JASJEEV KOHLI

II mates Oral SP

ANUJ BALI

FUNCTION: 1

NAVIGATION
AT OPERATIONAL LEVEL

Q lights of approaching vessel.

Q How the ship design

59 Q what is the distance between

1

FUNCTION 1
(NAVIGATION AT THE OPERATIONAL LEVEL)

1. PLAN & CONDUCT A PASSAGE & DETERMINE POSITION. ABILITY TO USE CELESTIAL & TERRESTIAL BODIES, LANDMARKS & AIDS TO NAVIGATION TO DETERMINE POSITION, TO APPRECIATE & ALLOW FOR EFFECT OF WIND, TIDES & CURRENT, TO USE CHARTS INCL.
   ECDIS & PUBLICATION e.g. SAILING DIRECTIONS, RADIO NAVIGATIONAL WARNINGS, ROUTING INFORMATION etc. ABILITY TO CORRECTILY USE NAV AIDS e.g. ECHO SOUNDERS, COMPASS (GYRO & MAGNETIC), STEERING CONTROL SYSTEMS & THEIR ADJUSTMENTS, etc. ABILITY TO INTERPRET INFORMATION RECEIVED FROM SHIPBOARD METEOROLOGICAL INSTRUMENTS
2. TO MAINTAIN A SAFE NAVIGATION WATCH.
   THROUGH KNOWLEDGE OF CONTENT, APPLICATION & INTENT OF THE ROR LOOKOUT DUTIES
3. RESPOND TO EMERGENCIES. PRECAUTIONS FOR PROTECTION & SAFETY OF PERSONNEL, INITIAL ASSESSMENT OF DAMAGE & CONTROL IN CASE OF FIRE, COLLISION, FLOODING, STRANDING, etc, MAKING OF EMERGENCY MUSTER CARD & CONDUCT OF DRILLS. RESPONSE TO DISTRESS SIGNAL AT SEA, KNOWLEDGE OF MERSAR.
4. SHIP MANOEUVRING & HANDLING. KNOWLEDGE OF FACTORS AFFECTING SAFE MANOEUVRING & HANDLING & BASIC KNOWLEDGE OF VESSEL'S MANOEUVERING CAPABILITIES & THEIR OPTIMUM USES

Q HOW WILL YOU DETERMINE RISK OF COLLISION?
Q MENTION RULE 19, ONLY IN OWN WORLD?
Q DEFINE CBD?
Q SUPPOSE THE V/L CALLS YOU VHF AND TELL YOU TO ALTER COURSE TO PORT IN HEAD ON SITUATION. OPEN AREA EVERY THING IS OKAY WILL YOU ALTER? WHY NOT?
Q LIGHT OF THE TOWING VESSEL MORE THAN 50 M IN LENGTH AND LENGTH OF THE TOW MORE THAN 250 METER, FOG SIGNAL FOR THE SAME?
Q WHAT DO YOU KNOW ABOUT IBS (INTEGRATED BRIDGE SYSTEM?)
Q WHAT DO YOU MEAN BY ECDIS? IT'S ROLES IN IBS?
Q GPS ROLE IN ECDIS AND ITS ROLE IN IBS
Q WHAT ALL THINGS MAKE AN IBS SYSTEM?
Q HOW ARE ECDIS CHARTS CORRECTED?
Q WHICH VOLUME OF ALRS IS IN FLOPPY? - VOLUME 4
Q TELL ME IF ANY ONE OF THE SYSTEMS OF IBS FAILS, WILL THE SYSTEM COLLAPSE? WHY OR WHY NOT?
Q WHAT ARE VARIOUS MOBS? EXPLAIN
Q IN R/V YOU ARE ABLE TO SEE THE LIGHTS?
Q NUC V/L SEEN FROM STERN MAKING WAY THROUGH WATER, ACTION?
Q V/L LESS THAN 50 METER AGROUND, ACTION?
Q 3 POINTS ON STBD BOW RESTRICTED VISIBILITY GETTING ON RADAR1
Q HE REVERTED TO THE EARLIER SITUATION (R+R+W IN VERTICAL LINE) HE SAID THAT YOU ASSUMED THE V/L TO BE NUC BUT IT TURNED OUT TO BE V/L AGROUND, NOW YOU HAVE RUN AGROUND
Q PRECAUTIONS WHILE ENTERING FOG?
Q PASSAGE PLANNING FROM ATLANTA TO JAPAN?
Q YOU ARE JOINING THE SHIP AS SECOND MATE TAKING OVER FROM OFF SIGNING SECOND MATE, HO WILL YOU TAKE OVER?
Q HAVE YOU EVER READ MARINERS HANDBOOK?
Q TELL ME ABOUT THE ERRORS OF ECHO SOUNDER?
Q HOW WILL YOU CORRECT CHARTS?
Q AT WHAT TIMES WOULD YOU PROCEED AT A SAFE SPEED?
Q HOW WILL YOU ASCERTAIN THAT FIX OF GPS IS ACCURATE?
Q DIFFERENCE BETWEEN IAMSAR AND MERSAR?
Q MAN OVER BOARD ON SHIP. ACTION?
Q WHAT ARE THE ERRORS OF MERCURY BAROMETER?
Q P/D V/S CROSSING FROM PORT TO STBD, IF BEARING REMAINS STEADY.ACTION?
Q I AM STAND ON V/L, HENCE I WILL MAINTAIN MY COURSE AND SPEED, IF THE OTHER V/L NOT TAKING ANY ACTION, AND IF ROC EXISTS, ACTION?
Q ONE WHITE LIGHT, ACTION?
Q R.V V/L ON YOUR PORT SIDE WITH RADAR WORKING AND RADAR NOT WORKING
Q HOW DO YOU RECEIVE WEATHER INFORMATION ON BOARD?
Q DO YOU GET ALL WEATHER INFORMATION ON BOARD?
Q HOW DO YOU FIX POSITION?
Q SEXTANT ERRORS?
Q VESSEL AGROUND, ACTION?
Q REQUIREMENT FOR MAGNETIC COMPASS
Q NO GYRO, SHIP CAN SAIL?
Q WHAT DWT SHIPS SHOULD HAVE TWO RADAR? 3000 DWT & above

MUKESH SOLANKI

Q WHAT INFORMATION DO YOU GIVE TO THE PILOT ON BOARDING?
Q CONTENTS OF PILOT CARDS REGARDING MANEUVERING
Q WHICH WAY DOES SHIP TURN WHEN GOING HEAD AND ASTERN
Q GPS IF 9.5 IS MIN ELEVATOR THAN WHAT IS THE MAX ELEVATOR FOR CHOOSING SATELLITE FOR FIX
Q WHO CREATES THE SIGNALS FIRST, THE SV OR THE RECEIVER
Q HOW WILL YOU MARK A NEW WRECK?
Q IF CREW MEMBER COMES TO YOU WHEN YOU ARE ON BRIDGE WATCH INFORM YOU FIRE, WHAT YOU DO
Q YOU SEE 2 V/L ON YOUR STBD BOW INVOLVED IN A RISK OF COLLISION, 3 MILES AWAY FROM YOU, WHAT ACTION
Q WHAT DO YOU MEAN BY PHASING SIGNAL IN NAVTEX?
Q WHAT IS THE FREQUENCY OF ENGLISH ~~$1001~~ LANGUAGE, WHY IS THESE A PROVISION FOR LOCAL LANGUAGE
Q WHAT ARE THE MESSAGES CATEGORIES THAT CAN BE REJECT
Q EPIRB'S HOW MANY TO BE CARRIED ON BOARD A SHIP? CAN YOU CARRY MORE THAN ONE?
Q WHY NO ROAMING SIGNALS IN INMARSAT EPIRB
Q ROR SITUATION –R/V DEAD ASTERN, DISTANCE 1 MILE AND CLOSING, WHAT ACTION
Q WHAT LIGHTS FOR V/L CBD MAKING WAY
Q VERTICAL AND HORIZONTAL SPACING OF MAST HEAD LIGHT
Q WHAT ARE THAT V/L WHICH HAS TO SHOW SIDE LIGHTS AND NO MASTHEAD LIGHTS WHEN MAKING WAY THROUGH WATER?
Q SHOW LIGHT FOR V/L AGROUND
Q WHAT V/S ARE EXEMPTED FROM SHOWING ANY OF THE ABOVE LIGHTS (I.E. AGROUND) V/L LESS THAN 12 METER IN LENGTH
Q IF YOU SEE THERE LIGHT RIGHT AHEAD WHAT ACTION WILL YOU TAKE
Q YOU HAVE JUST BEEN RELIVED BY THE 2ND OFFICER AND YOU O DOWN AND SEE SMOKE COMING FROM THE CABIN, WHAT ACTION?
Q ROR SITUATION, — • • BLASTS ON STBD BOW, WHAT ACTION, RADAR OPERATIONAL, IS IT POSSIBLE TO ALTER TO PORT
Q CONTENT OF RULE NO 19
Q ROR SITUATION, — • • BLAST ON STBD QUARTER, WHAT ACTION, RADAR OPERATIONAL
Q FREQUENCY OF PLOTTING POSITION IN SINGAPORE STRAIT
Q GROUNDING ACTION BY PRIORITY
Q CORRECTION TO ANEROID BAROMETER
Q GYRO ERROR
Q A NEW CADET JOIN ON BOARD HOW WILL YOU MAKE HIM FAMILIARIZE WITH CO2 ROOM
Q CAN SHIP STILL CARRY OPEN LIFE BOAT?
Q MEANING OF FLAG K AND H
Q AFTER CLEANING HOLD NEXT YOU FOUND 2METER WATER IN IT, WHAT ACTION (MENTION THAT CHECK N/R VALVE OF BRIDGE)
Q DIFFERENCE BETWEEN HOG AND SAG
Q THINGS TO BE CHECKED FOR WATER TIGHTNESS OF HATCHES AND BEFORE CLOSING A HATCHES
Q LIFE BOAT FALLS END TO END AND RENEWING CRITERIA
Q THINGS TO BE CHECKED DURING ABANDON SHIP DRILLS (SOLAS)
Q FIRE IN GALLEY, ACTION?
Q UNDER WHICH RULE THE PORT STATE CONTROL CHECKS BY COMING ON BOARD
Q LIGHTS OF A V/S NUC , MAKING WAY (UNDERWAY) ALSO DAY SIGNAL/ FOG SIGNAL
Q RULE NO 6-SAFE SPEED,RULE NO 5-LOOKOUT,RULE NO 19-R/V
Q WHAT ARE THE DUTIES OF LOOKOUT PERSON?
Q DOES OVERTAKING RULE APPLICABLE IN R/V? WHY?
Q TWO ALL ROUND RED LIGHTS AHEAD OF YOU, IDENTIFY, WHICH RULE, YOU'RE ACTION.
Q HOW WILL YOU DETERMINE IF ROC EXISTS OR NOT? R/V, WHICH RULE WHAT ACTION
Q RESTRICTED VISIBILITY (1) ON YOUR PORT QUARTER VSL APPROACHING .ROC EXISTS, RADAR OPERATIONAL
Q SOME ON PORT QUARTER YOU HEAR APPARENTLY A FOG SIGNAL OF SOME VESSEL. HOW YOU KNOW IT , ROC EXISTS
Q WHAT ARE TIDAL STREAM ATLAS , CONTENTS USE, ALSO ON CHARTS ,IF TIDAL STREAM ATLAS CHART IS GIVEN, PROCEDURE OF CALCULATING AND USING
Q INFORMATION DETAILS ABOUT WIND ROSES?
Q G.C SAILING FROM SAN FRANCISCO TO NEW YORK/ HOW DO YOU PROCEED, USE OF MERCATOR, GNAMONIC CHARTS?
Q TYPES OF PROJECTIONS FOR BOTH, WHY YOU CANNOT USE MERCATOR CHARTS ONLY. WHY DO YOU NEED GNAMONIC CHARTS? EXPLAIN THE PROCEDURE OF DOING IT
Q HOW YOU RECEIVED WEATHER INFORMATION WHEN V/L IN MID OCEANS
Q AS 2/O ONCE YOU RECEIVED ANEW CHARTS HOW DO YOU GO ABOUT DOING CORRECTION, PROCEDURE, MEANING OF SMALL, LARGE, TEMP, PRELIM WITH E.G.
Q WHAT ARE THE CONTENTS OF CUMULATIVE LIST OF ANTM? PUBLISHED AT WHAT INTERVAL, CONTAINS INFO FOR , WHAT PERIOD/
Q CONTENTS OF THE MANUAL FOR PERFORMANCE STANDARDS OF ARPA AND REGULATION BY IMO

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Q WHAT IS ADVANCE?
Q CHARTS PAST TWO YEARS NOT CORRECTED HOW YOU GO ABOUT DOING THAT?
Q WHAT IS AN MMS NOTICE? WHAT INFORMATION YOU GET?
Q EMERGENCY- FIRE IN NO.2 CARGO HOLD, VSL IN THE PORT, WHAT ACTION YOU WOULD TAKE ACCORDING TO PRIORITY BEING OOW, IF MASTER ,MATE NOT ON BOARD
Q HE HAD A DIAGRAM READY WITH SKETCH OF A SINGLE DERRICK? HE ASKED TO NAME THE PARTS ONE BY ONE
Q HOW WILL YOU DETERMINE THE RISK OF COLLISION EXISTS? (NARRATES POINTS FROM RULE 7)
Q MEANING OF " NOT TO IMPEDE THE SAFE PASSAGE"
Q ANDERSONS TURN? EXPLAIN
Q STOPPING DISTANCE OF THE LAST VSL
Q HOW WILL YOU RECEIVED NAVIGATIONAL WARNINGS ON BOARD
Q MANEUVERING CHARACTERISTICS OF LAST VSL (TURNING CIRCLE)
Q WHAT FACTOR DOES THE TURNING CIRCLE DEPEND ON
Q WHAT WOULD YOU DO TO REDUCE THE SQUAT OF YOUR VSL? WHAT ALL FACTOR AFFECT SQUAT?
Q WHAT ARE VECTOR CHARTS
Q WHETHER MANEUVERING / WARNING SIGNAL COMPULSORY?
Q WAITING SIGNAL
Q DISTRESS SIGNAL BESIDES ANNEX IV
Q PROCEDURE SIGNALS
Q ALPHABETICAL FLAGS AND CODES
Q GMDSS—AREA A1,A2,A3,A4
Q EPIRB - COSPAS, INMARSAT,VHF
Q FOOT PRINT OF A SATELLITE
Q DIFFERENCE BETWEEN INMARSAT AND COSPAS SARSAT SATELLITE
Q YOU HAVE A SICK MAN ON BOARD BEYOND YOUR MEDICAL INTELLIGENCE? HOW WILL YOU GET MEDICAL ASSISTANCE
Q PASSAGE PLAN TO NEW YORK TO GIBRALTAR BY G.C. SAILING
Q HOW DO YOU KNOW WHICH ALL CHARTS ARE THERE ON BOARD OR CORRECTED OR NOT
Q HOW WILL YOU GO ABOUT CORRECTING CHARTS FOR T&P NOTICES
Q SPACING OF LIGHT, DEFINITION OF MASTHEAD LIGHT, TOWING LIGHT, USE OF TOWING LIGHT
Q FOG SIGNALS BY TOWING & TOWED VSL, LIGHT DISPLAYED BY TOWED VSL
Q HOW WILL YOU TAKE EX MERIDIAN SIGHTS?
Q METHODS OF GETTING FIXES
Q TYPES OF SHIP
Q FROM WHEEL HOUSE POSTER YOU FOUND OUT –FOR RPM 60, SPEED OF VSL IS 7KTS, WHAT IS THE SPEED OVER GROUND , IF CURRENT 2KTS, EXPERIENCED FROM AFT?
Q PRINCIPLE OF NAV, PRACTICAL OF NAV, STABILITY, MET, BRIDGE EQUIPMENT
Q HOW YOU WILL HELP IN PASSAGE PLANNING?
Q WAYS OF POSITION FIXING
Q NOON SIGHT IN DETAIL?
Q ROUGH SEA AND YOU ARE ENTERING A PORT, YOUR SHIP IS YAWING WILL YOUR COMPASS ERROR WILL CHANGE AND IF IT'LL CHANGE, HOW'LL CALCULATE IT?
Q HOW A GYRO DOES WORKS?
Q STEERING GEAR ON LAST SHIP/ EXPLAIN FLENTING LEVER, NON FOLLOW UP MODE?
Q HOW WILL YOU USE ASD
Q WHAT IS THE COLLISION BULKHEAD?
Q WHAT IS THE DISTANCE BETWEEN TWO ALL ROUND LIGHT?
Q IS MANEUVERING LIGHT IS MANDATORY?
Q SAILING VSL LESS THAN 7METER, WHAT LIGHT WILL SHOW?
Q WHAT IS RULE NO 25
Q HOW MANY TYPE OF EPIRB'S
Q WHY ROAMING FREQUENCY IS NOT THERE IN INMARSAT EPIRB
Q WHAT IS GIDE LINE?
Q WHAT IS SART ,EXPLAIN
Q WHAT IS LUMINOUS INTENSITY OF EPIRB LIGHT? ANS – 0.75 CD
Q EXPLAIN HORIZONTAL AND VERTICAL SECTOR OF SIDE LIGHTS
Q WHAT IS 2MHZ DSC FREQUENCY?
Q WHAT IS AUDIBLE FREQUENCY?
Q NOON SIGHT PROCEDURE IN DETAILS
Q WORKING OF ECHO SOUNDER
Q CONTENTS AND PURPOSE OF INMARSAR
Q MAN OVER BOARD PROCEDURE
Q DAY SIGNAL OF V/L CBD
Q WHAT IS SHALLOW WATER?
Q EXPLAIN INTERACTION BETWEEN SHIPS?
Q TERMS OF ECHO SOUNDER, GPS
Q CONTROL OF AUTO PILOT
Q HOW IS CHART CORRECTION OF ECDIS DONE OTHER THAN CDROM
Q RASTER SCAN

Q ACTION IN CASE OF FIRE IN CCR DURING CARGO OPERATION
Q HOW WILL YOU TAKE OVER A NAVIGATIONAL WATCH
Q WHAT DO YOU KNOW ABOUT ECDIS
Q DIFFERENT TYPE OF ELECTRONIC CHARTS AND MAIN DIFFERENCE BETWEEN THEM
Q GYRO ERROR
Q SEXTANT ERROR AND HOW TO CORRECT THEM
Q WHAT ARE THE TWO POSITION OF AZIMUTH CIRCLE
Q WHAT CAN BE THE ERROR IN AN AZIMUTH CIRCLE
Q IN RESTRICTED VISIBILITY SOME TIME YOU HAVE TO KEEP THE LOOKOUT MAN FORWARD AND SOMETIMES ON THE MONKEY ISLAND, EXPLAIN WHY. ANS –BECAUSE IN A SEA SMOKE THE LOOKOUT MAN ON THE MONKEY ISLAND WILL BE ABLE TO SEA OVER THE FOG
Q WHAT ARE THE DIFFERENT TYPE OF FOG
Q ADMIRALTY LIST OF LIGHTS, HOW MANY VOLUMES, WHICH VOLUME APPLIES TO INDIAN COAST. WHAT INFORMATION YOU GET FROM THE LIST OF LIGHT
Q WHAT IS THE NOMINAL RANGE OF A LIGHT
Q FIND OUT THE PLR OF A LIGHT
Q DEFINITION OF RESERVE BUOYANCY, METACENTRE ,CENTRE OF GRAVITY
Q OIL DISCHARGE CRITERIA
Q OIL POLLUTION PRECAUTION EQUIPMENT CARRIED ON BOARD
Q SOLAS CHAPTER 12
Q SURVIVAL CRAFT CAPACITY OF YOUR LAST SHIP
Q CAN YOU COMMUNICATE USING LIGHT SIGNALING?
Q HOW WILL YOU IDENTIFY A MEDICAL FROM PORT VEHICLE
Q DIFFERENCES BETWEEN COSPAS SARSAT AND INMARSAT EPIRB
Q WHAT IS SART?
Q WHAT IS THE IMO REGULATION FOR SART?
Q WHAT FREQUENCY DOES SART WORK ON?
Q HOW WOULD YOU DETERMINE THAT THE 12 DOTS ON YOUR PPE IS SART NOT ANY OTHER TARGET
Q WHAT IS THE BATTERY LIFE OF EPIRB AND SART
Q CONTENTS OF ALRS VOLUME 2&3
Q WHAT ALL TYPE OF SIGHT HAVE YOU TAKEN
Q PROCEDURE FOR TAKING SUN, MOON, STAR SIGHT.
Q WHAT DO YOU MEAN BY HP ?
Q WHAT IS THE DIFFERENCE BETWEEN LONG BY CHRONO AND INTERCEPT METHOD? WHICH ONE BETTER?
Q WHAT IS THE USE OF COMPLEMENTARY TABLES, WHAT ARE ITS CONTENTS
Q IF A SHIP WISHES TO COMMUNICATE WITH ANOTHER SHIP USING HOW WILL IT CONVEY THE MESSAGE
Q WHEN DO YOU USE ANSWERING PENDANT
Q WHAT IS TACKLINE? WHAT IS ITS LENGTH?
Q WHAT IS ADDRESSES, RECEIVING STN ETC
Q WHAT IS GENERAL CALL
Q WHAT IS ERASE SIGNAL
Q IF YOU WRITE FOUR WORD SENTENCE AND MADE MISTAKE IN THIRD WORD, BUT YOU REALIZE THAT AFTER TRANSMITTING THE LAST WORD. HOW WILL YOU CORRECT IT
Q WHAT VESSEL HAVE TO COMPLY WITH THE SOLAS
Q WHAT IS THE DIFFERENCE BETWEEN OLD SOLAS AND NEW SOLAS
Q ABOUT LIFE BOAT RADIO
Q ON WHICH ALL OCCASIONS WILL YOU CALL THE MASTER
Q WHAT IS THE CHAPTER 3 OF SOLAS
Q WHAT IS MARINE EVACUATIONS SYSTEM
Q WHAT IS ADMIRERS ANNUAL NOTICE TO MARINERS
Q IN WHAT ORDER WILL YOU CORRECT CHARTS WHICH HAVE NOT BEEN CORRECTED FOR LAST 3 YEARS
Q WHAT PUBLICATION WILL YOU USE WHEN PLANNING PASSAGE FROM BOMBAY TO FUJAIRAH (GULF)
Q WHAT IS ADMINISTRATION SAILING DIRECTION?
Q HOW WILL YOU LIMIT THE LATITUDES WHEN DOING G.C SAILING?
Q WHAT IS SQUAT?
Q WHAT DO YOU UNDERSTAND BY NOON SIGHT, WHAT ARE THE PROBLEMS USUALLY ENCOUNTERED WHILE TAKING A NOON SIGHT
Q HOW WILL YOU ASSESS A VESSEL ON THE HORIZON AT HEIGHT
Q ABOUT POLARIS AND MOON SIGHTS
Q HAND LEAD LINE, ECHO SOUNDER AND POSITIONING BY GPS
Q USE OF MANEUVERABILITY DIAGRAM
Q DEFINE ADVANCE
Q CHART CORRECTION? HOW DO YOU EXECUTE ON RECEIVING A NEW NTM?
Q NAV WARNING AND WX MESSAGE RECEIVED DURING THE VOYAGE, HOW IS IT USED FOR ADVANTAGE? NAVTEX FUNCTION AND WORKING
Q WHAT OTHER EQUIPMENT USED FOR RECEIVING WX MESSAGE ON BOARD

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Q IS WEATHER FAX MANDATORY TO BE CARRIED?
Q FIND TIDES (SET AND DRIFT)
Q RUNNING FAX METHOD
Q IN RESTRICTED WATER WILL YOU USE THE WILLIAMSON TURN?
Q CALCULATE CE USING STAR
Q HOW TO USE STAR FINDER
Q IDENTIFICATION OF STAR
Q USE OF SEXTANT FOR NOON SIGHT
Q SUN AND MOON AVAILABLE CAN YOU OBTAIN A FIX
Q YOU SHOULD " TRANSIT" , "— — — —" INSTEAD OF TRANSMIT YOU SEND TRANSIT, ACTION OR TX STN & RX STN
Q HE GAVE 2 SENTENCES TO CODE IN 10 MINUTES
Q FREQUENCIES, TEST PROCEDURE, OPERATION OF SART
Q ANNEX 1, VERTICAL SPACING OF MAST HEAD LIGHT
Q ABOUT SUBMARINE BUOY
Q SOLAS CHAPTER 12
Q DIFFERENCE BETWEEN GYRO AND MAGNETIC COMPASS
Q MANEUVERING DATASHEET
Q WHY LIST OF B.E PROVIDES IN BRIDGE
Q YOUR TANKER SHIP COLLIDES WHAT WILL YOUR FIRST ACTION
Q WHAT IS ECDIS? ABOVE RASTER,VECTOR
Q YOU ARE IN NORTH COURSE ,HEAR FOG SIGNAL ON STBD QUARTER (RADAR OPERATIONAL) ACTION
Q YOU ARE IN NORTH COURSE , HEAR FOG SIGNAL ON STBD QUARTER (NO RADAR)
Q ABOUT GYRO, RADAR, GPS, ECHO SOUNDER, HOW WILL YOU GET POSITION
Q WHAT IS THE BEST WAY TO FIND COMPASS ERROR
Q WHAT IS TP AND HOW WILL YOU CALCULATE IT ON BOARD
Q SIGHTS IN DETAILS
Q FIRE IN ACCOMMODATION IN PORT, ACTION
Q PARTIAL LOSS OF INTACT BUOYANCY, ACTION
Q HOW WILL YOU COME TO KNOW IF YOUR ANCHOR IS DRAGGING
Q WHERE DO YOU GET DETAILS OF CARGO?
Q FIRE IN FORE CASTLE STORE. MAIN FIRE LINE RUPTURED , ACTION
Q INTERCOWHAT IS GAFF
Q WHERE WOULD YOU FIND INFO ABOUT RADIO NAV WARNING AND NAVTEX
Q WHAT DO YOU KNOW ABOUT PORT STATE CONTROL
Q IN FOG YOU'RE YOUR WHISTLE IS NOT IN OPERATION. WHAT WILL YOUR ACTION
Q POSITIONING OF WHISTLE
Q A VSL IS 49.5 METER IN LENGTH IS IT OBLIGED TO SHOW MAST HEAD LIGHT
Q WHAT IS MANEUVERING DATA
Q IN WHAT CONDITION IS MANEUVERING DATA TAKEN
Q WHY MANEUVERING DATE CALCULATED IN CALM SEAS , NOT IN ROUGH SEAS
Q WHAT ARE THE REASONS IN WHICH YOUR FOG HORN NOT BE OPERATIONAL
Q HOW DO YOU TAKE NOON SIGHT
Q HOW DO YOU TAKE EX - MERIDIAN ALTITUDE
Q WHAT ARE THE LIMITS OF EX-MERIDIAN ALTITUDE SIGHT
Q HOW WILL YOU GET EX-MERIDIAN ALTITUDE SIGHT OF STAR
Q HOW WILL YOU IDENTIFY A STAR
Q HOW WILL YOU TAKE A STAR SIGHT
Q DEFINITION OF NAUTICAL LIMIT AND ARRANGEMENT TWO LIGHT
Q WHAT DO YOU MEAN BY ERROR OF PERPENDICULARITY OF SEXTANT
Q MOB OF ANOTHER VESSEL, OTHER VESSEL REQUESTING ASSISTANCE, WHAT ACTION? WHICH SEARCH PATTER TO USE?
Q IAMSAR CONTENTS
Q WHAT RANGE OF VSL SHOULD PASS ASTERN OF TARGET VSL? WHAT IS THE AUDIBILITY RANGE OF SOUND SIGNALS (WHISTLE, FOG, HORN &GONG)
Q EXPLAIN WORKING OF BOW THRUSTER (HE DRAW ONE COAST LINE, AND VSL AND ASKED ME TO MANEUVER MY VSL BY USING BOW THRUSTER)
Q HOW DO YOU ACHIEVE WEATHER TIGHTNESS OF HATCH COVER? (MUCH COMPRESSION OF RUBBER PACKING IS REQUIRED)
Q WHAT ARE THE DIMENSIONS OF THE NON RETURN DRAIN VALVE HATCHES
Q WHAT DO YOU MEAN BY SOLAS? WHAT ARE THE DIFFERENCE BETWEEN OLD CHAPTER 3 AND NEW CHAPTER 3?
Q BOTH N.U.C , NORTH WESTERLY WIND , WIND FORCE 7 KNOTS, TARGET VSL DRIFTING AT THE RATE OF 6 KNOTS , OWN VSL CAN ESTABLISH EMERGENCY STRONG BUT HAS NOT TIME TO DO SO , ACTION?
Q HOW DO YOU CORRECT ROUTING CHARTS
Q WHAT DO YOU KNOW ABOUT ECDIS, VARIATION CHARTS AND CHART CATALOGUE
Q WHAT IS PARALLAX AND WHEN DO YOU APPLY IT
Q WHAT ARE VARIOUS CORRECTIONS FOR MOON AND WHAT IS V CORRECTION

Q SUPPOSE YOU ARE SAILING IN YEAR 2000 AND HAVE NOT YET RECEIVED NEW NAUTICAL ALMANAC ON BOARD , CAN YOU USE THAT OF THE YEAR 1999 FOR SUN, MOON AND PLANET HOW DO YOU PROCEED

Q WHAT ARE THE THERMAL CONDUCTIVITY OF THE TPA AS PER NEW CHAPTER 3 SOLAS

Q IN TSS (MALAGA STATE) RUDDER STUCK TO STBD 10 , ACTION (DETAIL ABOUT NFC)

Q LIGHTS SHOWN BY TRAWLER OF LESS THAN 50 METER , MORE THAN 50 METER UNDERWAY AND WHILE MAKING WAY

Q TRAWLER OF LESS THAN 50 METER , MORE THAN 50 METER UNDERWAY AND WHILE MAKING WAY, VSL GOES NUC THAN WHAT LIGHTS

Q DEFINE MASTHEAD LIGHT , ALL ROUND LIGHT , RAM VSL AND WHAT ALL VESSEL'S ARE RAM

Q WHAT MEDICAL BOOK CARRIED ON BOARD

Q WHAT ARE THE CONTENTS OF BC CODES? WHAT IS APPENDIX G?

Q ROR – 2 LETTER CODES MEANING , SINGLE LETTER HOIST MEANING , DESCRIBE CODE FLAG MIKE, CONTENTS OF MEDICAL SECTION

Q TAKING OVER NAVIGATIONAL WATCH

Q SPECIFY CHART ARE CORRECTED , WEATHER, VISIBILITY, COMPARE CTS/ GYRO , MASTER/ REPEATERS, GYRO / MAGNETIC

Q MOB PROCEDURE

Q MASTER HAS ASKED IS TO RESCUE THE PERSON OVERBOARD , WITH FOUR PERSON WHOM WILL YOU TAKE

Q SAFE WATER MARK, ISOLATED DANGER MARK. USE AND DESCRIBED OF THE DOG

Q WHAT IS ALL ROUND LIGHT , TOWING LIGHT , AND FLASHING LIGHT

Q WHEN DO YOU TAKE AMPLITUDE OF A BODY

Q PASSAGE PLANNING PUBLICATIONS FOR PASSAGE FROM MADRAS TO CHINA

Q HOW WILL YOU AIM THE LTA

Q METHOD OF TAKING OF NON SIGHT , WHAT IS 'C' CORRECTION

Q HOW DO YOU CALCULATE APPARENT NOON SIGHT

Q WHAT IS VRM AND FIX RING AMONG LIGHT HOUSE IS THERE USE

Q WHAT WILL YOU PREFER FOR FIXING AMONG LIGHT HOUSE AND BUOY? WHY

Q HOW WILL YOU DISTINGUISH A SPECIFIC LIGHT HOUSE, IF THERE IS TWO IN THE SAME BEARING (MENTION LIST OF LIGHT HOUSE)

Q WHAT INFORMATION YOU WILL OBTAIN FROM ADMIRALTY LIST OF LIGHT HOUSE AND FOG SIGNAL

Q HOW WILL YOU GO FOR NOON SIGHT

Q HOW WILL YOU DETERMINE THE MERIDIAN PASSAGE

Q HOW WILL YOU GO FOR THE SETTING OF NAVTEX (STATION SELECTION ,MESSAGE CATEGORY AND TESTING PROCEDURE)

Q HOW WILL YOU TAKE THE WATCH AT NIGHT IN SINGAPORE ABOUT FROM C/O

Q SAFE WATER MARK (SHAPE, LIGHT, USE)

Q NORTH CARDINAL MARKS (SHAPE , LIGHT, USE)

Q DIFFERENT CONTROL ON AUTO PILOT

Q WHAT IS THE DIFFERENCE BETWEEN RACON AND BECON

Q LIGHT SIGNALING CHARACTERISTICS

Q PRINCIPLE OF RADIO BEACON

Q LANGUAGES IN WHICH INTERCO IS PUBLISHED

Q PURPOSE OF INTERCO

Q HOW TO CANCEL DISTRESS MESSAGE

Q HOW TO USE AA, AB , ETC

Q ABOUT CONTAINER AND REFER SHIP

Q RULE NO 15 CROSSING SITUATION

Q RUDDER STUCK 20 TO STBD OPEN SEA

Q EPIRBS- HOW MANY REQUIRED ON BOARD. TYPES, FREQUENCIES OF OPS, ORBITS?

Q CORRECTIONS OF MOON? NO CURRENT ALMANAC ONBOARD FOR SIGHTS HOW WILL YOU PROCEED?

Q HOW DO YOU FIX A POSITION??

Q SEXTANT ERRORS?

Q REQUIREMENT FOR MAGNETIC COMPASS?

Q NO GYRO – CAN THE SHIP SAIL?

Q WHY DO SHIPS HAVE TWO RADARS?

Q WHAT DO YOU GIVE TO THE PILOT ON BOARDING? CONTENTS OF THE PILOT CARD?

Q DO TURNING CIRCLES APPEAR ON THE PILOT CARD?

Q WHICH WAY WILL THE SHIP TURN WHILE GOING AHEAD AND ASTERN?

Q WHAT IS TRANSVERSE THRUST?

Q WHAT IS ASD AND ITS CORRECTIONS?

Q ROUTING CHARTS WILL GIVE YOU WHAT INFO?

Q DETERMINATION OF CROSSING SITUATION IN DAY TIME?

Q MANEUVERING DATA?

Q TURNING CIRCLE?

Q SHALLOW WATER EFFECTS WHY?

Q GPS ERRORS DETERMINE?

Q VSL AGROUND IN RV. ACTION?

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Q NARROW CHANNEL – RUDDER STUCK ON STBD 20, ACTION?
Q WHAT IS ALSD? HOW IS IT CORRECTED PUBLISHED?
Q STEERING GEAR ON LAST SHIP IN DETAIL?
Q WHAT IS SQUAT? WHAT SHOULD BE THE DRAFT OF THE VESSEL?
Q COMPASS ERROR IN DETAILS?
Q WAYS OF POSITION FIXING?
Q HOW DOES THE GYRO WORK?
Q STEERING GEAR ON LAST SHIP. EXPLAIN HUNTING GEAR?
Q HOW WILL YOU USE ASD?
Q GPS ROLE IN ECDIS AND IBS?
Q HOW ARE ECDIS CHARTS CORRECTED?
Q IF ANY ONE OF THE IBS SYSTEM COLLAPSES WILL IBS FAIL COMPLETELY?
Q VERTICAL AND HORIZONTAL SPACING OF MAST HEAD LIGHTS?
Q LIGHTS FOR A VESSEL AGROUND?
Q REQUIREMENTS FOR THE DAY – LIGHT SIGNALING LAMPS?
Q TELL ME EVERYTHING YOU KNOW ABOUT TECHNICAL DETAILS OF LIGHT AND SOUND SIGNAL APPLIANCES?
Q FOR A VESSEL OF LENGTH 200M, AT WHAT DISTANCE WILL BOTH THE MAST HEAD LIGHTS WILL BE PLACED?
Q WHY THE VERTICAL PLACEMENTS OF LIGHTS DOESN'T HOLD GOOD FOR THE TOWING LIGHTS?
Q DEFINE STERN LIGHT? WHAT U MEAN BY "AS PRACTICABLE "?
Q SUPPOSE A VESSEL OF 55 M HAVING ONE MAST HEAD LIGHT ..... INTERRUPTED .....BUT SIR VESSEL WITH MORE THAN 50M SHOULD HAVE TWO MAST HEAD LIGHTS ..... OK, VESSEL OF LESS THAN 50MHAVING ONE MAST HEAD LIGHT, CAN THE STERN LIGHT BE PLACED ON THE AFT OF THE SAME MAST HAVING ALL THE PROPERTIES OF STERN LIGHT ..... I STUCK WITH ANSWER "NO "& EXPLAINED HIM THE DEFINITION?
Q HOW IS LOOKOUT DONE? WHAT IS MEANT BY ALL AVAILABLE MEANS?
Q CROSSING SITUATION FROM STARBOARD? CAN YOU ALTER TO PORT? WHY IS STARBOARD ALTERATION PREFERRED?
Q A VESSEL CROSSING FROM PORT SIDE? RISK OF COLLISION EXISTS?
Q OWN VESSEL IN DISTRESS AND CROSSING SITUATION FROM STARBOARD SIDE ACTION?
Q A VESSEL IN DISTRESS AND OWN VESSEL IS CROSSING FROM HER STARBOARD SIDE ACTION?
Q WHAT IS MEANT BY NOT TO IMPEDE THE SAFE PASSAGE?
Q WHAT IS THE MOST IMPORTANT PUBLICATION ON TANKERS? PRECAUTIONS TO BE TAKEN WHILE
Q TWO SAILING VESSELS, ONE ON THE EASTERN COURSE & THE OTHER ON THE WESTERN COURSE, YOU HEADING NORTH. BOTH THE SAILING VESSELS AROUND 3 MILES APART AND WIND FROM SW DIRECTION THAT IS FROM THE PORT QUARTER. WHAT ACTION?
Q WHICH AND WHAT IS THE RULE FOR THE SAILING VESSELS?
Q YOU ARE THE C/OFF ON BOARD AND YOU ARE LOADING GRAIN. START AND END THE WHOLE PROCEDURE FOR LOADING OF GRAIN?
Q WHAT IS SHORING?
Q GIVE ME ONE LINE DIFFERENCE BETWEEN BEACHING AND STRANDING?
Q HOW WILL YOU BEACH A LIFE BOAT?
Q WHAT IS TRANSOM SPACE, JURY RUDDER. FLY WHEEL ETC.?
Q WHAT IS THE PRESSURE REQUIRED IN THE FIRE LINE AND FIRE HYDRANTS?
Q IS THE FIRE LINE FITTED WITH A NON – RETURN VALVE?
Q HOW MANY TYPES OF EPIRB? WHAT ARE THE FREQUENCIES? CAN YOU USE L-BAND EPIRB IN AREAS A2 &A4?
Q HEAD ON SITUATION IN NARROW CHANNEL WITH A SHALLOW PATCH ON THE STARBOARD SIDE, ACTION?
Q HEAD ON SITUATION WITH FISHING BANKS ON PORT AND STARBOARD SIDES, ACTION? AFTER ALTERATION SUDDENLY YOU FIND A VESSEL ON YOUR PORT SIDE CROSSING ACTION?
Q RESTRICTED VISIBILITY AND A VESSEL CROSSING FROM THE PORT BOW, CPA & TCPA VERY CLEAR ACTION? KEPT CHANGING THE POSITION OF THE CROSSING VESSEL WITH CLEAR CPA & TCPA ALL THE TIME AND FOR ALL?
Q WHAT ARE THE CHARACTERISTICS OF THE MANEUVERING LIGHT?
Q HOW WILL YOU TEST EPIRB?
Q SOLAS REQUIREMENT FOR TPA AND IMMERSION SUIT?
Q VESSEL IS GOING TO HAVE SAFETY SURVEY, HOW YOU ARE GOING TO PREPARE FOR IT?
Q DRAW DIAGRAM OF VESSEL UPRIGHT AND VESSEL LISTED 5 DEG TO STBD SHOWING SHIFT OF COG AND COB?
Q ANY 5 IMO CONVENTIONS?
Q HOW WILL YOU DEFINE RISK OF COLLISION? (NEVER SAY RELATIVE BEARING. IF HE ASK YOU ABOUT THE BEARING)
Q DISTRESS SIGNAL? (ANNEX – IV OF R.O. R.)
Q WHAT IS INTERNATIONAL SHORE CONNECTION?
Q VESSELS IN PORT, FIRE IN CABIN YOU ARE D/O, CAPTAIN AND C/D NOT ONBOARD. ACTION?
Q WHAT WOULD BE YOUR LAST ACTION IF AT ANCHOR YOU FOUND OTHER VESSEL DRAGGING ANCHOR ANDGOING TO COLLIDE? (SLIP ANCHOR)
Q CHART CORRECTION USE OF CHART CORRECTION LOG FOR THE SAME?

Q USE OF SAILING DIRECTION.
Q USE OF ALRS.
Q HOW WILL YOU DEFINE SAFE SPEED?
Q IN WHAT SITUATION YOU WILL CALL MASTER?
Q HOW WILL YOU HAND OVER NAVIGATIONAL WATCH?
Q WHAT IS SECTOR SEARCH?
Q HOW TO GET POSITION FOR POLARIS? WHY DO WE APPLY A0, A1, A2, CORRECTION?
Q CONTENTS OF IMDG CODE, NO OF VOLUMES, HOW WILL YOU GO ABOUT TO FIND DETAILS OF CERTAIN CARGO?
Q SICK PERSON ON BOARD WITH PAIN IS RIGHT SIDE LOWER ABDOMEN, NO SOLUTION IS MFAG? ACTION?
Q WHILE COSTING, FREQUENCY OF TAKING FIXES?
Q DETERMINATION OF CROSSING SITUATION IN DAY TIME?
Q MANEUVERING CHARACTERISTICS?
Q TURING CIRCLE?
Q SHALLOW WATER EFFECTS, WHY?
Q TELL ME ABOUT YOUR LAST SHIP?
Q WHAT IS 13G?
Q WHAT IS AUX AND EMERGENCY STEERING? TELL ME WHAT IT IS PRACTICALLY? BY HAND WHEEL IS IT A REQUIREMENT?
Q WHAT IS DIFFERENCE BETWEEN AUX AND EMERGENCY STEERING
Q WHAT TYPE OF PIPELINE YOU HAD ON SHIP?
Q TELL ME FOR A DEEP DROUGHT VESSEL HOW WILL YOU DO PASSAGE PLANNING?
Q CAN YOU TRANSIT FULLY LOADED SING STRAIT? THEN WHERE WILL YOU PASS TO GO TO JAPAN?
Q WHAT IS INST RATE OF DISCHARGE? WHAT IS ACTUALLY IT IS? SO YOU MEAN TO SAY IF I INCREASE SPEED I CAN DISCHARGE MORE? HOW MUCH? SO WHAT HAPPENS IF SPEED INCREASE?
Q WHAT PREVENTIVE MEASURES FOR SAFE STEERING?
Q WHAT IS WHEEL OVER POINT MEASURED?
Q GPS CORRECTIONS? NOT ERROR
Q STEERING CONTROLS?
Q RUDDER STOCK AT 10 PORT. HEAVY RAIN VESSEL AT FULL SEA SPEED, ACTION? ANS. DO NOT CALL MASTER UNTIL & UNLESS YOU CHECK — STEERING MOTORS POWER, 2ND STEERING. MOTORS, HAND STEERING. NPV THEN CALL MASTER?
Q GROUNDING BIG BULK CARRIER, CARRYING GRAIN. FPK NO. 1 & 2 RS BADLY DAMAGED STRONG CURRENT, ACTION?
Q YOU ARE DUTY OFF ON TANKER, JUST ARRIVED IN PORT. HOW WILL YOU GO ABOUT STARTING
Q DESCRIBE 'FLAG G '– DESCRIBE ITS SIZE, COLOR, HOW MANY STRIPS, ETC?
Q WHAT IS CORRECTION OF ANEROID BAROMETER?
Q WHAT IS GYRO ERROR AND.CALCULATING USING SUM?
Q ATTITUDE CORRECTIONS ? WHAT IS OBS. ATTITUDE?
Q SEXTANT ERRORS, EXPLAIN HOW YOU WILL FIND IT
Q ISOLATED DANGER MARK: DESCRIBE ITS SHAPE AND CHARACTERISTICS? AND HOW YOU WILL FIND THIS MARK IN FOG?
Q WEST CARDINAL BUOY RIGHT AHEAD: ACTION?R.O.C. EXISTS, ACTION?
Q SAFE WATER MARK: DESCRIBE ITS SHAPE AND CHARACTERISTICS?
Q MOB: TELL FIRST 3 PRIORITY ACTIONS THEN DESCRIBES REST ACTION REQUIRED?
Q YOU ARE OOW ON TANKER, HOW WILL YOU GO ABOUT DISCHARGING IT? DESCRIBE ALL PROCEDURES YOU WILL DO FOR SAFE AND EFFICIENT CARGO OPERATIONS?
Q WHAT ARE VARIOUS CORRECTIONS FOR MOON AND WHAT IS 'V' CORRECTION?
Q SUPPOSE YOU ARE SAILING IN YEAR 2000 AND HAVE NOT YET RECEIVED NEW NAUTICAL ALMANAC ONBOARD, CAN YOU USE THAT OF THE YEAR 1999 FOR SUN, MOON & PLANETS & HOW DO YOU PROCEED?
Q GYRO FELLS OUT AT SEA HOW WILL YOU COME TO KNOW?
Q WHAT IS ASD & CORRECTION?
Q SHALLOW WATER EFFECTS-SQUAT, SMELLING OF GROW?
Q FOR SAR WHICH PUBLICATION YOU WILL REFER? (IAMSAR VOL3)
Q WHILE GIVE INFORMATION HELMS MAN TOTAL SHIP IS NOT TURNING WHAT CAN BE?
Q STEERING NOT FAIL, RUDDER STUCK ACTION?
Q YOU ARE ENTERING PORT FIND ONE LIGHT HOUSE ONLY HOW YOU WILL FIX POSITION? (VSA)
Q WHAT IS DRYING HIGHT AND CHART DATUM?
Q ANCHORED V/2 RIGHT AHEAD HOW YOU WILL PASS HER?
Q ENTERING TO HUGELY RIVER AS A NAVIGATING OFFICER WHAT ARE THE PRECAUTIONS YOU WILL TAKE REGARDING ECHO SOUNDER AND HOW TO CORRECT THEM? (MULTIPLE ECHO, PHLKOGOREN ECHO.)
Q TOTAL NUMBER OF VOLUMES OF SAILING DIRECTIONS AND ITS CONTENTS?
Q WHAT ARE WEEKLY NOTICES AND PRIMARILY NOTICES TO MAINERS AND WHAT DOES IT CONTAIN?
Q WHAT ARE THE VARIOUS METROLOGICAL EQUIPMENTS ON YOUR LAST SHIP?
Q WHAT IS VDR? FUNCTION EXPLAINS?
Q AIS EXPLAIN?

5

Chart folios:

Ships normally maintain folios depending on the kind of voyages that the ship is making. Thus a ship that is making voyages around Indian subcontinent may be having only one or two folios. Plying area may be geographically divided in two zones & ship will then have two folios with one folio having eastern zone charts & other folio having western zone charts.

Ships making fixed voyages may have a similar arrangement, thus folios known by the area.

A ship plying all over & having no fixed route may maintain international folio system or standard folio system maintained by the company or as per BA numbers. Thus BA 1 to BA 300 may be listed in folio 1. BA 301 to BA 600 may be listed in folio 2 & so on.

Second officer in a register must record the details of folios, which are maintained. A printed record of list of charts is sent to the head office.

Folio covers are made of canvass or other appropriate material capable of holding charts. Folio number, a list of charts within it & a table of correction record is pasted on outside of the folio cover.

The international Convention for the safety of life at Sea (SOLAS 1974)states; 'All ships shall carry adequate and up-to-date charts, sailing directions, lists of lights, notices to mariners, tide tables and all other nautical publications necessary for the intended voyage' (chapter V, Regulation 20).

The publication entitled How to Correct Your Chart the Admiralty Way (NP 294) is a simple guide towards correcting practices. Admiralty Notice to mariners may be consulted at or obtained from admiralty distributions, or they may be consulted at British mercantile marine offices, Customs Houses and at certain other places in the United Kingdom and overseas.

Passage planning from Okha to OTB Kandla

Q. 24.3 Your ship drawing a draft of 9m, has to reach the anchorage off Outer Tuna buoy From a position, 5 cables WNW of Okha Pilot station. Explain how will you go about planning a safe passage.

Ans.

As soon as the next port is known, Navigation officer must provide the master with following information:

01. 'Sea speed distance' or details of 'open sea passage' to next port.
02. Pilotage & harbour motoring or distance which would be traversed at reduced speed.
03. Open sea passage distance + reduced speed passage after next port to reach the subsequent port after next port or till bunkering port, if known.
04. Fuel, diesel, fresh water & lub oils remaining on board.
05. ETA next port at say 11.5 kn, 12 kn & 12.5 kn, where 12 kn is the normal general average speed of the ship.
06. Requisition for charts, harbour plan or nautical publication if required for the voyage.

Appraisal

01. Adm chart catalogue is consulted, to pull out charts, harbour plan & Sailing Direction for the current voyage.

02. Latest cumulative notice is checked to find if the editions of voyage charts are valid. In other words, it is confirmed that all charts on board are of current edition.
03. Latest quarterly Weekly Notices to Mariner or Cumulative notice is checked to ensure that, all the Admiralty publications (with supplements) relevant to the current voyage are of the latest edition.
04. The voyage charts & connected publications are then corrected to the latest weekly 'Notices to Mariners' on board.
05. Relevant Adm List of Lights is consulted to know more details regarding position, characteristics of any Light or construction of any Lighthouse.
06. From Adm Sailing direction find:
    (a) Weather or meteorological information of the passage area or the climatic conditions at destination port.
    (b) Information regarding waters close to shore, underwater dangers etc. with relevant caution for a watchkeeper if any.
    (c) Information regarding approaches & anchorages.
    (d) Information regarding shelter anchorages & important ports along the route.
    (e) Information regarding the tidal streams.
07. From ALRS vol. 2, get the information regarding Navigational Aids available in the passage area.
08. From ALRS vol. 6, get the port, health & pilotage information.
09. Similarly Guide to Port Entry, Routing Chart of the area for the current month, navigational & large-scale charts etc. are studied carefully.
10. Scale of chart, new edition date, dates of survey etc are considered while evaluating reliability of a chart.

Thus in respect of the **passage under consideration**, the navigational officer may, while going through various charts & publications, pick up useful information & note the same down in **Bridge note book** for himself, for other officers & for future reference, as follows:

(1) **Voyage charts**: BA 673 - Port of Okha & Approaches (1:50000). BA 43 - Gulf of Kachchh. BA3466 - Approaches to Kandla (1:40000) & Kandla Creek. Indian charts 2059 & 203.
(2) **Approaches to Kandla** Creek & their buoyed approach channels are very irregular & liable to frequent changes, the buoyage is moved accordingly.
(3) Masters using **Deep Water Route** should take in to account possible changes in depth due to meteorological & other effects since the last survey.
(4) A Vessel unless constrained by her draft should, as far as possible avoid using the Deep Water Route.
(5) **Flood stream** sets strongly round 'S' end of **Samiani Island** (5 cables NE of Okha Pt.), in a S'ly & E'ly direction & from there sets S'wards through Okha harbour, curving in E'ly direction round 'S' end of Beyt Island (E of Okha Pt.). It has a rate of from 1.25 - 1.5 kn at Neaps & 2 kn at Springs.
(6) **'Shelter Anchorage along the route'**: During SW Monsoon, in depth of 18.3 m, anchorage lies 3/4th of mile 'N' wards of entrance inlet under lee of Karumbhar Is.
(7) **Tidal stream** over **Ranwara Shoal** attain a rate of 5 kn at Springs & 3 kn at Neaps, causing heavy tide ripples & overfalls over uneven ground in vicinity & W-wards.
(8) **Important Port along the route:** Mandvi is very important commercial town in Gulf of Kachchh, connected by road to Bhuj.
(9) **Conspicuous position fixing Lights, Points etc:** Mandvi Light with elevation of 37m from Masonry tower lies at SW portion of fort. Pirotan I. lies 6.5 M NE of NW end of Dera & is a good land mark. Pirotan light is over a white circular tower with black bands.
(10) **Important radar detection ranges:** Balachiri Rk. (SSE of OTB anchorage). gives good echo at 19M Samiani Is. (5 cables NE of Okha Pt.) give good echo at 12 M.
(11) **Kandla Pilotage:** is compulsory from OTB. A vessel should embark a pilot close SW of OTB with Tekra Light bearing 011°. Loaded vessels can cross bar only during HW. Agents to be losely kept advised of ETA. Vessels can contact Kandla Tower through VHF ch. 16. Pilot station is 16 M from port.
(12) **Tides:** Both Okha & Kandla are secondary ports, listed in ATT 2, with Bombay as Standard Port. Tidal streams at selected positions in Gulf of Kachchh chart may be found out using Tidal stream table given on the chart & the knowledge of HW timings at Bombay.
(13) **Extracts from Shipmaster's report:**

(1) Voyage charts numbers (ii) Approaches charts
(2) A vessel unless CBD should as far as possible avoid using the deep water route.
(3) Flood stream sets strongly round 'S'
(4) Shelter Anchorage along the route must be note down
(5) Tidal Stream
(6) Important port along the route
(7) Conspicuous position fixing lights, points etc
(8) Important radar detection ranges
(9) Pilotage
(10) Tides

6

(A) Pilot advised that anchorage is 2 M from OTB. Inside the harbour anchorages, are allotted by port authorities & pilots anchor there. Night navigation has been introduced & restricted to vessels upto 189m LOA & upto 8.23m draft. Tankers handled only in daytime.

(B) Report, October 1993: Approaching Gulf of Kachchh from SW the promontory of "Okhamandal" shows up well on radar with all Racons operating. Large swell in SW Monsoon. Anchorage quite crowded. Inner anchorage is by pilot with tug's assistance. There was rule that if you anchored over 2 M from OTB, a double pilotage fees would be charged.

Kandla Tower gives out berthing information around 2100 h & 0900 h Maximum security required. At anchorage, thieves roam around at night in high-powered boats.

Planning:

Subsequent to appraisal, planning commences. Planning is done on chart as well as bridge note book, keeping in mind all the aspect of passage under consideration.

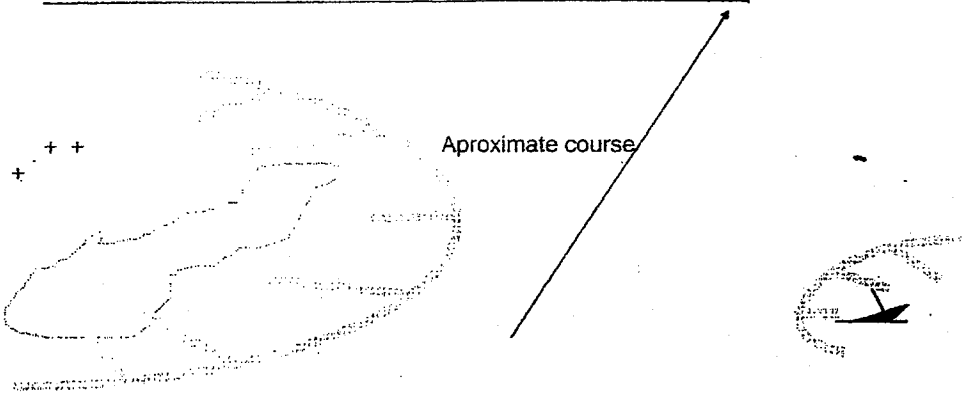

Fig. 26.1

(A) Largest scale chart, extending from departure port till destination port is picked up first. In present case it is BA 43. In most cases it may be a very small scale chart. Plot a course on this chart, which is not the final course but only a general rough course line or guide line for plotting the final course.

(B) Now take the largest scale chart of departure port. This would normally be approaches chart. Plot initial position, 5 cables WNW of Okha Pilot Station. On the Approaches chart & the navigational scale chart course lines are plotted as follows.

(C) Highlight the danger areas, showing areas dangerous for vessel, on either side of rough course line. Shade these areas with slanting edge of chart pencil (2B), as shown in fig 24.1.
Safety margin lines on either side of this course line is drawn tangenting the highlighted zones, to make a safe water band for the vessel.

(D) Course line is laid approximately midway of the safe water band. This has following merits:
(1) Course is laid in safe depths.
(2) Emergency alteration on either side may be done without having to go in the chart room to check present position.
(3) In cases of negligence, delay or mistake in altering course or in resuming the original course after altering for another vessel, vessel will have some margin of safety.
(4) Successive alteration to Starboard for head on traffic will not put the vessel in shallow waters.
(5) In case of machinery or steering failure, more margin of safety on either side.

(E) Some times approaches & departure courses are along transit bearing lines. The set of lights (Inferior / superior light), is most reliable & efficient way of guarding against cross channel currents

& ensuring that the vessel is in the middle of approach channel. All that one has to ensure is that the two lights are maintained in vertical line.

(F) Once the courses are decided, the alteration points need to be placed. Following points should be remembered in selecting the alteration points ;

(1) Floating marks, buoys etc not relied as exclusive pos fixing aids, in order to alter course.

(2) Beam bearing of a light house preferred for alter course position. This has following merits.
(AA) Light flashing or lighthouse on beam warns you, "Don't forget you have to alter",
(BB) Light, beacon etc. while abeam is normally nearest, hence position error for a given error in bearing is minimum.
(CC) '// indexing distance' is equal to 'alteration point distance', helping one to check any possible clerical error.
(DD) Light being nearest, more chances of being visible in reduced visibility cases.

(3) It may be placed on color sector boundary line as is done after course of 063°T in present case.

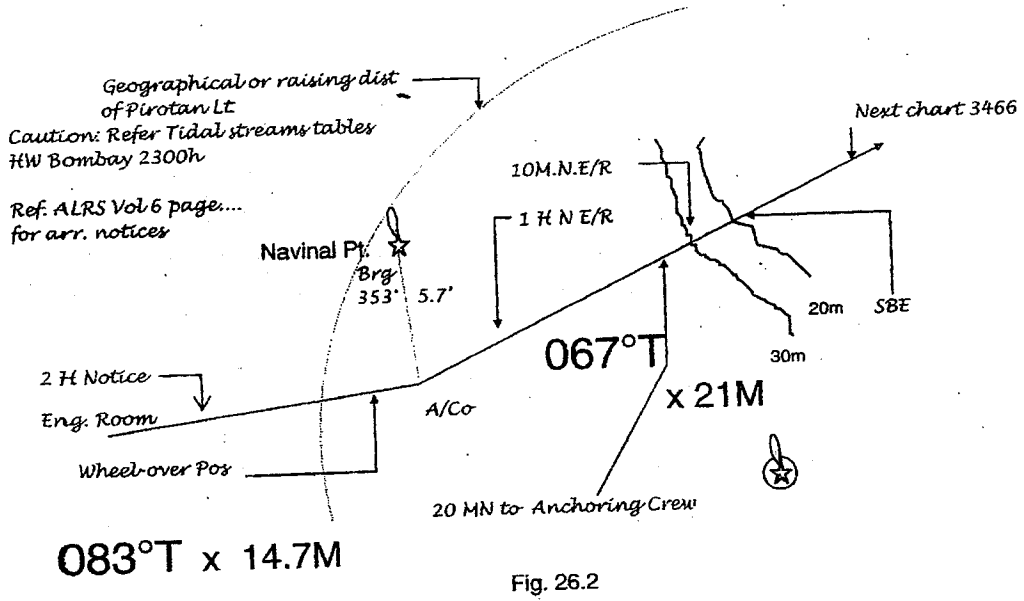

Fig. 26.2

(4) Depth contours perpendicular to course line can be used to cross check position. In present case note, '10 min. notice' & 'Standby Engines' given at crossing of contour. (Caution: Soundings are extremely reliable means of ascertaining safe depths, helping to confirm the position already determined by other means but should not be used as sole & primary means of fixing up position.)

(5) 2 Racons, 2 conspicuous points of land etc. with suitable angular separation (close to 90°), may be suitable means of position fixing.

(6) Alt/ course positions may be synchronized with Transit bearing lines, eliminating any chances of compass error.

(G) A few adjustments may be required in course lines to suit positions of alteration of course. Nevertheless , course lines at this stage are more or less final.

7

(I) The voyage charts are then placed in the order of appearance. Mark the first voyage chart viz. BA 673 as OK-1, at the thumb label on the reverse of folded chart. Thus OK-2 marked on BA 43 would mean 2nd chart of passage between Okha & Kandla. Reference charts & very small scale charts are kept separately. In the passage under consideration the charts will be marked as follows:

BA 673 as OK-1
BA 43 as OK-2
BA 3466 as OK-3

(J) Once the charts are suitably marked with the information required for a safe passage, the summary of the passage & relevant information can be written down in the Bridge note book. Bridge note book is an important document & must be filled up carefully & in proper sequence. Ensure that;

(a) It is neat & systematic so that any other person may refer back to it.
(b) Information is adequate so that identical courses may be laid on a new chart without help of original chart.
(c) It is possible to make reference to this note book, during any inquiry in future even if the courses on the chart are erased off.

Manoeuvring:

2242: Standby engine & H/ahd
2248: Engines stopped.
2254: Engines tried out on astern propulsion & ahead manoeuvring resumed.
Distance to go from here is expected to be 3M till anchorage position.
ETA at Anchorage point = 2320 h.

Anchorage:

Following facts are noted regarding anchorage at Kandla:

(a) Congested anchorage.
(b) Double port dues on anchoring over 2 M from OTB.
(c) Buoyage & channel liable to shift.
(d) High powered boats may be seen at anchorage. Efficient deck patrol & anti pilferage caution must be exercised.
(e) Good holding ground. Scope used is adjusted accordingly, considering duration of stay & congestion of anchorage.
(f) Engines to be at very short notice or handy as required by the situation.
(g) State of tide, tide timings, must be calculated for the stay.

Pilotage:

Maximum possible information is gathered regarding different aspects of pilotage passage, such as regarding tidal streams, currents, conspicuous shore objects, tricky areas etc., through Adm Sailing Direction, Guide to Port Entry, Tide tables, Harbour Plans, Tidal / Current atlases etc. In case of Kandla, limited information only is provided owing to changing channel position, compulsory pilotage etc.

Nevertheless best possible course is laid till the wharf. The courses & distances of pilotage courses are marked on chart.

Soon after pilot enters the wheelhouse, there is exchange of information between Master & Pilot. Master, Pilot & OOD must not indulge in any activity which may disturb their attention from normal navigation e.g. 'arrival port paper work'. Manoeuvring data is always displayed on the wheelhouse. Yet the Master must tell the pilot, essential details of manoeuvring. e.g. type of propeller whether single or twin, type of engines whether diesel or steam, length over all, beam etc.

Information Exchange pilot

Pilot normally will take over the control for all practical purposes immediately & it may not be correct to bombard the pilot with lot of questions. However considering that pilots are very familiar with home pilotage waters, Master must show the intended course plan till wharf, to the pilot & discuss the course of

action as soon as practicable. Pilot would normally find it very easy to amend the existing course lines with required modifications where required.

Following must form the subject of Master - Pilot discussion, where applicable.

(a) Tidal streams / current
(b) Wharves if unsafe, depth there at. Whether sufficient number of fenders is provided at wharf.
(c) Any correction to be made on harbour plan regarding functioning of lights, change in depths, new dangers, insertion or deletion of wreck etc.
(d) Peculiar manoeuvre while passing a vessel on reciprocal course. (e.g. such manoeuvres are carried out in different ways in river transit while going to Houston, transiting River plate, transiting Suez or Kiel).
(d) Tips to make changes in plotted course. Though it is not expected that pilot will reveal all the tricks of trade to the Master but at least the necessary details in the case under consideration may be given by the pilot, in order to make the passage safer.
(e) VHF channel to be monitored.
(f) Position where the tugs to be made fast & time when crew should be ready on stations.
(g) Portable fender if needed at some specific position on deck.
(h) Anchor or anchors, if will be used to manoeuvre the vessel.
(I) Wind, current at wharf, procedure of making fast etc.

Master must then instruct the OOD accordingly, explaining him the course of action. Second Mate or the OOD then amends the courses. In any case frequent position plotting is done on chart. Passing of buoys, bridges, conspicuous shore features etc. is recorded on chart, and logged down in movement book & logbook.

Execution & Monitoring:

Refer to answer to the earlier question. Upon completion of planning, 2nd mate will show the charts & courses along with Bridge Note Book to Master. Master will check various stages of passage, with particular reference to distance at which dangers, shoals etc. are passed. Weather expected at crucial areas considered. It is also checked up whether a critical passage will take place in day time or night time. The level of sophisticated equipment the vessel has is also considered. Master will then approve the passage with little or no amendments.

OODs during the execution of voyage must follow the passage plan with all the caution. Present & next courses should actually be checked, instead of just relying on the written figures. Same thing applies for wheelover position bearings. Proposed plan must be used as a guideline & more importance should be give to on scene developments. One cant say that he cant afford to frequently alter Co as per the ROR, as the same will upset the ETA or planned passage. Steaming time may change between different waypoints due to new weather developments. A watch keeper may find mistakes in original plan or may need to follow a different course for a particular leg owing to some reason. The watch keeper must call Master & discuss the problem with him & seek his approval for the amendment.

Contingency:

No passage plan is complete without 'contingency or alternate planning' for alternate conditions. One can not possibly make contingency plan for every problem, but must at least make contingency plans for more probable difficulties, e.g. delay due to reduced visibility(If there is a probability of visibility becoming poor in a given area).
In the present case let's consider that somewhere along the route, engines may have to be stopped. Following factors will have to be considered by the passage planning team:

(a) In what direction would the vessel Drift!
(b) Continuous position fixing would be there or not.

8

Q.001 TESTS ON ANCHORS

A.001. ALL ANCHORS OVER 168 lb (76 kg) IN WEIGHT MUST BE TESTED & ISSUED WITH A TEST TEST CERTIFICATE. THE WEIGHT OF ANY ANCHOR FOR THE PURPOSE OF THE RULES & REGULATIONS GOVERNING ANCHORS & CABLES SHALL:
FOR STOCKLESS ANCHORS INCLUDE THE WEIGHT OF THE ANCHOR TOGETHER WITH ITS SHACKLE I F ANY.
FOR STOCKED ANCHORS THE WEIGHT OF THE ANCHOR INCLUDING ITS SHACKLE, IF ANY, BUT EXCLUDING THE STOCK.

DROP TEST (CAST ANCHORS): -
ANY PART OF AN ANCHOR OVER 15 cwt IS SUBJECTED TO A PERCUSSION TEST BY BEING DROPPED BOTH END ON & SIDE ON FROM A HEIGHT OF 12 FEET ON TO AN IRON OR STEEL SLAB. AFTER THAT, THE PIECE MUST BE SLUNG & HAMMERED ALL OVER BY A 7 lb SLEDGEHAMMER. A CLEAR RING MUST BE PRODUCED TO SHOW THAT NO FLAW HAS DEVELOPED DURING THE PERCUSSION TEST.

THE BENDING TEST (CAST ANCHORS): -
AN ADDITIONAL PIECE OF METAL, 8 IN. LONG, IS CAST WITH THE PIECE TO BE TESTED, & IS CUT AWAY FOR THE PURPOSE OF THE BENDING TEST. THIS PIECE WILL BE TURNED DOWN TO 1 IN. DIA, & BENT COLD BY HAMMERING THROUGH AN ANGLE OF 90o OVER A RADIUS OF 1.5 IN. THE CASTING WILL BE DEEMED SUFFICIENTLY DUCTILE IF NO FRACTURE APPEARS IN THE METAL.

ALL ANCHORS ARE SUBJECT TO PROOF STRAIN, & SUBSEQUENT PROOF LOAD, BUT ONLY CAST STEEL ANCHORS ARE WILL BE SUBJECTED TO PERCUSSION, HAMMERING & BENDING TESTS. WROUGHT IRON, OR FORGED STEEL ANCHORS ARE NOT SUBJECTED TO THESE TESTS AS THEY ARE FORGED FROM RED OT SLAB BY HAMMERING. ALL OTHER ANCHORS WILL ALSO BE ANNEALED.

MARKS ON ANCHORS.
EACH ANCHOR MUST CARRY ON THE CROWN & ON THE SHANK THE MAKER'S NAME OR INITIALS, ITS PROGRESSIVE NUMBER & ITS WEIGHT. THE ANCHOR WILL ALSO BEAR THE NUMBER OF THE CERTIFICATE, TOGETHER WITH LETTERS INDICATING THE CERTIFYING AUTHORITY.

TESTS ON CABLES: -
ANCHOR CABLE OVER 12.5 MM IN DIAMETRE IS ACCEPTED FOR TESTING AT AN APPROVED TESTING ESTABLISHMENTS IN LENGTHS OF 27.5 MTS. (1 SHACKLE OF CABLE). THE MANUFACTURER WILL PROVIDE 3 ADDITIONAL LINKS FOR THE PURPOSE OF THE TEST.
THESE 3 LINKS WILL BE SUBJECTED TO A TENSILE BREAKING STRESS, AND IF THIS PROVES TO BE SATISFACTORY THEN THE TOTAL LENGTH OF THE CABLE WILL BE SUBJECTED TO A TENSILE PROOF TEST, THE TESTS BEING CARRIED OUT ON APPROVED TESTING MACHINES.
IF TWO SUCCESIVE LINKS BREAK, THE CABLE IS REJECTED. BEFORE THE TESTS ON CHAIN CABLE IS CARRIED OUT, THE SUPERVISER WILL SATISFY HIMSELF THAT THE QUALITY OF THE MATERIAL FROM WHICH THE CABLE IS MANUFACTURED MEETS WITH THE REQUIREMENTS OF THE ANCHOR AND CHAIN CABLE REGULATIONS.

MUKESH SOLANKI

Q.1 IF YOUR SHIP IS SUDDENLY LISTED, WHAT IS ACTION?

A.1. (1) INFORM MASTER AND BRIEF HIM ABOUT THE SITUATION.
(2) WATCH OUT THE LIST CAREFULLY IF ANY SIGN OF FURTHER INCREASING.
IF YES, THEN SOUND THE EMERGENCY ALARM & MASTER CREW.
(3) IF LIST IS STABLE, WAKE UP YOUR CREW, SOUND ALL TANKS, HOLDS AND BILGES.
(4) INFORM DUTY ENGINEER IF E/R IS UMS, ASK HIM TO CHECK INTEGRITY OF E/R & SOUND ALL BUNKER TANKS.
IN THE MEANTIME C/O WILL EVALUATE THE STABILITY TAKING INTO ACCOUNT OF BUNKERS CONSUMED AND SLACK TANKS FSC.
(5) IF ALL SOUNDINGS ARE FOUND NORMAL THEN SUSPECT CARGO SHIFT (NOT FOR TANKERS). IF WEATHER & SITUATION PERMIT, SEND YOUR MEN TO INVESTIGATE AND ACT ACCORDINGLY. (6) DO NOT ATTEMPT TO RESIFTS ANY CARGO USING MANPOWER AT SEA. JUST LASH THE SHIFTED CARGOES IN THEIR PLACES AND CHECK/TIGHTEN OTHER LASHINGS OF OTHER CARGOES.
(7) IF SOUNDINGS FOUND ABNORMAL IN ANY TANKS OR HOLDS, SUSPECT BUNKER/BALLAST INGRESS FROM OTHER TANKS OR SEASIDE. CHECK FOR ANY CRACKS/LEAKAGE IF WEATHER & SITUATION PERMIT. TRANSFER CONTENTS OF THE TANK BELOW THE LEVEL OF DAMAGE & CARRY OUT TEMPORARY REPAIRS IF NEEDED & CORRECT LIST BY ADJUSTING BALLAST.
(8) IF STABILITY CALCULATION SHOWS FLUID GM IS CLOSE TO ZERO OR NEGATIVE (THIS MAY HAPPEN DUE TO ICE ACCUMULATION ON DECK, CONSUMPTION OF BUNKERS FROM DB'S ETC), THEN THE SITUATION IS VERY CRITICAL. THE SHIP IS AT ANGLE OF LOLL. CALCULATE THE STABILITY FOR PLANNED ACTIONS (WHICH MAY INCLUDE REDUCING THE NO. OF DB TANKS BY TRANSFERRING CONTENTS TO OTHER TANKS ETC. VERY IMP: DO NOT TRY TO CORRECT LIST BY BALLASTING HIGHER SIDE AS THIS MAY FURTHER REDUCE GM AND CAPSIZE THE SHIP

Q.2. HOW YOU WILL USE LAST YEAR ALMANAC?

A.2. ALMANAC FOR NEXT YEAR
AFTER THE DAILY PAGES OF 2006 ALMANAC YOU WILL FIND A PAGE WITH DETAILED INSTRUCTION ON HOW TO USE THE ALMANAC ON NEXT YEAR. THERE ONE CAN FIND QUICK CALCULATION METHODS WITH EXAMPLES GIVEN. THIS INSTRUCTION SHEET IS PRESENT ON EVERY ALMANAC.
BUT AFTER YOU SAY THIS, THE EXAMINER WILL PROBABLY CROSS YOU SAYING WHAT IF THAT PAGE IS MISSING FROM THE ALMANAC?
TELL HIM THAT AS YOU KNOW THE INCREMENTAL RATE OF GHA OF CELESTIAL BODIES (E.G.: SUN=15°/HR, MOON=14°19'/HR, STARS=15°01.46'/HR), YOU CAN EXTRAPOLATE AND FIND THE GHA. DECLINATIONS OF STARS DO NOT VARY APPRECIABLY, FOR SUN AND MOON YOU CAN EXTRAPOLATE SIMILARLY.
HOPE THE EXAMINER WILL BE SATISFIED HEARING THESE.
CALCULATION OF SUN/MOON RISE/SET, ALTITUDES, HP, MERPASS, TWILIGHT ETC ARE LITTLE COMPLEX, BUT YOU CAN TAKE HELP OF SIGHT REDUCTION TABLES & FIND ALTITUDE TO CALCULATE SIGHT.

Q.3. RUDDER STUCK?

A.3. ~~ENGINE GO FULL ASTERN. YOUR VSL WILL STOP PLUS HDG WILL NOT CHANGE (TRANSVERSE THRUST WILL OFFSET THE 10 DEG PORT RUDDER) PUT OUT YOUR NUC ALLS, ASK TUGS T BRING YOU SAFELY INTO A DOCK / LAY BERTH FOR REPAIRS.~~

Q.4. DIFFERENCE BETWEEN HARMFUL, HAZARDOUS AND DANGEROUS?

A.4. IMO CALLS SUBSTANCES WHICH ARE DANGEROUS TO HUMANS (POISON), MARINE CREATURES (PLASTIC / MARINE POLLUTANT)AND TO THE SHIP (SULPHUR - DUE TO ITS CORROSIVE PROPERTIES) AS DANGEROUS.
HENCE THE IMDG CODE - DANGEROUS GOODS.

HAZARDOUS IS A TERM (MEANING THE SAME AS DANGEROUS) AS USED BY USA - HENCE DANGEROUS GOODS OF IMDG CODE ARE CALLED HAZMAT - HAZARDOUS MATERIAL BY US REGULATIONS IN THE CFR.

HARMFUL REFERS TO SOMETHING CAUSING BODILY HARM (E.G.: TO HUMAN BEINGS AND MAYBE TO ANIMALS / MARINE CREATURES). HENCE PETROL MAY NOT BE HARMFUL, THOUGH DANGEROUS. IT USUALLY WOULD NEED TO BE INGESTED (BY EYES, MOUTH, SKIN, ETC.)

Q.5. HOW YOU WILL CORRECT THE CHART WHICH IS NOT CORRECTED FROM LAST FEW YEARS?

A.5. SEE ALL THE WEEKLY NTM ISSUED IN THE LAST 1-6 MONTHS UP TO JAN / JULY; THEN THE CUMULATIVE NOTICES TO MARINERS , TILL YOU FIND A NTM NUMBER WHICH FIGURES ON THE CHART LEFT BOTTOM CORNER. IT IS THEN THAT YOU KNOW WHEN THE LAST CORRECTION WAS DONE ON THIS CHART!

MY VIE WOULD BE TO START OFF FROM THAT CORRECTION AND WORKED YOUR WAY TO THE PRESENT NTM. IN OTHER WORDS SAY THE LAST CORRECTION DONE WAS 125 / 2005 - YOUR MOST

RECENT CUMULATIVE NOTICE WOULD TELL YOU WHETHER THIS IS THE CURRENT CHART EDITION, AND A LIST OF ALL NTM APPLICABLE. GO IN THE ORDER OF 2005 - 2006 - 2007 CORRECTING THE CHARTS.

REASON -
A) YOU CANNOT BE SURE WHEN THE LAST CORRECTION WAS DONE (3 YRS? 5 YRS? 3 MONTHS? WHO KNOWS?!)
B) SAY A BUOY WAS NEWLY INSTALLED IN 2006 MAY WITH NTM 123/2006.
IT WAS SHIFTED IN JAN 2007 WITH NTM 50/2007. IF YOU WORK FROM 2006 THEN 2006, THE 2007 NTM WILL MAKE SENSE. IF YOU GO BACKWARDS, THE NTM WILL MAKE NO SENSE TO YOU, SINCE YOU WOULD NOT BE ABLE TO FIND THAT BUOY IN THE FIRST PLACE!

Q.6. WHAT IS THE REASON FOR PREFERRING LONG BY CHRONO METHOD FOR SIGHTS N MORNING? WHY NOT INTERCEPT?
A.6. WELL USING LONG BY CHRONO YOU GET THE DR LAT AND OBS LONG TO TRANSFER TO NOON SIGHT. USING INTERCEPT THE PL HAS TO BE TRANSFERRED BY RUNNING THE DR POSITION AND THE INTERCEPT. ADDITIONAL WORKING OF THE INTERCEPT PL TRANSFER EITHER BY PLOTTING ON CHART OR BY CALCULATION IS REQUIRED. SO LONG BY CHRONO IS EASIER TO TRANSFER. HOWEVER BOTH METHODS ARE VALID.

Q.7. HOW WILL YOU DETERMINE IF RISK OF COLLISION EXISTS, ONE WHITE LIGHT ON STBD QUARTER, RADAR NOT OPERATIONAL, GOOD VISIBILITY?
A.7. TAKE RELATIVE BEARING OF THE VESSEL. RELATIVE BEARING MUST REMAIN SAME FOR RISK OF COLLISION TO EXIST AS LONG AS OWN VESSEL HAS NOT ALTERED COURSE.
IF THE ONE WHITE LIGHT IS A MASTHEAD LIGHT WITH RANGE 6 NM THEN THE DISTANCE BETWEEN THE VESSELS SHOULD REDUCE BY FURTHER 3 NM FOR SIDELIGHT TO BE VISIBLE. IF RED SIDELIGHT OR BOTH SIDELIGHTS SEEN AFTER SOME TIME THEN RISK OF COLLISION MAY EXIST. GREEN SIDELIGHT MAY MEAN CLOSE QUARTERS SITUATION..

Q.8. WHY DO WE TAKE THE COMPASS BEARING RATHER THEN OTHER MEANS OF BEARING TO DETERMINE OF RISK OF COLLISION?
A.8. THE MAIN AIM IS TO AVOID TAKING A RELATIVE BEARING...(W.R.T SHIPS HEAD) AS IT CHANGES WITH ANY ALTERATION...THE COMPASS BEARING REMAINS FIXED AND IS HENCE USED TO DETERMINE ROC

Q.9. PRINCIPAL OF STRIPPER?
A.9. RECIPROCATING ACTION.

Q.10. BULKHEAD MASTER VALVE , WHAT IS IT AND ITS USE?
A.10. PROTECTION OF THE PUMP SUCTION VALVE AND EFFICIENT SEPARATION.

Q.11. U SEE SOUTH CARDINAL MARK RIGHT AHEAD OF YOU HEADING NORTH, YOUR PROFFERED ACTION, REVERSE COURSE OR ALTER UR COURSE PORT OR STBD, WITH PROPER REASON?
A.11. JUST STRESS THAT SAFE WATER LIES TO THE SOUTH OF THE BUOY...SO CHECK THE CHART AND PROCEED ACCORDINGLY. IT MAY INVOLVE A MAJOR ALTERATION TO EITHER SIDE. DEPENDING ON THE EXTENT OF THE RESTRICTION TO THE NORTH OF THE BUOY

CAPT.J.B.SINGH'S FAVORITE QUESTIONS:
RULES 9, 10 N 19.
SITUATION...RV A VESSEL OVERTAKING U.
ROR CARDS
YOUR VESSEL HEADING SOUTH. THE GREEN LIGHT OF THE TARGET JUST DISAPPEARS. TARGET BRG 2 POINTS ON PORT BOW.
LATEST AMENDMENTS TO ROR

INTERNAL: CAPT MAISHALLE:
EXTERNAL: CAPT BHATIA:
1...ROR CARDS...
2.. ASKED ME LIGHT OF AGROUNG VSL LESS THAN 50M AND R THESE LIGHTS SHOWN BY SOME OTHER VSL .....NUC SEEN FROM ASTERN .....AND HOW WILL U DTERMINE WHTHER IT IS AN NUC OR AT ANCHOR...
3.....GREEN LIGHT SEEN ON PORT BOW ...DTERMINE WHICH VSL AND WOT ACTION ... ACCORDING TO WHICH RULE
4...TWO WHITE LIGHT IN LINE AND BELOW THAT GREEN LIGHT SEEN ON STBD BOW .....DTERMINE.....SAME AS ABOVE QST
5...PASSAGE PLANNING FROM INDIA TO SRILANKA...
6....MOB ON PORT SIDE UR ACTION...
7....WOT IS TURNING CIRCLE AND STOPPING DISTANCE ....WHICH SIDE TURNING CIRCLE OF UR LAST SHIP WAS LESS AND WY...

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CAPT MHAISALE:

1 CARDS AND SITUATIONS.
2 FOG SIGNAL FOR VSL AGROUND
3 (GAVE ME A PC OF PAPER) DRAW A GC COURSE FROM 40 N 000 TO 40 N 060 W ON A GNOMONIC CHART.
4 WHT IS TIDAL STREAM. HOW WILL U CALCULATE. (HE GAVE ME A COASTAL CHART AND ASKED ME TO FIND IT OUT AT SOME GIVEN TIME)

CAPT MIRANDA:

1 PRIMARY DUTIES OF 2ND MATE
2 PUBLICATIONS TO BE REFERED FOR PASSAGE PLANING
3 DESCRIBE LIGHTS OF VSL AGROUND OF LESS THAN 50 M IN LENGHT
4 ——"—— OF VSL ENGAGED IN FISHING
5 TAKE ACTIONS WHEN U C A VSL AGROUND RIGHT AHEAD OF U (I SAID I'LL ALTER TO STBD AND GO ON A RECIPROCAL CRS. THEN HE ASKED ME ON WHICH SIDE IS TURNING CIRCLE SMALLER) - ITS ON PORT SIDE FOR RIGHT HANDED SCREW PROP.
6 METREOLOGICAL EQUIP ON BOARD
7 WHT DOES IT INDICATE WHEN DRYBULB READING IS SAME AS WET BULB

1) TAKING OVER NAVIGATION WATCH
2) PASSAGE PLANNING AT SEA,PILOT TO BERTH (SHIP ROUTEING,WEATHER ROUTEING)
3) IF ANEROID BAROMETER SHOWS DROP OF 10 MB ..WHAT DOES IT MEAN...WHAT ALL ACTIONS U WILL TAKE...IF IN NORTHERN HEMISPHERE...
4) IF U HEAR 1 PROLONGED N 2 SHORT BLASTS FWD OF BEAM IN FOG.....WHAT ACTION WILL U TAKE
5) U OVERTAKING ANOTHER VESSEL IN OPEN SEA...ACTIONS..??
6) WHAT IS STEVENSON SCREEN...WHICH ALL CONDITIONS WILL DRY N WET BUB SHOW SAME TEMP..??
7) SOME FOG SIGNALS N LIGHTS
8) WHEELHOUSE POSTERS...?? EXPLAIN ALL THINGS IT SHOWS IN DETAIL
9) MUSTER CARD..??
10) WHATS IS IAMSAR..??SEARCH PATTERNS..??
11) EXPLAIN ALL NAVIGATION PUBLICATIONS.....U SAID REQD FOR PASSAGE PLANNING
12) A VESSEL CROSSING U FROM UR PORT BEAM ACTIONS..??
13) USE OF SEXTANT..... ALL ERRORS N HOW TO CORRECT THEM..??

EXTERNAL: CAPT. COUTINHO:

- TYPES OF EQUIPMENTS ONBOARD UR LAST SHIP
- WHY NO VDR, REQUIREMNT FOR VDR, WAT IS SVDR
- WHEELHOUSE POSTER WAT INFO U GET
- ERRORS OF GPS
- HOW WILL U CORRECT CHART NOT CORRTED FOR MORE THAN 2 YRS
- T & P NOTICES
- HOW WILL U KNOW THAT A PARTICULAR CORN IS DONE IN ECDIS
- HOW WILL TAKE NOON SIGHT
- WAT IS PROGNOSIS AND ANALYSIS
- HOW WILL U LOCATE POLARIS
- HOW WILL U CALCULATE EX MERIDEAN LIMITS
- HOW WILL U FIND THE TIDAL STREAM AT A PLACE IN MUMBAI PORT
- DESCRIBE SOUTH CARDINAL BOUY
- CO'S 180° U SEE S-CARDNL BOUY RIGHT AHEAD ACTION
- LIGHT, DAYLIGHT SIGNL, FOG SIGNAL OF PILOT AND TOWING VESSEL UNDERWAY N AT ANCHOR
- TOWING VESSEL CROSSING ON UR PORT BOW ACTION
- HOW WILL U DETERMINE THAT VISIBILITY IS RESTRICTED
- E/R INFORMED U THEY REDUCING SPEED, WAT ACTION U WILL TAKE
- IAMSAR SEARCH PATTERNS

1.HOW WILL YOU CORRECT CHARTS WHICH HAVE NOT BEEN CORRECTED FOR THE PAST 2 YEARS.
2.WHAT R T & P CORRECTIONS?
3. HOW WILL CORRECT ECDIS CHARTS.
4. YOU ARE OOW AND VISIBILITY GETS REDUCED. WHAT ACTION WILL YOU TAKE?
5. YOU ARE A PDV AND U SEE A PDV 3 POINTS STBD BOW BOTH ITS SIDELIGHTS. WHAT ACTION WILL U TAKE?
6. WHAT R THE LIGHTS DISPLAYED BY A TOWING VESSEL?
7. HOW WILL U KNOW ANCHOR IS DRAGGING.
8. HOW WILL YOU TAKE NOON SIGHT. WHAT CORRECTIONS R THERE IN TOTAL CORRECTION AND EXPLAIN.
9. YOU HAVE A STEERING FAILURE.
10. EXPLAIN TRANVERSE THRUST.
11. YOU R ON CARGO WATCH AND WHEN READING THE DRAFTS BEFORE GOING TO NEXT LOADING SEQUENCE, U NOTICE THAT THE DRAFT HAS OVERSHOT. WHAT ACTION WILL U TAKE.

Front 2

MUKESH SOLANKI

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CAPT VAZ AND KHARE:

DIFF. BETWEEN TIDAL STREAM AND TIDAL ATLAS?
U DO NOT HAVE TIDAL ATLAS ,HOW WILL U CALCULATE TIDAL STREAM?
HOW WILL U REFER IMDG FOR COW OPERATION?
CAPT NAIR:
: ROUTEING CHARTS? WINDROSE?
: HYGROMETER, ANEROID N MERCURY BAROMETER
: SITUATIONS_ HEADON N ACTION BY STANDON VSL
: WHY V USE ALL&FS, THOUGH CHARAC. OF LIGHTS GIVEN ON CHART?
: ECHO SOUNDER.CORRECTIONS, CD-20MTR N ECHO SOUNDER SHOWING 19 MTR , WHY?
: TAKING OVER NAV. WATCH, COURSE RECORDER CHECKS
: ANGLE OF REPOSE, WHICH IS DANG, MORE OR LESS ANGLE OF REPOSE?
: STIFF N TENDER VSLS
: IMMERSION SUIT N TPA, DIFFERENCE?
: NEW AMMENDMENT FOR BULK CARRIERS REG. LIFE BOAT?
: MARPOL ANNEX V
: CONTAINER, STANDARD DIMENSIONS? REFER CNTR- CHECKS WHILE LOADING, VENT?
: M & MS NOTICES
: RQMNT OG LIFE JACKETS ON PASSENGER VSLS?

CAPT PANIGRRAHI:

1 DESCRIBE NORTH CARDINAL BUOY
2 VSL ON PORT SIDE UR ACTION
3 VSL ON STBD QTR RESTRICTED VISIBILITY UR ACTION
4 ERRORS OF ANEROID BAROMETER
5 DESCRIBE SQUAT
6 AGROUND VSL LIGHTS ND SOUND SIGNALS
7 MEANING OF FLAGS FROMM A TO Z
8 STATE RULE RESTRICTED VISIBILITY(RULE 19)
9 STATE RULE ACTION BY STAND ON VSL(RULE 17)
10 ERRORS OF GYRO
11 ERRORS OF ECHO SOUNDER
12 PASSAGE PLAN

CAPT SINHA:

1 :WHAT IS TRS? HOW IS IT FORMED?
2 :WHAT IS ODAS BUOY? DESCRIBE?
3 :(SITUATION) OWN VSL CBD, RAM VSL ON STBD BOW? ACTION? QUOTE THE RULE (18)?
4 :QUOTE RULE 19 (WORD TO WORD NOT REQUIRED)
5 :FEW CARDS RANDOM..... STOPS IF U KNOW THE SITUATION AND ACTION..
6 :ENTERING TSS COLLISION WITH FISHING VESSEL, ACTION?(STRESSES ON REPORTING)
7 :LOAD DENSITY? LOADING OF STEEL COILS? EACH OF 20T SHIPS GEAR? (LOADING OF HEAVY LIFT) SECURING OF COILS, HOW WILL U PLAN IT?
8 : VSL OUT OF DRYDOCK AT ANCHOR, HOW WILL U PREP. 4 COMPASS ADJUSTMENT NEXT DAY? PREPARE?(LOCATION OF SPARE MAGNETS, GREASING OF NUTS OF SPHERES, PREVIOUS CORRECTION REPORT)?
9 : CRITICAL PERIOD IN A FLOATING DRYDOCK? (DANTON). HOW GRAVING AND FLOATING DRYDOCK OPERATE? UPTHRUST AND HOW LOSS OF GM OCCURES?
10:PREP. WHEN SAILING OUT OF DRYDOCK?
11:VESSEL ARRIVING PORT FOR LOADING CHECKD TO BE CARRIED OUT?
12: PREP. FOR CRUDE OIL WASHING? IN DETAIL?
13: CONTENTS OF LASHING CODE? REQUIRED BY WHICH RESOLUTION? (CHECK SOLAS CHAP VI..HIS FAV.) WHO ENDORSES IT?
14:CONTENTS OF CHAIN REGISTER? WHO INSPECTS? AS PER WHAT REGULATION?
15: HOW WILL YOU PREP. FOR BUNKERING?
16:GRAIN CODE? CONTENTS ? VOL HEELING MOMENTS? HOW WILL U REFER?
17:WHAT IS STATUTORY CERTIFICATE? NAME ALL CERTIFICATES WITH VALIDITY PERIOD?
18: CONTENTS OF OFFICIAL LOG BOOK?

GENERAL QUESTIONS:

Q1 WHAT IS THE CLOSED HATCH LOADINGS? WHEN SHOULD ONE ATTEMPTED FOR THAT?
Q2 IS MANOEUVRING SIGNAL MANDATORY.....ANY IDEA?
Q3 FOR MINIMUM SHIFTING OF CARGOES ANGLE OF REPOSE SHOULD BE MORE OR LESS? ALSO REASON FOR THAT?
Q4 WHY AND WHAT DRUGS ARE KEPT IN MASTERS CUSTODY APART FROM MEDICAL CHEST?
Q5 IN DENCE FOG IF WHISTLE AND GONG NOT WORKING, ACTION?
Q6 WHAT R THE INFORMATIONS RECEIVED FROM LODICATOR?
Q7 WHAT IS LD AND PLD, WHAT IS THE DIFFERENCE BETWEEN THESE TWO?
Q8 HOW TO USE OLD ALMANAC OF PREVIOUS YEAR FOR CURRENT YEAR....?
Q9 WHAT R THE PREVENTIVE MEASURES FOR SAFE STEERING?
Q10 IS WEATHER FAX MANDATORY TO BE CARRIED?
Q11 WHICH BUOY EXHIBITS RACON T AND RACON M?
Q12 WHAT IS SKELETON PLATE?
Q13 ANGLE OF ROLL TO WHICH THE CONTAINER TWIST LOCKS ARE TESTED?
Q14 HOW WILL U ENSURE THE ALL ROUND VISIBILITY OF RIGID REPLICA OF FLAG A?
Q15 REQUIREMENTS FOR LTA, HAND FLARES
Q16 COW PROCEDURE IN DETAIL
Q17 HOW DO WE GET THE (11.5 % O2 AND 1.5 % HC) POINT E ON FLAMMABILITY DIAGRAM
Q18 SOLAS AMENDMENTS REGARDING COMBINATION OF GENERAL ALARM AND FIRE ALARM
Q19 REQUIREMENTS FOR DEMISTER PADS.
Q20 DIFFERENCE BETWEEN DANGEROUS , HARMFUL AND HAZARDOUS SUBSTANCES.
Q21 PREPARING VSL FOR SEQ SURVEY AS A THIRD/SECOND OFFICER. 13/11/2007 ANONYMOUS
Q22 WHAT IS SUBSIDIARY RISK.
Q23 WHAT ARE CATEGORIES OF MARINE POLLUTANTS AND HOW R THEY CLASSIFIED.
Q24 CALCULATE SWL OF DERRICK IN UNION PURCHASE.
Q25 PREPARING VSL FOR DEPARTURE.
Q26 EXTRA REFERENCES FOR ENTERING MALACCA STRAIT.
Q27 DIFFERENCE BETWEEN INTACT & RESERVE BUOYANCY
Q28 WHICH BUOY EXHIBITS RACON T
Q29 WHAT IS THE NEW ABBREVIATION FOR INSPIRES
Q30 WHAT IS MEDICAL SCALE
Q31 WHAT IS AC AND NC WITH RESPECT TO RADAR LOG
Q32 WHAT IS THE DIFFERENCE BET ABANDONSHIP N BOAT DRILL?
Q33 WHAT IS THE TOTAL TIME DURATION OF SOUND SIGNAL FOR A AGROUND VESSEL MORE THAN 100 M IN LENGTH
Q34 HOW IS FACTOR OF SAFETY DETERMINED..??
Q35 WHAT IS THE DIFF BET ISOLATED DANGER MARK N SAFE WATER MARK WHEN BOTH INDICATE SAFE WATER ALL AROUND..?? HOW FAR WILL U KEEP UR SHIP FROM ISO DANGER BUOY?
Q36 HOW MUCH BLOOD ALCOHOL CONTENT IS PERMISSIBLE FOR WATCHES??
Q37 WHAT ARE THE DIFF TYPES OF DUNNAGE..?? BASED ON SIZE..??
Q38 WHY ARE THE LINES ON BAROGRAPH CURVED..??
Q39 WHAT ARE THE PRECAUTIONS TO BE CARRIED OUT WHILE NAVIGATING IN PSSA(PARTICULALRY SENSITIVE SEA AREAS)..??
Q40 HOW WILL U GET DISPLACEMENT (USING DRAFT) FROM CAPACITY PLAN..??
Q41 WHAT IS CYCLOSTROPIC FORCE..?
Q42 WHY DOES THE TRS CURVE N RECURVE??
Q43 DIFFERENCE BETWEEN TIDE,CURRENT,TIDAL STREAM..???HOW ARE ATT CORRECTED
Q44 WHAT FORE PEAK VALVE?
Q45 HOW DO I PROCEED FOR RADIO MEDICAL ADVICE(FULL ON THEORY...ASKED BY KHARE).....NO ONE LINER...HE NEEDS COMPLETE PROCEDURE

SETS FOR N/S CPN VAZ.

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FN 1:

1) HORIZONTAL SECTOR OF LIGHTS.
2) POSITION OF MANOEUVRING LIGHTS.
3) SAILING V/L IDENTIFICATION.
4) MEANING OF COMBINED LANTERN & WHEN CAN IT BE CARRIED.
5) SAILING V/L END ON, ACTION.
6) FISHING V/L OVERTAKING YOU, ACTION.
7) FISHING V/L HAMPERED BY GEAR LIGHTS.
8) PUBLICATIONS ON BRIDGE / USED FOR PASSAGE PLANNING.
9) ANCHORING TERMS.
10) OPEN SEA STEERING GEAR FAILURE.
11) OTHER V/L OVERTAKING, ACTION.
12) WHAT ARE THE MEDICAL PUBLICATIONS ON BOARD.
13) LIGHTS FOR A DIVING V/L.
14) OCCULTING & FLASHING LIGHTS.
15) MAN OVERBOARD, ACTION.
16) PRINCIPLE OF ECHO SOUNDER.
17) WHAT IS UPPERMOST CONTINUOUS DECK.
18) CAN POOP OR FO'CSLE BE U.C.D.?
19) CAN POOP DK. ON LOG CARIER BE U.C.D.?
20) WHAT IS AREA A3?
21) WHY IS A STARBOARD TURN PREFERRED IN ROR?
22) TURNING CIRCLE OF LAST SHIP.
23) TRANSVERSE THRUST & FUNCTIONAL WAKE.
24) MANOEUVRING LIGHTS SPECIFICATIONS & USES.
25) HORIZONTAL SPACING OF LIGHTS.
26) WHAT IS ASPECT?
27) IN A RADAR SET WHAT ARE THE ASSUMPTIONS MADE FOR ITS WORKING?
28) ERROR IN RADAR WHEN USED FOR RANGE DETECTION.
29) DRY DOCK TERMS.
30) WHAT IS DRAWING FORWARD / AFT.
31) HOW WILL YOU ENSURE ALL ROUND VISIBILITY OF RIGID REPLICA FLAG 'A'.
32) VERTICAL SEPERATION OF MASTHEAD LIGHTS.
33) VARIATION / DEVIATION DEFINITION.
34) DESCRIBE THE LIGHTS OF A DREDGER MORE THAN 50 METRES IN LENGTH DISPLAYING RAM LIGHTS, AS SEEN FROM STBD SIDE .
35) DREDGER WITHOUT OBSTRUCTION LESS THAN 50 METRES UNDERWAY AS SEEN FROM ASTERN.
36) RULE 18: RESPONSIBLITIES BETWEEN VESSELS.
37) TOWING VESSEL >=50 METRES AND LENGTH OF TOW 200 MTS OR LESS AS SEEN FROM PORT SIDE.
38) DAY SIGNAL OF A FISHING VESSEL WITH NETS MORE THAN 150 METRES AS SEEN END ON.
39) RESTRICTED VISIBLITY ENGINE FAILURE AND THE VESSEL EXPERIENCES TRAFFIC AROUND, ACTION.
40) PROCEDURE FOR CHANGING OVER TO HAND STEERING.
41) TAKING OVER AS 2nd MATE.
42)

FN 2:

1) LIFTING GEAR INSPECTION - ANNUALLY & EVERY 5 YEARS.
2) DECK SEAL PURPOSE, IF NOT FUNCTIONG SHOULD OPERATIONS BE CARRIED OUT.
3) LOADING OF COAL + WRT. TO B.C. CODE.
4) TK CLEANING OF A V/L WITHOUT IG.
5) ACTION WHEN A COMPONENT OF LIFTING EQUIPMENT FAILS IN PORT.
6) WHEN IS LOAD MAXIMUM ON DERRICK.
7) WHAT HAPPENS IN A UNION PURCHASE WHEN ANGLE > 120o.
8) LOADING SULPHUR.
9) EMS. CONTENTS.
10) WHAT IS N2 BLANKETING.
11) COMPATIBILITY / SEGREGATION.
12) WHAT IS PROOF LOAD.
13) CRANE FOR 25T, WILL YOU LOAD 26T IF GETTING DELAYED.
14) LOADING STEEL PLATES ON DECK.
15) WHAT IS MOUSING OF A CARGO HOOK.
16) STATIC ELECTRICITY PRECAUTIONS USING UTI TAPES AND BUTTERWORTH MACHINES.
17) WHAT IS SKELETON PLATE.
18) IMDG: VOLUMES, SUPPLIMENT AND CLASSIFICATION.

MUKESH SOLANKI

19) **FN 3:**

1) MARPOL ANNEXES: DISCHARGE OF OIL CRITERIA, PPM, CAN V/L AT ANCHOR DISCHARGE OIL.
2) ANNEX I MARPOL.
3) SOPEP: LIST OF EQUIPMENT CARRIED IN THE LOCKER.
4) GARBAGE: CAN YOU BURN PLASTIC IN INCINERATOR, REQUIREMENT FOR DISPOSAL OF ASH FROM INCINERATOR.
5) SOLAS: REQUIREMENTS FOR PYROTECHNICS, INTERNATIONAL SHIP / SHORE CONNECTION, TPA & UNIT OF ELECTRICAL CONDUCTIVITY, HYDROSTATIC RELEASE UNIT & ITS ACTIVATION.
6) PRESSURE AT WHICH FIRELINE RELIEF VALVE OPERATES.
7) OPERATION OF ODMCS.
8) LUMINOUS INTENSITY OF A MOB MARKER / PYROTECHNICS.
9) RPM '0' ACTION.
10) INSTANTANEOUS RATE OF DISCHARGE.
11) PURPOSE OF DECK SEAL.
12) SOLAS REQUIREMENTS FOR ALARMS ON IG. PANEL.
13) TPA & MEANING OF THERMAL CONDUCTIVITY.
14) SOLAS SPECIFICATIONS FOR LIFE JACKETS AND BUOYS.
15) SOLAS CONTENTS.
16) WHAT IS PERMEABILITY WITH RESPECT TO SOLAS.
17) SHEER STRAKE, GARBOARD STRAKE, GUNWALE PLATE.
18) PANTING / POUNDING & STRENTHENING AGAINST IT.
19) TYPES OF FRAMING ON CONTAINERS & TANKERS.
20) PRINCIPLE OFELECTRIC ARC WELDING.
21) WHAT IS SLAG & USES.
22) USE OF CAMBER OTHER THAN DRAINAGE OF WATER.
23) HOW DO YOU STRENGTHEN THE DECK IN THE WAKE OF HATCH OPENINGS.
24) SOLAS REQUIREMENTS FOR PRESSURE AT HYDRANTS.
25) DEFINITION AND FORMULAE FOR PRESSURE.
26) PRESSURE WHEN CO2 IS INJECTED.
27) DISCHARGE CRITERA FOR SLUDGE & SPECIFICATIONS OF A SLUDGE LINE.
28) EMERGENCY FIRE PUMP SPECIFICATIONS.
29) STARTING, CHECKS IF WATER NOT COMING ON DECK.
30) SOPEP MANUAL CONTENTS.
31) IS IT DIFFERENT FOR DIFFERENT SHIPS?
32) CONSTRUCTION OF DRAIN PLUG & USES.
33) TEST FIRE DETECTOR.
34) HOT WORK IN E/R COMPARTMENT IN PORT, DUTY OF OOW.
35) DISCHARGE CRITERA FOR OIL FROM MACHINERY SPACE INSIDE AND OUTSIDE SPECIAL AREAS
36) RESTRICTED VISIBLITY ENGINE FAILURE AND THE VESSEL EXPERIENCES TRAFFIC AROUND, ACTION.
37)

SETS FOR N/S CPN UPPAL

FN 1:

1) PILOT V/L MORE THAN 100 MTS IN LENGTH LIGHTS.
2) OOW NARROW CHANNEL PRECAUTIONS.
3) ROUTEING CHARTS CONTENTS.
4) TYPES OF EPIRBS, L BAND POSITION FIXING METHODS.
5) SART.
6) FISHING VESSEL/TRAWLER AT ANCHOR LIGHTS.
7) NAVTEX IN DETAIL.
8) TIDAL STREAM ATLASES. ALSO FIND TIDAL STREAM IN DOVER STRAIT AT 1400 HRS.
9) CORRECT CHARTS FOR 2 YEARS IF ROUTEING CHART NOT ON BOARD.
10) CHART CORRECTIONS ALSO CHART CORRECTIONS WHEN NO CUMULATIVE NOTICES ON BOARD.
11) SART/EPIRB CARRAIGE REQUIREMENTS.
12) NO. OF SARTS ON BOARD.
13) EPIRB OPERATION.
14) ASK TRANSMITTING STATION TO REPEAT FOLLOWING.
15) HORIZONTAL SPACING FOR DIRECTION INDICATING LTS. FOR A FISHING VESSEL GEAR EXTENDING 150 METRES. AND FOR THE SAME VESSEL AT ANCHOR.
16) NUC NOT MAKING WAY THROUGH WATER AND AT ANCHOR LIGHTS.
17) WILL A TRAWLER 60 METRES IN LENGTH SHOW MASTHEAD LIGHTS.
18) FOG SIGNAL FORD OF BEAM RESTRICTED VISIBILITY.

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19) OWN VESSEL AT ANCHOR AND YOU SEE ANOTHER VESSEL AT ANCHOR DRIFTING TOWARDS YOU, ACTION. HOW WILL YOU TRY TO MOVE OUT OF HER WAY. YOUR ACTION IF COLLISION IS IMMINENT.
20) CORRECTION OF ECDIS CHARTS.
21) BLIP ON RADAR 8 MILES OFF RESTRICTED VISIBILITY.
22) AMVER/INSPIRES WHERE WILL YOU LOOK FOR STATIONS TO REPORT (IND NM ANNUAL ISSUE). AMVER TYPE OF REPORTS.
23) INSPIRES, TYPES OF REPORTS.
24) VERTICAL POSITIONING OF MASTHEAD & SIDE LIGHTS.
25) GMDSS. C-AREAS.
26) DF NIGHT EFFECT.
27) USES OF ANSWERING PENDANT.
28) SAFE SPEED.
29) PASSAGE FROM TOKYO TO NEWYORK & GREAT CIRCLE OF THE SAME.
30) TRANSFER OF P/L FROM GNOMONIC TO MERCATOR CHART.
31) ECHO SOUNDER ERRORS.
32) ELABORATE ON QUADRANTAL ERROR.
33) PRECAUTIONS BY OOW. AT TSS.
34) MEANING OF NATURAL SCALE.
35) GYRO ERROR.
36) IF GYRO IS TAKEN TO POLES WHAT WILL HAPPEN?
37) MERCATOR / GNOMONIC / ORTHOMORPHIC PROJECTION.
38) ECDIS: RASTER / VECTOR. HOW DO YOU CORRECT AN ECDIS (SEMI AUTOMATIC, AUTOMATIC AND INTERACTIVE METHODS).
39) EGC: SAFETYNET / FLEETNET.
40) DIFFERENCE BETWEEN INMARSAT A & C.
41) NOON SIGHT IN DETAIL.
42) SHALLOW WATER EFFECT.
43) LIGHTS EXHIBITED BY TOWING VESSEL / N.U.C MAKING WAY / NOT MAKING WAY AND NUC AT ANCHOR.
44) WHAT IS LATERAL DRAG OR DRIFT.

FN 2:

1) IMDG CLASSES & DRAW LABEL + DIMENSIONS.
2) DRAW PORT SIDE LOADLINE + 2 V/Ls OF SAME DWT HAVE SAME FREEBOARD.
3) DRAW CORROSIVE LABEL.
4) IMDG DETAILS OF EMS + CLASS.
5) LOADING DANGEROUS CARGO GENERAL PRECAUTIONS.
6) LOADING EXPLOSIVES.
7) FIRE IN ONE OF THE BARRELS CONTAINING EXPLOSIVES.
8) FIRE IN GRAIN CARRIER HOLD.
9) EXPLOSIVES SUB CLASSES.
10) IMDG NO. OF VOLUMES & CONTENTS.
11) EMS & MFAG CONTENTS.
12) MASTER & MATE NOT ON BOARD FIRE IN HOLD.
13) STULKEN DERRICK & ITS ADVANTAGES.
14) IMDG TYPES OF SEGREGATION.
15) HEAVY LIFT PRECAUTIONS.
16) YOU ARE LOADING PIPES ON DECK, WHICH BOOK WILL YOU REFER TO FOR LOADING AND LASHING AND HOW WIL YOU GO ABOUT LOADING THEM.
17) DIFFERENT TYPES OF CONTAINERS.
18) HOW WILL YOU LOAD DRUMS.
19)

FN 3:

1) TPA/IMMERSION SUIT DIFFERENCE.
2) LIFE BOAT CONSTRUCTION AND STABILITY IN DETAIL.
3) CONDITION FOR TOTALLY ENCLOESD LIFEBOAT.
4) DRAW FLAMMABILITY RANGE DIAGRAM.
5) EXPLAIN CRITICAL DILUTION LINE.
6) TANKSCOPE / MULTIGAS DETECTOR.
7) LSA ON TANKERS.
8) LSA CARRAIGE ON PASSENGER SHIPS.
9) SPECIFICATIONS LIFEBUOYS / TPA.
10) ANNEX 5 GARBAGE.
11) MARPOL 73/78 SYNOPSIS & NAME VARIOUS ANNEXES.
12) SOLAS A & B PACKS DIFFERENCE.

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13) FIRE IN HOLD; MASTER ORDERS HOLD TO BE FLOODED WITH CO2 ACTION.
14) DIFFERENCE BETWEEN P/V BREAKER & P/V VALVE.
15) OPERATION OF EMERGENCY STEERING GEAR.
16) SOLAS REQUIREMENT FOR CO2.
17) SOLAS REQUIREMENTS FOR ROCKET PARACHUTE FLARES & HAND FLARES.
18) FIRE IN BOILER PLATFORM / HOLD.
19) SOLAS REQUIREMENTS FOR PILOT LADDERS.
20) CONTROL TESTS + REQUIREMENTS FOR CONTROLS IN CHAPTER V SOLAS.
21) HOWMANY EPIRBS SHOULD A VESSEL HAVING 4 LIFEBOATS CARRY.
22) DRAW THE STBD LOADLINE OF YOUR LAST SHIP.
23) DEFINATION OF DECKLINE AND FREEBOARD.
24) DOES EVERY VESSEL OF THE SAME DISPLACEMENT HAVE THE SAME FREEBOARD./ WHICH SHIP HAS LESS FREEBOARD.
25) WHAT ARE THE DIFFERENT CLASSES OF SHIPS WITH RESPECT TO LOADLINES.
26) WHAT IS A WEAK LINK AND HOW DOES IT WORK.
27) WHAT IS IAMSAR.

N/S. CAPN. BAIJAL.

FN I.

1) CONTROLS ON STEERING GEAR SYSTEMS.
2) VARIOUS ERRORS ON WHEN A CELESTIAL OBSERVATION IS TAKEN.
3) OBTAIN MEDICAL ADVICE BY RADIO.
4) DESCRIBE BEAUFORT SCALE CONTENTS, WIND SPEED TO WAVE HEIGHT VALUES.
5) DIFFERENCE BETWEEN TIDE, TIDAL STREAMS AND CURRENTS.
6) LIGHTS & FOG SIGNALS OF VESSEL AGROUND AND ACTION ON SEEING THIS VESSEL.
7) DISPLAY LIGHTS OF VESSEL C.B.D. NOT MAKING WAY AND MAKING WAY, ACTION ON SEEING THIS VESSEL.
8) RULE 19.
9) EXPLAIN EVERYTHING ABOUT ROEUTING CHARTS.
10) HOW ARE LOADLINE ZONES MARKED AND WHY.
11) EXPLAIN REFRACTION CORRECTION FOR SIGHT REDUCTION.
12) NAVIGATING IN THE ENGLISH CHANNEL AND ACTION UPON SIGHTING RACON 'D' ON YOUR RADAR PPI. IN RESTRICTED VISIBILITY.

FN II.

1) WHAT IS CARGO SECURING MANUAL AND ITS CONTENTS?
2) WHAT IS THE DIFFERENCE BETWEEN COMPATIBLITY AND SEGREGATION TABLES?
3) HOW WOULD YOU GO ABOUT LOADING CRACKERS ON YOUR SHIP?
4) WITH RESPECT TO CHEMICAL TANKERS WHAT DOES LD50 STAND FOR?
5)

FN III.

1) NEW AND EXISTING SHIPS ACCORDING TO SOLAS AND MARPOL.
2) LIFEBOAT REQUIREMENTS FOR NEW SHIPS.
3) LIFEBOAT AIR SUPPORT SYSTEM REGULATIONS.
4) FITTINGS ON A FULLY ENCLOSED LIFEBOAT.
5) SLOP TANK REQUIREMENTS AS PER MARPOL.
6) OIL TANKER LOADING AND DISCHARGE CHECKLISTS.
7) MEASURES TAKEN TO PREVENT HARM TO MARINE ENVIRONMENT BY CHEMICALS.
8) FFA ON CHEMICAL TANKERS.

SETS FOR N/S CPN PANDA.

FN I:

1) Tx DISTRESS, URGENCY & SAFETY BY RT, WT.
2) WHEN DO YOU SEND DISTRESS, SAFETY AND URGENCY MESSAGES.
3) CONTROL TESTS.
4) RPM '0' - ACTION.
5) RUDDER 5o TO STARBOARD - ACTION.
6) TRANSMIT DECIMAL / ERROR BY LIGHT SIGNAL.

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7) ERROR BY Tx STATION.
8) ACTION IF YOU ARE Rx STATION.
9) HOW DOES EPIRB CALCULATE POSN. OF PERSONS IN DISTRESS.
10) DECIMAL IN R/T.
11) 0-10 IN PHONETICS.
12) FISHING VESSEL / TRAWLER 61 METRES IN LENGTH, DESCRIBE THEIR MASTHEAD LIGHTS.
13) FOG SIGNAL OF FISHING VESSEL AND VESSELS AT ANCHOR.
14) DESCRIBE ECDIS - INTEGRATED BRIDGE SYSTEM.
15) DECCA: PRINCIPLE & ERRORS.
16) GPS: PRINCIPLE, ERRORS & GDOP.
17) AUTOPILOT CONTROLS + MODES.
18) EPIRB MCC IN INDIA.
19) SART.
20) EMERGENCY STEERING ON LAST SHIP.
21) DIFFERENCE BETWEEN CURRENT AND TIDE.
22) FIND OUT TIDE AT A PLACE ON AN ENGLISH CHANNEL CHART.
23) WHICH ALRS VOLUME CONTAINS INFORMATION ON GMDSS, ALSO WHAT OTHER INFORMATION CAN BE OBTAINED FROM IT.
24) HOW DOES A MESSAGE START ON A NAVTEX.
25) WHAT IS b1,b2,b3&b4.
26) HOW ARE WARM AND COLD FRONTS SHOWN ON WEATHER FAXES.
27) ERROR OF MAGNETIC COMPASS AT NIGHT.
28) WORKING OF STAR FINDER.
29) HOW DO YOU CALCULATE THE ONSET OF FOG.
30) PRINCIPLE OF 2 LOOPS OF D/F.
31) DOPPLER LOG PRINCIPLE.
32) MOB R/V.
33) SECTOR SIDE LIGHTS.
34) INTERCO CONTENTS.
35) ISM SYNOPSIS.

FN II:

1) PRECAUTIONS WHEN ULLAGE WITH TAPE (MANUAL).
2) TYPES OF VALVES.
3) OPERATION OF CENTRIFUGAL PUMP, CAN WE STRIP USING.
4) ON YOUR CONTAINER SHIP WHERE WERE THE COLLISION BULKHEADS FITTED, COULD YOUR NO. 1 HOLD GET FLOODED AFTER COLLISION.
5) WHAT IS THE TYPE OF CRUDE CARRIED ON YOUR LAST SHIP.
6) HOW WILL YOU KNOW IF VESSEL IS HOGGED OR SAGGED.
7) CARGO COOLED ON LPG.
8) INTERNATIONAL GAS CARRIER CODE.
9) MATERIAL & CONSTRUCTION OF GAS TANKER TANKS.
10) LAST CARGO: CHEMICAL PROPERTIES, UN#, CLASS & HAZARDS.
11) DISCHARGE CRITERIA FOR PHOSPHORIC ACID ACCORDING TO ISM.
12) TYPES OF VALVES.
13) WHAT TYPE OF VALVES ARE USED AS MANIFOLD VALVES AND FIRE HYDRANT VALVES.
14) TYPE OF PUMPS ON CRUDE OIL TANKERS, DOES CENTRIFUGAL PUMP DEPEND ON SUCTION HEAD AND IS IT A POSITIVE DISPLACEMENT PUMP / WHAT DO YOU DO TO INCREASE THE DISCHARGE RATE.
15) CHECKS PRIOR TO STARTING RECIPROCAL PUMP, AND THE PROCEDURE FOR STARTING THE SAME.
16) I.G. SYSTEM ALARMS ACCORDING TO SOLAS.
17) IMDG NAME ALL CLASSES.
18) USE OF EXPLOSIMETRE / TANKSCOPE. IF YOU HAVE NOT USED IT FOR THE PAST 3 MONTHS HOW WILL YOU GO ABOUT IT.
19) WHEN WOULD YOU USE AN EXPLOSIMETRE AND WHEN A TANKSCOPE.
20) TANKSCOPE CALIBRATION & USE.
21) LAST SHIP PIPELINE LAYOUT.
22) PRECAUTIONS AGAINST BACKPRESSURE.
23) HOW WILL YOU CHECK SEACHEST INTEGRITY

FN III.

1) DEFINE FORWARD PERPENDICULAR.
2) FIRE FIGHTING EXTINGUISHING SYSTEM ON BOARD.
3) FIRE IN ACCOMODATION CABIN.
4) DESCRIBE YOUR FIXED FOAM SYSTEM.
5) WHAT KIND OF FOAM DO WE GET ON OUR FOAM MONITOR.
6) DIFFERENCE BETWEEN FOAM FROM EXTINGUISHER AND FROM MONITOR.
7) ACTION WHEN WATER DISCHARGE, BUT NO FOAM.
8) I.G. BLOWER MALFUNCTION.

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9) I.G. NOT COPING UP.
10) MARPOL REGULATION 9, ANNEX 1.
11) INTANTANEOUS RATE OF DISCHARGE.
12) WHAT IS I.M.O. & CONTENTS.
13) HAVE YOU EVER OPERATED ODME AND THE TESTING OF THE SAME.
14) SOLAS A & B PACKS.
15) LIFEBOAT ON LAST SHIP.
16) WILL THE LIFE BOAT SINK IF IT HAS A HOLE.
17) DIFFERENCE BETWEEN AN ENCLOSED AND AN OPEN LIFE BOAT.
18) MARPOL ANNEX II SYNOPSIS.
19) HOW DO YOU DETERMINE CONTENT OF EFFLUENT IN CARGO (ODMCS).
20) SOPEP DRILL ON CHEMICAL TANKERS.
21) MARPOL ANNEX 5 - GARBAGE DISPOSAL REGULATIONS.
22) GARBAGE DISPOSAL ON LAST SHIP.
23) CONTENTS OF GARBAGE LOG.
24) FFA ON LAST GC VESSEL.
25) SCBA CHECK LIST.
26) FIXED FIRE FIGHTING EQUIPMENT ON GC VESSEL.
27) PRINCIPLE OF SAMPLE EXTRACTION SYSTEM.
28) SOLAS REGULATIONS FOR BOAT & FIRE DRILLS.
29) ON/OFF LOAD RELEASE SYSTEM OF LIFEBOAT.
30) 'CHAPTER 12 SOLAS', A SYNOPSIS.

SETS ON CAPN AWASTHI

FN I:

NAVIGATIONAL EQUIPMENT THAT YOU ARE FAMILIAR WITH.
STRUCTURE OF GPS AND HOW DOES IT GET ITS POSITION.
WHAT IS HDOP / GDOP / PDOP.
LEADING LIGHTS AND SECTORED LEADING LIGHTS AND THEIR PRACTICAL USES (please refer to bridge team management book).
NARROW CHANNEL GYRO AND MAGNETIC FAILURE AND THE PILOT WANTS A HEADING FAST.
PEN DOWN EVERYTHING YOU KNOW ABOUT FISHING VESSELS INCLUDING LIGHTS SHAPES FLAGS TYPE OF NETS LIGHT POSITIONING AND SOUND SIGNALS.
WHAT IS THE MARITIME COMMUNITY DOING TO FIGHT THE Y2K PROBLEM. WHAT EQUIPMENT IS LIABLE TO DEVELOP A FAULT DUE TO Y2K PROBLEM.
OPEN SEAS AND VESSEL 4 POINTS ON PORT BOW, STARBOARD QUARTER ACTION.
CLOSE QUARTER SITUATION AND THEN COLLISION, GIVE DETAILED ACTION.
GIVE AN EXAMPLE OF AN ACTUAL EMERGENCY ON BOARD.
CONTENTS OF INTERCO.

N/S CAPN. MISHRA:

FN I
THE FOLLOWING QUESTIONS HAVE FREQUENTLY TURNED UP IN HIS SETS:

1) STOPPING DISTANCE, HEAD REACH AND TURNING CIRCLE.
2) EFFECT OF SPEED ON TURNING CIRCLE.
3) ISM. SYNOPSIS.
4) STCW 95 SYNOPSIS AND REST PERIODS FOR CREW.
5) IF A VESSEL IS AGROUND WHY SHOULD AN OOW. INFORM ENGINE ROOM.
6) PORT STATE CONTROL AND ITS POWERS.
7) CONTENTS OF ADMIRALITY SAILING DIRECTIONS AND WHERE WOULD YOU FIND A LIST OF THE SAME.
8) HOW DO YOU GO ABOUT PLOTTING A GREAT-CIRCLE COURSE AND WHAT ARE THE MERITS AND DE-MERITS.
9) FORMAT FOR A SITREP REPORT.
10) WHAT IS DOPPLER SHIFT AND HOW IS THIS EFFECT APPLIED TO THE LOG.
11) HOW DO YOU GO ABOUT CORRECTING VARIOUS PUBLICATIONS, EG. ALRS, LIST OF LIGHTS, ASD, ETC
12) WHAT IS NAVTEX.
13) TESTS ON EPIRBS AND SARTS
14) WHAT IS CAVITATION / TRANSVERSE THRUST.
15) ELABORATE ON SHALLOW WATER EFFECTS.
16) WHAT IS A NEAR MISS.
17) GMDSS: SART.

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18) WHAT IS RULE 7 / 9.
19) DESCRIBE NORTH AND WEST CARDINAL MARKS.
20) DURATION OF PROLONGED BLAST / SOUND SIGNALS IN NARROW CHANNELS / SIGNALS TO ATTRACT ATTENTION.
21) WHAT SIGNALS CAN BE SUPPLIMENTED BY LIGHT.
22) WHAT ARE THE FUNCTIONAL REQUIREMENTS FOR GMDSS AS PER SOLAS.
23) DUTIES AS A GMDSS CERTIFICATE HOLDER ON BOARD.
24)

FN II

1) CONSTRUCTION OF A MAGAZINE.
2) WHAT IS O2 ANALYSER, TANKSCOPE AND EXPLOSIMETRE (CGI).
3) HOW DO YOU CALIBRATE A TANKSCOPE.
4) ENCLOSED SPACE ENTRY PERMIT
5) HOW DO YOU ENTER A TANK WHICH HAS A FEW mm OF OIL AND A METRE OF WATER.
6) PROCEDURES TO CARRY OUT COW, TANK-CLEANING AND GAS FREEING
7) WHAT IS FREE SURFACE EFFECT, HOW WILL YOU CALCULATE IT AND HOW DOES IT AFFECT THE STABILITY OF YOUR SHIP.
8) HOW DO YOU MAINTAIN PRESSURE ON LPG SHIPS.
9) WHAT IS THE CAUSE OF LOSS OF BULKCARRIERS AT SEA.
10) WHAT IS THE INFORMATION TO BE OBTAINED IN THE SHIPPERS DECLERATION WHEN DANGEROUS GOODS ARE TO BE LOADED, DOES IT CONTAIN THE WEIGHT OF THE CARGO.
11) HOW WILL YOU ENSURE WATER TIGHTNESS OF RUBBER GASKETING IN HATCH PONTOONS.
12) REQUIREMENTS FOR LOADING BULK GRAIN AND EXPLAIN DOCUMENT OF AUTHORISATION.
13) INTACT STABILITY CRITERIA FOR LOADING BULK GRAIN.(ref. Grain code)
14) HOW AND WHEN WILL YOU CARRY OUT INERTING AND PURGING
15) GENERAL PRECAUTIONS WHILE LOADING DANGEROUS CARGO
16) SKETCHES OF P/V BREAKERS AND VALVES.
17) TYPES OF DECK SEALS.
18) PACKING RECOMMENDATIONS AND TESTS FOR PACKAGING.
19) PLANNING AND STOWAGE FOR LOADING CONTAINERS, AND CALCULATING STABILITY FOR THE SAME.
20) EXPLAIN ANGLE OF LOLL AND PERIOD OF ROLL.

FN III

21) IAMSAR, A SYNOPSIS.
22) WHAT IS PANTING AND POUNDING AND WHAT ARE THE CONSTRUCTION FEATURES ON A VESSEL TO COUNTER THEIR EFFECTS.
23) HOW WILL YOU MAINTAIN THE WATERTIGHT INTEGRITY OF HATCH COVERS.
24) PROCEDURE FOR STARTING THE EMERGENCY FIRE PUMP.
25) HOW DO YOU DETERMINE THE CARRIAGE CAPACITY OF A LIFEBOAT
26) WHAT IS AN OIL RECORD BOOK AND WHAT ARE THE ENTRIES IN THE SAME.
27) WHAT IS DIRTY BALLAST-CLEAN BALLAST-SEGREGATED BALLAST
28) FFA ON LPG SHIPS.
29) MANTAINENCE OF DCP FIRE EXTINGUISHERS AND FREQUENCY OF HYDRAULIC PRESSURE TESTING OF ALL TYPES OF EXTINGUISHERS.
30) WHAT ANNEXES OF MARPOL CAN BE APPLIED TO LPG SHIPS- CAN YOU APPLY ANNEX II (ANNEX II DOESN'T APPLY BECAUSE LIQUID AS DEFINED BY THE ANNEX IS A SUBSTANCE WHOSE VAPOUR PRESSURE SHOULD NOT EXCEED 2.8 KP/CM^2 AT AN AMBIENT TEMPERATURE OF 37.8 DEG C.
31) SOLAS REQUIREMENTS FOR A FULLY ENCLOSED LIFEBOAT AND RESCUE BOAT.
32) CONSTRUCTION AND THE IMPORTANCE OF THE DRAIN PLUG.
33) MANTAINENCE OF LIFE BOAT FALLS.
34) DUTIES AND PRECAUTIONS WHEN APPROACHING A BOAT IN DISTRESS, WHICH SIDE WILL YOU APPROACH THE BOAT.
35) FORMULA TO FIND GRT / NRT.
36) REGULATIONS REGARDING THERMAL PROTECTIVE AIDS, IMMERSION SUIT FROM SOLAS.
37) WHAT IS EGC.
38) HOW WOULD YOU GO ABOUT DISPOSING PLASTIC ON BOARD..
39) HOW DO YOU CARRY OUT MAINTAINENCE OF FIRE EXTINGUISHERS ON YOUR VESSEL
40) ANNEX II, A SYNOPSIS.
41) CRITERIA FOR DOUBLE HULLED TANKERS, ARE THEY LESS STABLE AND HAVE YOU LOOKED UP MS NOTICE FOR DOUBLE HULLED TANKERS.
42) SLOP TANK CRITERIA.
43) WHAT IS MARPOL LINE.
44) SOPEP AND CONTENTS OF A SOPEP LOCKER.
45) OIL OVERFLOW DURING BUNKERING, ACTION.

N/S CAPN. MONDAL:

MUKESH SOLANKI

FN:I

1) HAVE YOU TAKEN ANY CELESTIAL OBSERVATIONS; DESCRIBE PROCEDURES FOR X-MERIDIAN, LONG BY CHRON AND INTERCEPT METHODS.
2) DISCUSS THE MERITS AND THE DEMERITS OF LONG BY CHRON AND INTERCEPT; WHICH ONE WOULD YOU PREFER AND WHY.
3) WHAT IS a0, a1, and a2 CORRECTIONS IN A POLARIS OBSERVATION.
4) CHART SYMBOLS LIKE : SHINTO SHRINE, FRESH WATER SPRINGS, BUDDHIST TEMPLE, UNSURVEYED COASTLINE, FISHING STAKES ETC.
5) STRANDED VESSEL IN SIGHT, ACTION.
6) ACTION TO ABANDON A VESSEL.
7) OIL SLICK FROM A VESSEL AHEAD OF YOU IN ENGLISH CHANNEL ACTION.
8) ECDIS, A SYNOPSIS.
9) QUOTE RULES 5 AND 6.
10) INTERCO CONTENTS AND SIGNALS EXCHANGED BETWEEN A ICEBREAKER AND AN ASSISTED VESSEL.
11) GET MEDICAL ADVICE USING INTERCO.
12) RADAR CHARACTERISTICS, EFFICIENCY AND LIMITATIONS.
13) LIMITS OF EX-MERIDIAN.

FN:II

1) IMDG. CLASSES.
2) DOCUMENTATION FOR LOADING VARIOUS DANGEROUS GOODS. (AS PER CHAPTER VII SOLAS).
3) VARIOUS DEFINITIONS IN SHIP CONSTRUCTION.
4) STRESSES ON A VESSEL, INFORMATION PROVIDED BY A LOADICATOR, AND WHAT ARE THE UNITS OF THESE STRESSES.
5) TANKER WORK, ISGOTT DEFINITIONS.
6) DRAW THE FLAMMABLE RANGE DIAGRAMME.

FN: III

1) REQUIREMENTS FOR THE DISCHARGE OF OIL ON CARGO VESSELS AND TANKERS.
2) IOPP CERTIFICATE AND SOPEP REQUIREMENTS, A SYNOPSIS.
3) AUTHORITIES TO BE CONTACTED IN CASE OF AN OIL SPILL.
4) HOW WOULD YOU CONDUCT A BOAT AND FIRE DRILL.
5) ENCLOSED SPACE ENTRY PROCEDURES AND CHECK LIST.
6) ARRIVAL PORT CHECKLIST.
7) OIL RECORD BOOK ENTRIES AND SPECIFICATIONS.
8) MARPOL ANEXXE I REG 9.
9) IMMERSION SUIT REQUIREMENTS.
10) RESCUE BOAT REQUIREMENTS AS PER SOLAS.
11) EMERGENCY FIRE PUMP REQUIREMENTS
12) FIXED FOAM SYSTEMS AND CONTENTS OF FOAM COMPOUND.
13) HOW AND WHERE IS FOAM FORMED WHEN COMPOUND IS INJECTED IN THE LINE.
14) STEERING GEAR REQUIREMENTS AS PER SOLAS.
15) TELEMOTOR AND HUNTING LEVER DIAG.

SETS ON CAPN SHUKLA.

FN I:

1) WHAT IS FLASHING LIGHT.
2) DIAMETRE OF BELLS AND MASS OF THE STRIKER AND THE CHARACTERISTICS OF THE BELL.
3) AUDIBLE RANGES FOR VESSELS OF DIFFERENT LENGTH.
4) WHAT ARE SIGNAL FOR A VESSEL AGROUND IN RESTRICTED VISIBLITY.
5) VERTICAL AND HORIZONTAL POSITIONING OF LIGHTS OF VESSELS MORE THAN 100 METRES IN LENGTH.
6) IS THERE ANY RULE THAT SAYS THAT THE STERN LIGHT MUST BE IN THE FORE AND AFT CENTRE LINE OF THE SHIP.
7) SOUND SIGNAL FOR OVERTAKING ANOTHER VESSEL FROM THE STARBOARD SIDE IN A NARROW CHANNEL.
8) WHAT IS SAFE SPEED ALSO EXPLAIN CHARACTERISTICS EFFICIENCY AND LIMITATIONS OF RADAR AND ALSO CONSTRAINTS IMPOSED BY THE RADAR RANGE SCALE IN USE.
9) TURNING ABILITY & STOPPING DISTANCE WRT. RULE 6.
10) WHAT IS ISOPHASE AND GROUP OCCULTING LIGHT.
11) WHICH VESSEL WILL SHOW A YELLOW LIGHT AND THE CHARACTERISTICS OF THE SAME.
12) PILOT VESSEL MORE THAN 50 METRES UNDERWAY, LIGHTS.
13) VERTICAL AND HORIZONTAL POSITIONING OF SIDELIGHTS FOR VESSEL OF MORE THAN 20 METRES IN LENGTH.

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14) 2300 HRS / STEERING GEAR FAILURE / REST. VIS. MASTERS INSTRUCTIONS TO GO FORD AND DROP ANCHOR. DESCRIBE THE PROCEDURE AND PRECAUTIONS. (please check for clearence on ship side/small craft).
15) WHAT IS SHORT AND PROLONGED BLAST.
16) VERTICAL AND HORIZONTAL POSITIONING OF A DREDGERS LIGHTS.
17) LIGHTS AND CHARACTERISTICS OF AN AIR CUSHIONED VESSEL.
18) RULE 10.
19) TAKING OVER WATCH AT NIGHT.
20) CORRECT SIDE ERROR OF SEXTANT AT NIGHT.
21) HOW WILL YOU REMOVE SEXTANT FROM THE BOX.
22) WHAT IS BOXING A COMPASS.
23) BOX IT FROM WEST TO SOUTH.
24) WHY ARE TWO WHISTLES CARRIED ON SHIPS AND THEIR REQUIREMENTS ACCORDING TO ANNEX II.
25) CALCULATE NOON POSITION, AND WHICH METHOD WILL YOU PREFER.
26) WHAT ARE THE PARTICULARS OF SOUTH CARDINAL, SAFE WATER AND ISOLATED DANGER BUOY.
27) WHAT IS CONVENTIONAL DIRECTION OF BUOYAGE.
28) WHAT ARE THE CONTENTS OF WEEKLY NOTICES TO MARINERS.
29) WILL YOU CALL MASTER AT WHAT ATMOSPHERIC DROP OF PRESSURE.
30) METEOROLOGICAL INSTRUMENTS CARRIED ON BOARD.
31) WHAT ARE WEATHER SHIPS AND HOW ARE THEY CLASSIFIED.
32) HOW WILL YOU CHECK THE READING OF A GOLD SLIDE AND WHICH READING WILL YOU TAKE FIRST.
33) WHICH CHAPTER DOES DISTRESS COME UNDER INTERCO.
34) WHAT DISTRESS SIGNALS WOULD A SMALL WOODEN BOAT SHOW.
35) CHAPTER 3 INTERCO.
36) TYPES OF EPIRBS AND ALL FREQUENCIES OF THE SAME.
37) FLAGS Z / N / P / J / H / L / 2 / 2nd & 3rd SUBSTITUTE.
38) ~~GMDSS: AREAS, AND~~ WHAT IS MMSI NO.
39) GMDSS: THEORY AND PURPOSE, SART, EPIRB, EGC, SAFETY NET, FLEET NET, SAT C, NAVTEX.
40) FIRST THING TO DO WHEN YOU ENTER CHARTROOM / WHEELHOUSE.

FN: II

1) PRECAUTIONS ON A TANKER BEFORE ARRIVING LOAD PORT.
2) HOW DID YOU STRIP MAIN CARGO LINE ON LAST SHIP.

FN III:

1) HOW WILL YOU START FIRE PUMP ON BOARD.
2) HOW MANY PERSONS WILL YOU REQUIRE TO LOWER A LIFEBOAT IN CALM WEATHER AND HOW WILL YOU LOWER IT
3) WHEN WILL YOU ACTIVATE SART IN A LIFEBOAT.
4) LANDING SIGNAL AT NIGHT.
5) WHAT SIGNAL WILL SHORE GIVE TO INDICATE IF THIS PLACE IS NOT SAFE FOR LANDING.
6) SOLAS STEERING GEAR REQUIREMENTS.
7) HOW WILL YOU RIG A BREECHES BUOY.
8) SURVIVAL MANUAL AND USE.
9) PRECAUTIONS WHEN PASSING A ROPE TO A TUG.
10) SOPEP SYNOPSIS / CONTENTS OF SOPEP LOCKER.

SETS FUNCTION WISE - (FN III)

N/S. CAPN. BAIJAL.

9) NEW AND EXISTING SHIPS ACCORDING TO SOLAS AND MARPOL.
10) LIFEBOAT REQUIREMENTS FOR NEW SHIPS.
11) LIFEBOAT AIR SUPPORT SYSTEM REGULATIONS.
12) FITTINGS ON A FULLY ENCLOSED LIFEBOAT.
13) SLOP TANK REQUIREMENTS AS PER MARPOL.
6) OIL TANKER LOADING AND DISCHARGE CHECKLISTS

N/S CAPN. MONDAL:

16) REQUIREMENTS FOR THE DISCHARGE OF OIL ON CARGO VESSELS AND TANKERS.
17) IOPP CERTIFICATE AND SOPEP REQUIREMENTS, A SYNOPSIS.
18) AUTHORITIES TO BE CONTACTED IN CASE OF AN OIL SPILL.
19) HOW WOULD YOU CONDUCT A BOAT AND FIRE DRILL.

20) ENCLOSED SPACE ENTRY PROCEDURES AND CHECK LIST.
21) ARRIVAL PORT CHECKLIST.
22) OIL RECORD BOOK ENTRIES AND SPECIFICATIONS.
23) MARPOL ANEXXE I REG 9.
24) IMMERSION SUIT REQUIREMENTS.
25) RESCUE BOAT REQUIREMENTS AS PER SOLAS.
26) EMERGENCY FIRE PUMP REQUIREMENTS
27) FIXED FOAM SYSTEMS AND CONTENTS OF FOAM COMPOUND.
28) HOW AND WHERE IS FOAM FORMED WHEN COMPOUND IS INJECTED IN THE LINE.
29) STEERING GEAR REQUIREMENTS AS PER SOLAS.
30) TELEMOTOR AND HUNTING LEVER DIAG.

N/S CAPN. MISHRA:

25) IAMSAR, A SYNOPSIS.
26) WHAT IS PANTING AND POUNDING AND WHAT ARE THE CONSTRUCTION FEATURES ON A VESSEL TO COUNTER THEIR EFFECTS.
27) PROCEDURE FOR STARTING THE EMERGENCY FIRE PUMP.
28) HOW DO YOU DETERMINE THE CARRIAGE CAPACITY OF A LIFEBOAT
29) WHAT IS AN OIL RECORD BOOK AND WHAT ARE THE ENTRIES IN THE SAME.
30) WHAT IS DIRTY BALLAST-CLEAN BALLAST-SEGREGATED BALLAST
31) FFA ON LPG SHIPS.
32) WHAT ANNEXES OF MARPOL CAN BE APPLIED TO LPG SHIPS- CAN YOU APPLY ANNEX II (ANNEX II DOESN'T APPLY BECAUSE LIQUID AS DEFINED BY THE ANNEX IS A SUBSTANCE WHOSE VAPOUR PRESSURE SHOULD NOT EXCEED 2.8 KP/CM^2 AT AN AMBIENT TEMPERATURE OF 37.8 DEG C.
33) SOLAS REQUIREMENTS FOR A FULLY ENCLOSED LIFEBOAT AND RESCUE BOAT
34) REGULATIONS REGARDING THERMAL PROTECTIVE AIDS, IMMERSION SUIT FROM SOLAS.
35) WHAT IS EGC.
36) HOW WOULD YOU GO ABOUT DISPOSING PLASTIC ON BOARD..
37) HOW DO YOU CARRY OUT MAINTAINENCE OF FIRE EXTINGUISHERS ON YOUR VESSEL
38) ANNEX II, A SYNOPSIS.

N/S CPN PANDA.

31) DEFINE FORWARD PERPENDICULAR.
32) FIRE FIGHTING EXTINGUISHING SYSTEM ON BOARD.
33) ACTION WHEN WATER DISCHARGE, BUT NO FOAM.
34) I.G. BLOWER MALFUNCTION.
35) I.G. NOT COPING UP.
36) MARPOL REGULATION 9, ANNEX 1.
37) INTANTANEOUS RATE OF DISCHARGE.
38) WHAT IS I.M.O. & CONTENTS.
39) ODMCS OPERATION.
40) SOLAS A & B PACKS.
41) LIFEBOAT ON LAST SHIP.
42) EPIRB MCC IN INDIA.
43) SART.
44) MARPOL ANNEX II SYNOPSIS.
45) HOW DO YOU DETERMINE CONTENT OF EFFLUENT IN CARGO (ODMCS).
46) SOPEP DRILL ON CHEMICAL TANKERS.
47) MARPOL ANNEX 5 - GARBAGE DISPOSAL REGULATIONS.
48) GARBAGE DISPOSAL ON LAST SHIP.
49) CONTENTS OF GARBAGE LOG.
50) FFA ON LAST GC VESSEL.
51) SCBA CHECK LIST.
52) FIXED FIRE FIGHTING EQUIPMENT ON GC VESSEL.
53) PRINCIPLE OF SAMPLE EXTRACTION SYSTEM.
54) SOLAS REGULATIONS FOR BOAT & FIRE DRILLS.
55) ON/OFF LOAD RELEASE SYSTEM OF LIFEBOAT.

N/S CPN UPPAL

28) TPA/IMMERSION SUIT DIFFERENCE.
29) CONDITION FOR TOTALLY ENCLOESD LIFEBOAT.
30) DRAW FLAMMABILITY RANGE DIAGRAM.
31) EXPLAIN CRITICAL DILUTION LINE.
32) TANKSCOPE / MULTIGAS DETECTOR.
33) LSA ON TANKERS.
34) SPECIFICATIONS LIFEBUOYS / TPA.
35) ANNEX 5 GARBAGE.

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36) MARPOL 73/78 SYNOPSIS.
37) LSA TANKERS.
38) SOLAS A & B PACKS DIFFERENCE.
39) LSA CARRAIGE ON PASSENGERS.
40) FIRE IN HOLD; MASTER ORDERS HOLD TO BE FLOODED WITH CO2 ACTION.
41) DIFFERENCE BETWEEN P/V BREAKER & P/V VALVE.
42) OPERATION OF EMERGENCY STEERING GEAR.
43) SOLAS REQUIREMENT FOR CO2.
44) SOLAS REQUIREMENTS FOR ROCKET PARACHUTE FLARES & HAND FLARES.
45) FIRE IN BOILER PLATFORM / HOLD.
46) SOLAS REQUIREMENTS FOR PILOT LADDERS.
47) CONTROL TESTS + REQUIREMENTS FOR CONTROLS IN CHAPTER V SOLAS.
48) HOWMANY EPIRBS SHOULD A VESSEL HAVING 4 LIFEBOATS CARRY.

SETS - FUNCTION WISE (FN II)

N/S CAPN. MISHRA:

39) CONSTRUCTION OF A MAGAZINE.
40) HOW DO YOU CALIBRATE A TANKSCOPE.
41) ENCLOSED SPACE ENTRY PERMIT.
42) PROCEDURES TO CARRY OUT COW, TANK-CLEANING AND GAS FREEING
43) WHAT IS FREE SURFACE EFFECT, HOW WILL YOU CALCULATE IT AND HOW DOES IT AFFECT THE STABILITY OF YOUR SHIP.
44) HOW DO YOU MAINTAIN PRESSURE ON LPG SHIPS.
45) WHAT IS THE CAUSE OF LOSS OF BULKCARRIERS AT SEA.
46) HOW AND WHEN WILL YOU CARRY OUT INERTING AND PURGING
47) GENERAL PRECAUTIONS WHILE LOADING DANGEROUS CARGO
48) SKETCHES OF P/V BREAKERS AND VALVES.
49) TYPES OF DECK SEALS

N/S CAPN. MONDAL:

7) IMDG. CLASSES.
8) DOCUMENTATION FOR LOADING VARIOUS DANGEROUS GOODS. (AS PER CHAPTER VII SOLAS).
9) VARIOUS DEFINITIONS IN SHIP CONSTRUCTION.
10) STRESSES ON A VESSEL, INFORMATION PROVIDED BY A LOADICATOR, AND WHAT ARE THE UNITS OF THESE STRESSES.
11) TANKER WORK, ISGOTT DEFINITIONS.
12) DRAW THE FLAMMABLE RANGE DIAGRAMME.

N/S. CAPN. BAIJAL.

6) WHAT IS CARGO SECURING MANUAL AND ITS CONTENTS.
7) WHAT IS THE DIFFERENCE BETWEEN COMPATIBLITY AND SEGREGATION TABLES.
8) HOW WOULD YOU GO ABOUT LOADING CRACKERS ON YOUR SHIP.

N/S CPN PANDA.

24) PRECAUTIONS WHEN ULLAGE WITH TAPE (MANUAL).
25) TYPES OF VALVES.
26) OPERATION OF CENTRIFUGAL PUMP, CAN WE STRIP USING.
27) HOW WILL YOU KNOW IF VESSEL IS HOGGED OR SAGGED.
28) CARGO COOLED ON LPG.
29) INTERNATIONAL GAS CARRIER CODE.
30) MATERIAL & CONSTRUCTION OF GAS TANKER TANKS.
31) LAST CARGO: CHEMICAL PROPERTIES, UN#, CLASS & HAZARDS.
32) DISCHARGE CRITERIA FOR PHOSPHORIC ACID ACCORDING TO ISM.
33) TYPE OF PUMPS ON CRUDE OIL TANKERS.
34) CHECKS PRIOR TO STARTING RECIPROCAL PUMP.
35) I.G. SYSTEM ALARMS ACCORDING TO SOLS.
36) IMDG NAME ALL CLASSES.

N/S CPN UPPAL

20) IMDG CLASS 8 DRAW LABEL + DIMENSIONS.
21) DRAW PORT SIDE LOADLINE + 2 V/Ls OF SAME DWT HAVE SAME FREEBOARD.
22) DRAW CORROSIVE LABEL.
23) IMDG DETAILS OF EMS + CLASS.

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24) LOADING DANGEROUS CARGO GENERAL PRECAUTIONS.
25) LOADING EXPLOSIVES.
26) FIRE IN ONE OF THE BARRELS CONTAINING EXPLOSIVES.
27) EXPLOSIVES SUB CLASSES.
28) IMDG NO. OF VOLUMES & CONTENTS.
29) EMS & MFAG CONTENTS.
30) MASTER & MATE NOT ON BOARD FIRE IN HOLD.
12) STULKEN DERRICK & ITS ADVANTAGES.

SETS - FUNCTION WISE. ***FN I.***

N/S. CAPN. BAIJAL.

13) CONTROLS ON STEERING GEAR SYSTEMS.
14) VARIOUS ERRORS ON WHEN A CELESTIAL OBSERVATION IS TAKEN.
15) OBTAIN MEDICAL ADVICE BY RADIO.
16) DESCRIBE BEAUFORT SCALE CONTENTS, WIND SPEED TO WAVE HEIGHT VALUES.
17) DIFFERENCE BETWEEN TIDE, TIDAL STREAMS AND CURRENTS.

N/S CAPN. MONDAL:

14) HAVE YOU TAKEN ANY CELESTIAL OBSERVATIONS; DESCRIBE PROCEDURES FOR X-MERIDIAN, LONG BY CHRON AND INTERCEPT METHODS.
15) DISCUSS THE MERITS AND THE DEMERITS OF LONG BY CHRON AND INTERCEPT; WHICH ONE WOULD YOU PREFER AND WHY.
16) WHAT IS a0, a1, and a2 CORRECTIONS IN A POLARIS OBSERVATION.
17) CHART SYMBOLS LIKE : SHINTO SHRINE, FRESH WATER SPRINGS, BUDDHIST TEMPLE, UNSURVEYED COASTLINE, FISHING STAKES ETC.
18) STRANDED VESSEL IN SIGHT, ACTION.
19) ACTION TO ABANDON A VESSEL.
20) OIL SLICK FROM A VESSEL AHEAD OF YOU IN ENGLISH CHANNEL ACTION.
21) ECDIS, A SYNOPSIS.
22) QUOTE RULES 5 AND 6.
23) INTERCO CONTENTS AND SIGNALS EXCHANGED BETWEEN A ICEBREAKER AND AN ASSISTED VESSEL.
24) GET MEDICAL ADVICE USING INTERCO.
25) RADAR CHARACTERISTICS, EFFICIENCY AND LIMITATIONS.
26) LIMITS OF EX-MERIDIAN.

N/S CAPN. MISHRA:

I

THE FOLLOWING QUESTIONS HAVE FREQUENTLY TURNED UP IN HIS SETS:

50) STOPPING DISTANCE, HEAD REACH AND TURNING CIRCLE.
51) EFFECT OF SPEED ON TURNING CIRCLE.
52) ISM. SYNOPSIS.
53) STCW 95 SYNOPSIS AND REST PERIODS FOR CREW.
54) IF A VESSEL IS AGROUND WHY SHOULD AN OOW. INFORM ENGINE ROOM.
55) PORT STATE CONTROL AND ITS POWERS.
56) CONTENTS OF ADMIRALITY SAILING DIRECTIONS AND WHERE WOULD YOU FIND A LIST OF THE SAME.
57) HOW DO YOU GO ABOUT PLOTTING A GREAT-CIRCLE COURSE AND WHAT ARE THE MERITS AND DE-MERITS.
58) FORMAT FOR A SITREP REPORT.
59) WHAT IS DOPPLER SHIFT AND HOW IS THIS EFFECT APPLIED TO THE LOG.
60) HOW DO YOU GO ABOUT CORRECTING VARIOUS PUBLICATIONS, EG. ALRS, LIST OF LIGHTS, ASD, ETC
61) WHAT IS NAVTEX.
62) TESTS ON EPIRBS AND SARTS
63) WHAT IS CAVITATION
64) ELABORATE ON SHALLOW WATER EFFECTS.
65) WHAT IS A NEAR MISS

SETS FOR N/S CPN PANDA.

1) Tx DISTRESS, URGENCY & SAFETY BY RT, WT.
2) CONTROL TESTS.

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3) RPM '0' - ACTION.
4) RUDDER 5o TO STARBOARD - ACTION.
5) TRANSMIT DECIMAL/ERROR BY LIGHT SIGNAL.
6) ERROR BY Tx STATION.
7) ACTION IF YOU ARE Rx STATION.
8) HOW DOES EPIRB CALCULATE POSN. OF PERSONS IN DISTRESS.
9) DECIMAL IN R/T.
10) 0-10 IN PHONETICS.
11) DESCRIBE ECDIS - INTEGRATED BRIDGE SYSTEM.
12) DECCA: PRINCIPLE & ERRORS.
13) GPS: PRINCIPLE, ERRORS & GDOP.
14) AUTOPILOT CONTROLS + MODES.
15) EMERGENCY STEERING ON LAST SHIP.
16) ERROR OF MAGNETIC COMPASS AT NIGHT.
17) WORKING OF STAR FINNDER.
18) CHART CORRECTIONS.
19) PRINCIPLE OF 2 LOOPS OF D/F.
20) DOPPLER LOG PRINCIPLE.
21) MOB R/V.
22) SECTOR SIDE LIGHTS.
23) INTERCO CONTENTS.

SETS FOR N/S CPN UPPAL

FN 1:

45) PILOT V/L MORE THAN 100 MTS IN LENGTH LIGHTS.
46) OOW NARROW CHANNEL PRECAUTIONS.
47) ROUTEING CHARTS CONTENTS.
48) TYPES OF EPIRBS, L BAND POSITION FIXING METHODS.
49) SART.
50) FISHING VESSEL/TRAWLER AT ANCHOR LIGHTS.
51) NAVTEX IN DETAIL.
52) TIDAL STREAM ATLASES.
53) CORRECT CHARTS FOR 2 YEARS IF CUMULATIVE NOTICES NOT ON BOARD.
54) SART/EPIRB CARRAIGE REQUIREMENTS.
55) NO. OF SARTS ON BOARD.
56) EPIRB OPERATION.
57) ASK TRANSMITTING STATION TO REPEAT FOLLOWING.
58) HORIZONTAL SPACING FOR DIRECTION INDICATING LTS. FOR 150 MTS GEAR.
59) FOG SIGNAL FORD OF BEAM RESTRICTED VISIBILITY.
60) CORRECTION OF ECDIS CHARTS.
61) BLIP ON RADAR 8 MILES OFF RESTRICTED VISIBILITY.
62) AMVER/INSPIRES WHERE WILL YOU LOOK FOR STATIONS TO REPORT (IND NM ANNUAL ISSUE). AMVER TYPE OF REPORTS.
63) VERTICAL POSITIONING OF MASTHEAD & SIDE LIGHTS.
64) GMDSS. C-AREAS.
65) DF NIGHT EFFECT.
66) USES OF ANSWERING PENDANT.
67) SAFE SPEED.
68) PASSAGE FROM TOKYO TO NEWYORK.
69) TRANSFER OF P/L FROM GNOMONIC TO MERCATOR CHART.
70) ECHO SOUNDER ERRORS.
71) ELABORATE ON QUADRANTAL ERROR.
72) PRECAUTIONS BY OOW. AT TSS.
73) MEANING OF NATURAL SCALE.
74) GYRO ERROR.
75) IF GYRO IS TAKEN TO POLES WHAT WILL HAPPEN?
76) MERCATOR / GNOMONIC PROJECTION.
77) ECDIS: RASTER / VECTOR.
78) EGC: SAFETYNET / FLEETNET.
79) DIFFERENCE BETWEEN INMARSAT A & C.
80) NOON SIGHT IN DETAIL.
37) SHALLOW WATER EFFECT.

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CAPTAIN VAZ

FN 1:

43) HORIZONTAL SECTOR OF LIGHTS.
44) POSITION OF MANOEUVRING LIGHTS.
45) SAILING V/L IDENTIFICATION.
46) MEANING OF COMBINED LANTERN & WHEN CAN IT BE CARRIED.
47) SAILING V/L END ON, ACTION.
48) FISHING V/L OVERTAKING YOU, ACTION.
49) FISHING V/L HAMPERED BY GEAR LIGHTS.
50) ANCHORING TERMS.
51) OPEN SEA STEERING GEAR FAILURE.
52) OTHER V/L OVERTAKING, ACTION.
53) WHAT ARE THE MEDICAL PUBLICATIONS ON BOARD.
54) LIGHTS FOR A DIVING V/L.
55) OCCULTING & FLASHING LIGHTS.
56) MAN OVERBOARD, ACTION.
57) PRINCIPLE OF ECHO SOUNDER.
58) WHAT IS UPPERMOST CONTINUOUS DECK.
59) CAN POOP OR FO'CSLE BE U.C.D.?
60) CAN POOP DK. ON LOG CARIER BE U.C.D.?
61) WHAT IS AREA A3?
62) WHY IS A STARBOARD TURN PREFERRED IN ROR?
63) TURNING CIRCLE OF LAST SHIP.
64) TRANSVERSE THRUST & FUNCTIONAL WAKE.
65) MANOEUVRING LIGHTS SPECIFICATIONS & USES.
66) HORIZONTAL SPACING OF LIGHTS.
67) WHAT IS ASPECT?
68) IN A RADAR SET WHAT ARE THE ASSUMPTIONS MADE FOR ITS WORKING?
69) ERROR IN RADAR WHEN USED FOR RANGE DETECTION.
70) DRY DOCK TERMS.
71) WHAT IS DRAWING FORWARD / AFT.
72) HOW WILL YOU ENSURE ALL ROUND VISIBILITY OF RIGID REPLICA FLAG 'A'.
73) VERTICAL SEPERATION OF MASTHEAD LIGHTS.
74) VARIATION / DEVIATION DEFINITION.

FUNCTION: 2

CARGO HANDLING & STOWAGE

FUNCTION 2
(CARGO HANDLING AND STOWAGE)

20

MONITOR LOADING, DISCHARHING, STOWAGE AND CARE DURING PASSAGE.
KNOWLEDGE OF SAFE HANDLING, STOWAGE AND SECURING OF CARGOES INCLUDING DANGEROUS, HAZARDOUS AND HARMFUL CARGOES AND THEIR EFFECTS ON SAFETY OF LIFE AND OF THE SHIP.
USE OF IMDG CODE.

Q.001. WHAT IS BALE CAPACITY?
A.001. BALE CAPACITY IS THE CUBIC CAPACITY OF A SPACE WHEN THE BREADTH IS TAKEN FROM THE INSIDE THE CARGO BATTENS, DEPTH IS TAKEN FROM THE TOP OF THE WOOD SHEATHING ON THE TANK TOP TO THE UNDER SIDE OF THE DECK BEAMS AND THE LENGTH IS TAKEN FROM THE INSIDE OF THE BULKHEAD STIFFENERS OR SPAR CEILING.

Q.002. WHAT IS GRAIN CAPACITY?
A.002. GRAIN CAPACITY IS THE CUBIC CAPACITY OF SPACE WHEN THE LENGTH, BREADTH AND DEPTH IS TAKEN FROM THE RIGHT TO THE PLATING AND ALLOWANCE IS MADE FOR THE VOLUME OCCUPIED BY THE FRAMES, BEAMS AND STIFFENERS.

Q.003. WHAT IS A STOWAGE FACTORS?
A.003. A STOWAGE FACTORS IS A VOLUME OCCUPIED BY A UNIT WEIGHT OF CARGO, IT IS EXPRESSED IN CUBIC METRES PER TONNE OR CUBIC FEET PER LONG TON. m^3/t

Q.004. WHAT IS A BROKEN STOWAGE?
A.004. A BROKEN STOWAGE IS THE SPACE BETWEEN THE PACKAGES WHICH REMAINS UNFILLED.

Q.005. WHY WE ADD A BROKEN STOWAGE TO THE STOWAGE FACTOR?
A.005. WE ALWAYS ADD BROKEN STOWAGE TO THE STOWAGE FACTOR TO GET THE REALISTIC SPACE, WHICH THE CARGO WILL OCCUPY.

Q.006. WHAT IS LOAD DENSITY?
A.006. LOAD DENSITY IS THE MAXIMUM WEIGHT THAT CAN BE SAFELY LOADED ON A UNIT AREA.IT IS EXPRESSED IN TONNES PER METRE SQUARE. T/m^2

Q.007. WHAT IS A DEAD WEIGHT CARGO?
A.007. A DEAD WEIGHT CARGO IS CARGO ON WHICH FREIGHT IS CHARGED ON ITS WEIGHT.

Q.008. WHAT IS A MEASUREMENT CARGO?
A.008. A MEASUREMENT CARGO IS A CARGO IN WHICH FREIGHT IS CHARGED ON THE VOLUME OCCUPIED BY THE CARGO.

Q.009. WHAT IS CARGO MENIFIST?
A.009. CARGO MENIFIST IS A LIST OF ALL CARGO ON THE SHIP AT ANY TIME.

Q.010. WHAT IS DANGEROUS CARGO MANIFIST?
A.010. DANGEROUS CARGO MANIFIST IS A LIST OF ALL DANGEROUS CARGO ONBOARD AT ANY TIME.

Q.011. WHAT IS THE PURPOSE OF CARGO MANIFIST?
A.011. CARGO MANIFIST IS PREPARED FOR CUSTOMS PURPOSES BUT IT CAN ALSO BE USE IN TALLYING OF CARGO, CHECKING AGAINST OVERCARRIAGE AND FOR TICKING OFF THE CARGOES WHO'S BILLS OF LADING HAVE BEEN SIGHTED.

Q.012. WHAT IS CARGO SWEAT?
A.012. CARGO SWEAT IS OCCURS WHEN VENTILATION IS CARRIED OUT WHILE GOING FROM COLD PLACE TO WARM PLACE.THE INCOMIMG AIR IS WARM AND CARGO INSIDE THE HOLD IS COLD, THE WARM AIR COMING INTO CONTACT WITH THE CARGO AND GETS COOLED AND IF COOLED BELOW ITS DEW POINT THE WATER DROPLET CONDENSE ON THE CARGO.

Q.013. WHAT IS A SHIPS SWEAT?
A.013. A SHIPS SWEAT IS OCCURS WHEN A SHIP GOES FROM WARM PLACE TO COLDER PLACES. THE AIR IN THE CARGO HOLD IS WARM BUT THE AIR SURROUNDING THE SHIP IS COLD. THIS COLD AIR COOLS THE SHIP'S STRUCTURE AND WARM AIR INSIDE THE HOLD WHICH IS IN CONTACT WITH THE SHIP'S SIDES AND DECK AND IF COOLED BELOW ITS DEW POINT, IT CAUSES IT TO GIVE OUT WATER VAPOUR WHICH CONDENSES IN FORM OF WATER DROPLETS ON THE SHIP SIDE AND DECK. THIS SHIP'S SWEAT MAY RUN DOWN OR DRIP ONTO THE CARGO.

Q.014. HOW WILL YOU PREVENT THE FORMATION OF SWEAT IN GENERAL CARGO SHIP?
A.014. I WILL KEEP CAREFUL WATCH ON THE DRY AND WET BULB OF AIR TEMPERATURE AND IF I FOUND THAT DEW POINT OF THE OUTSIDE AIR IS LESS THAN THE TEMPERATURE OF THE AIR INSIDE THE HOLD, THEN ONLY I WILL START VENTILATION OF CARGO HOLD.

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Q.015. HOW YOU WILL DO THE THROUGH VENTILATION OF THE CARGO HOLD?
A.015. THIS IS DONE BY TRIMMING THE LEEWARD VENTILATOR INTO THE APPRENT WIND DIRECTION AND THE WINDWARD VENTILATOR AWAY FROM THE APPRENT WIND.
IN THROUGH VENTILATION AIR IS PASSED OVER THE ENTIRE AREA OF THE HOLD RIGHT DOWN TO THE BOTTOM.

Q.016. HOW YOU WILL DO THE SURFACE VENTILATION OF THE CARGO HOLD?
A.016. THIS IS DONE BY CARRIED OUT WITH THE WINDWARD VENTILATOR TURNED INTO THE APPRENT WIND AND LEEWARD VENTILATOR AWAY FROM THE APPRENT WIND.

Q.017. YOUR VESSEL LOADED WITH COAL, HOW WILL YOU DO THE VENTILATION OF THE HOLD? WHY?
A.017. I WILL START THE SURFACE VENTILATION OF THE HOLD BY KEEPING THE WINDWARD VENTILATOR TURNED INTO THE APPRENT WIND AND LEEWARD VENTILATOR AWAY FROM THE APPRENT WIND OR BY MECHANICAL FANS.
SURFACE VENTILATION IS IMPORTANT TO REMOVE ANY METHANE GAS WHICH MAY BE GIVEN OUT FROM COAL AND TO DISSIPATE ANY HEAT FORMED BY OXIDATION OF THE COAL.

Q.018. WHAT IS THE USE OF DUNNAGE ONBOARD THE SHIP?
A.018. DUNNAGE IS USED TO MINIMIZE THE DAMAGE OF CARGO BY SWEAT & MACHANICAL DAMAGE.

Q.019. WHAT IS DUNNAGE?
A.019. DUNNAGE IS A MATERIAL USED TO PROTECT THE CARGO FROM MOISTURE, CONTAMINATION AND MECHANICAL DAMAGE, EXAMPLE: WOOD, PLANK, CANVAS, PLASTC, ETC...

Q.020. WHAT IS A FUNCTION OF DUNNAGE?
A.020. THE MAIN FUNCTION OF DUNNAGE ARE
1. PROTECTION AGAINST SWEAT AND CONDENSATION OF WATER.
2. PROTECTION AGAINST MOISTURE AND LIQUID.
3. PROTECTION AGAINST SOILING AND CONTAMINATION.
4. PROTECTION AGAINST MECHANICAL DAMAGE.
5. DISTRIBUTE THE WEIGHT EVENLY ON THE TANK TOP
THE NATURE OF MATERIAL USED FOR DUNNAGE SHOULD NOT BE WET, MOIST, TAINTED OR CONTAMINATED THE CARGO.

Q.021. HOW WILL YOU PLAN THE DUNNAGE ON TANK TOP?
A.021. ON THE TANK TOP DUNNAGE SHOULD BE DOUBLE LAYER AND SPACED APPROXIMATELY 1 METRE APART.DUNNAGE MUST BE CONSISTING OF WOODEN BEAM 50mm×50mm OR BRODER.

Q.022. WHAT CHECKS YOU WILL DO WHILE USING SECOND HAND TIMBER AS DUNNAGE AND NEW TIMBER AS DUNNAGE?
A.022. I WILL ENSURE THAT SECOND HAND TIMBER IS FREE OF STAINS, NAILS, LARGE SPLINTERS, ETC...
AND NEW TIMBER IS FREE FROM OF STRONG SMELLS OR RESIN COATINGS.

Q.023. WHAT IS THE USE OF SEPARATION? HOW YOU WILL SEPARATE (1) THE STEEL BILLET AND LOGS, (2) SAME PULP FOR DIFFERENT PORT.
A.023. SEPARATION IS USED TO PREVENT DIFFERENT CARGOES OR DIFFERENT PARCEL OF THE SAME CARGO FROM INADVERTENTLY GETTING MIXED.
STEEL BILLENT, PIPES, LOGS OR PACKAGED TIMBER CAN BE SEPARATED BY CHALK MARKS OR WATER PAINTS.

Q.024. DEFINE SAFE WORKING LOAD?
A.024. SAFE WORKING LOAD IS THE STRESS THAT A COMPONENT OF LIFTING APPARATUS CAN BEAR IN NORMAL USE.
OR
SAFE WORKING LOAD IS THE MAXIMUM LOAD THAT A COMPONENT CAN SAFELY LIFT IN DAY TO DAY WORK.

Q.025. DEFINE BREAKING STRESS?
A.025. BREAKING STRESS IS THE STRESS AT WHICH A COMPONENT WILL FRACTURE.

Q.026. WHEN YOU WILL CONDEMN A WIRE ROPE?
A.026. WIRE ROPES MUST BE INSPECTED ONCE IN THREE MONTH AND IF ANY WIRE IS BROKEN THAN EVERY MONTH AND BEFORE COMMENCING THE CARGO OPERATION. IF MORE THAN 10% OF THE WIRE IN A LENGTH OF EIGHT DIAMETERS IS BROKEN THEN CONDEMN THE WIRE.

Q.027. WIRE ROPE CONSTRUCTION 6×36, DIAMETER 12mm, 15 WIRES ARE BROKEN IN A LENGTH OF 8 METRE, WILL YOU REJECT OR USE THIS WIRE?
A.027. CONST. 6×36= 216 WIRES
10% OF WIRE=216×10%=21.6 WIRES
LENGTH = 8×1000×12= 96000mm
IN LENGTH OF 96000mm → 21.6 BROKEN WIRES IS ALLOWED
BUT IN 8000mm → 15 WIRES IS BROKEN
THERE FORE WE WILL ACCEPT THIS WIRE BECAUSE MAXIMUM BROKEN WIRES 21.6 IS PERMITTED.

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Q.028. WHAT IS A PURPOSE OF VENTILATION?
A.028. TO REMOVE HEAT, DISSIPATE GASES, PREVENT CONDENSATION, REMOVE TAINT.

Q.029. HOW THE VENTILATION IS DONE ON SHIP?
A.029. VENTILATION IS DONE BY
1. NATURAL.
2. MECHANICAL FORCED WITH HUMID CONTROL.

Q.030. WHAT ARE THE CHECKS YOU WILL DO ON RECEIVING A NEW WIRES, BLOCKS, SHACKELS, ETC...
A.030. FIRST I WILL CHECK THE TEST CERTIFICATE OF A NEW WIRES, BLOCKS, SHACKELS, ETC... THAN I WILL CHECK THE (INVOICE)

FOR WIREROPES: -
1. DIAMETER OF WIRE BY USING VERNIER CALIBER,
2. SAFE WORKING LOAD, GIVEN IN TEST CERTIFICATE IS SAME AS WE ORDER,
3. I WILL ENSURE THAT THE TEST CERTIFICATE IS ISSUED BY CERTIFYING AUTHORITY.

FOR BLOCKS:-
1. SAFE WORKING LOAD, GIVEN IN TEST CERTIFICATE IS SAME AS WE ORDER,
2. ALL SHEVES ARE MOVING FREELY
3. ENSURE THAT THE BLOCK IS NOT DAMAGED WHILE IN TRANSPORT.

SHACKELS:-
1. SAFE WORKING LOAD, GIVEN IN TEST CERTIFICATE IS SAME AS WE ORDER,
2. NO VISIBLE DAMAGED IS SEEN

Q.031. CAN YOU USE THE COMPONENT IN NORMAL DAY WORK, WHOSE SWL IS EXCEEDED? (Red)
IN WHAT CIRCUMSTANCES YOU WILL USE A COMPONENT, WHOSE SWL IS EXCEEDED?
A.031. NO. I CAN NOT USE IN NORMAL OPERATION. THE SWL OF A COMPONENT CAN ONLY BE EXCEEDED WHEN
1. THE COMPONENT IS BEING TESTED
2. IT IS BEING USED FOR AN EMERGENCY SUCH AS THE USE OF GROUND TACKLE FOR UNGROUNDING A SHIP.

(Red)

Q.032. DEFINE PROOF LOAD
A.032. WHEN A COMPONENT OF A LIFTING GEAR IS TO BE TESTED WE CANNOT TEST IT TO ITS BREAKING STRENGTH AS THIS WOULD DESTROY THE COMPONENT. WE HAVE TO APPLY A LOAD ON IT, MORE THAN THE SAFEWORKING LOAD SUFFICIENT TO ASSURE US THAT WHEN IT IS LOADED UPTO ITS SWL, IT WILL SAFELY BEAR THIS LOAD. THIS LOAD THAT WE APPLY MORE THAN THE SWL IS CALLED THE PROOF LOAD.
OR
WHILE TESTING OF COMPONENT WE APPLY A LOAD MORE THAN ITS SWL, THAT LOAD IS CALLED PROOF LOAD.

Q.033. HOW WILL YOU CARRY THE TEST OF DERRICKS AND CRANE IN DRY DOCK?
A.033. DERRICKS AND CRANES CAN BE TESTED IN TWO WAYS.
1. A STATIC TEST
2. A DYNAMIC TEST

Q.034. EXPLAIN THE STATIC AND DYNAMIC TEST PROCEDURE.
A.034. STATIC TEST: - IN A STATIC TEST A SPRING BALANCE IS SHACKLED TO AN EYE ON DECK AND THE DERRICK OR CRANE RUNNER WIRE IS USED TO PULL ON IT TILL THE PROOF LOAD IS REACHED.
THIS METHOD IS NORMALLY USED FOR SMALLER CAPACITY DERRICK AND CRANES.
DYNAMIC TEST: - IN A DYNAMIC TEST A PRE WEIGHED LOAD EQUAL TO THE PROOF LOAD IS BROUGHT BY BARGE OR TRUCK TO THE SHIP SIDE FROM WHERE IT IS LIFTED BY THE DERRICK OR CRANE. THE DERRICK IS SWUNG SIDE TO SIDE AND UP AND DOWN WITH THE WEIGHT SUSPENDED.

AFTER TESTING IT IS MOST IMPORTANT TO CHECK COMPONENTS OF THE LIFTING GEAR FOR ANY ELONGATION, DEFORMATION OR FRACTURE.

Q.035. HOW YOU WILL RIG PURCHASE TO ADVANTAGE AND DISADVANTAGE?
A.035. ADVANTAGE: - WHEN LOAD MOVES IN THE SAME DIRECTION AS THE EFFORT.
DISADVANTAGE: - WHEN LOAD MOVES IN AN OPPOSITE DIRECTION TO THE EFFORT.

Q.036. WHAT IS MECHANICAL ADVANTAGE?
A.036. MECHANICAL ADVANTAGE IS THE RATIO OF LOAD TO EFFORT.

Q.037. DEFINE VELOCITY RATIO
A.037. VELOCITY RATIO IS THE RATIO OF VELOCITY OF EFFORT TO VELOCITY OF LOAD.

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Q.038. WHAT IS THE OPERATING ANGLE OF DERRICK IN UNION PURCHASE?
A.038. THE OPERATING ANGLE OF THE DERRICK SHOULD PREFRABLY BE NOT LESS THAN 30 DEGREES TO THE HORIZONTAL AND UNDER NO CIRCUMSTANCES SHOULD IT BE LESS THAN 15 DEGREES.

Q.039. WHAT IS THE MAXIMUM ANGLE BETWEEN THE CARGOS WIRES IN UNION PURCHASE? WHY? (Red)
A.039. THE MAXIMUM INCLUDED ANGLE BETWEEN THE CARGO WIRES SHOULD NOT EXCEED 120 DEGREES.
TO MINIMIZE FORCE IN THE RIG

Q.040. WHAT IS THE DIFFERENCE BETWEEN SIMPLE DERRICK AND JUMBO DERRICK?
A.040. SIMPLE DERRICK COMES IN SIZE RANGING FROM 2-20 TONNES SWL.
JUMBO DERRICK COMES IN SIZE RANGING FROM 50 TONNES
STUELCKEN DERRICK LIFTS UPTO 500 TONNES.

Q.041. WHAT IS THE ADVANTAGE OF A STUELCKEN DERRICK?
A.041. STUELCKEN DERRICK LIFTS UPTO 500 TONNES.

Q.042. WHAT IS THE AIM OF CODE OF SAFE PRACTICE FOR SOLID BULK CARGOES?
A.042. AIM OF CODE OF SAFE PRACTICE FOR SOLID BULK CARGOES ARE
1. TO HIGHLIGHT THE DANGERS ASSOCIATED WITH THE SHIPMENT OF BULK CARGOES.
2. TO GIVE GUIDANCE ON PROCEDURES TO BE ADOPTED.
3. TO LIST TYPICAL MATERIALS CURRENTLY BEING SHIPPED IN BULK.
4. TO DESCRIBE TEST PROCEDURE TO DETERMINE VARIOUS CHARACTERISTICS OF BULK CARGOES.

Q.043. WHAT IS THE SOLID BULK CARGOES?
A.043. SOLIDS IN PARTICLE OR GRANULAR FORM, GENERALLY HOMOGENEOUS IN COMPOSITION.

Q.044. DEFINE ANGLE OF REPOSE
A.044. ANGLE OF REPOSE IS THE ANGEL BETWEEN A HORIZONTAL PLANE & THE CONE OBTAINED WHEN BULK CARGO IS LOADED ON THIS PLANE.

Q.045 DEFINE TML
A.045. TRANSPORTABLE MOISTURE LIMIT IS THE MAXIMUM MOISTURE CONTENT OF A CONCENTRATE CONSIDERED SAFE FOR CARRIAGE BY A GENERAL CARGO VESSEL. IT IS AROUND 90% OF THE FLOW MOISTURE POINT It is determined by empirical methods.

Q.046. DEFINE MC
A.046. MOISTURE CONTENT OF A SAMPLE IS THE PERCENTAGE WEIGHT OF THE WATER CONTAINED IN THE WEIGHT OF THE SAMPLE.

Q.047. DEFINE FLOW MOISTURE POINT
A.047. FLOW MOISTURE POINT IS THE PERCENTAGE MOISTURE CONTENT AT WHICH A FLOW STATE DEVELOPS.

Q.048. WHAT IS THE HIGH DENSITY CARGOES?
A.048. HIGH DENSITY CARGOES ARE THOSE THAT HAVE A STOWAGE FACTOR LESS THAN 0.56m³/tonne.

Q.049. WHAT IS THE HAZARDS OF CONCENTRATES?
A.049. 1.HIGH DENSITY
2. DRY SHIFT (BELOW TML)
3. WET SHIFT (ABOVE TML)
4. SPONTANEOUS COMBUSTION

Q.050. WHAT IS THE HAZARDS ASSOCIATED WITH COAL?
A.050. 1. SPONTANEOUS HEATING
2. EMISSION OF METHANE
3. CORROSION
4. LIQUEFACTION

Q.051. DEFINE POND COAL
A.051. 'POND COAL' IS THE TERM GIVEN TO THE COAL LEFT OVER FROM EARLIER MINING WHICH HAS BEEN DUMPED INTO FRESH WATER PONDS AND LATER RECLAIMED FOR SHIPMENT. IT IS A HIGH MOISTURE CONTENT TOGETHER WITH A HIGH SULPHUR CONTENT.

Q.052. DEFINE LIQUEFACTION
A.052. LIQUEFACTION IS THE PROCESS WHEREBY MOISTURE IN THE CARGO MIGRATES TO THE SURFACE DUE TO COMPACTION AND VIBRATION RESULTING IN THE DEVELOPMENT OF A FLOW STATE.

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Q.053. WHAT IS THE PROPERTIES OF SULPHUR?
A.053. SULPHUR IS TOXIC IN NATURE, IT DOES NOT HEAT SPONTANEOUSLY BUT IS EASILY INFLAMMABLE. IT READILY FUSES WHEN HEATED SLIGHTLY. WHEN IT BURNS IT GIVES OUT SULPHUR DIOXIDE WHICH IS TOXIC AND HAS A PUNGENT SMELL. SULPHUR COMBINES WITH SALT WATER PRODUCING SULPHURIC ACID.

Q.054. WHY IT IS ADVICED TO HOSE DOWN THE HOLD AFTER DISCHARGING OF SULPHUR INSTEAD OF SWEEPING?
A.054. SULPHUR DUST CAN READILY IGNITE CAUSING AN EXPLOSION. WHILE SWEEPING THE HOLD, THIS MAY ARISE, SO THIS DANGER MAY BE AVOIDED BY HOSING DOWN.

Q.055. YOUR SHIP'S HOLD IS FRESHLY PAINTED, WILL YOU LOAD THE COTTON IN THIS HOLD?
A.055. NO, COTTON MUST NOT BE STOWED IN FRESHLY PAINTED HOLDS AS HEAT PRODUCED IS LIKELY TO CAUSE IGNITION OF PAINT VAPOURS.

Q.056. WHY RICE REQUIRES AN EFFICIENT AND ELABRATE VENTILATION AND DRAINAGE SYSTEM?
A.056. RICE REQUIRES AN EFFICIENT AND ELABRATE VENTILATION AND DRAINAGE SYSTEM BECAUSE
1. RICE EVOLVES CARBONIC ACID GAS
2. RICE HAS A HIGH MOISTURE CONTENT WHICH CAN LEAD TO SHIP'S SWEAT FORMING.
3. RICE LIABLE TO HEAT.

Q.057. WHAT IS THE PERCENTAGE RATIO OF LOSS OF WEIGHT IN RICE?
A.057. THE LOSS OF WEIGHT IN RICE COULD BE AS MUCH AS 5% DUE TO MOISTURE BEING GIVEN OUT.

Q.058. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING RICE IN SHORT NOTICE?
A.058. IF SUFFICIENT TIME IS NOT AVAILABLE FOR WASHING AND DRYING, THEN THE HOLD MAY BE SPRINKLED WITH SAWDUST AND BROOMED DOWN THOROUGHLY WITH HARD BROOMS.

Q.059. HOW WILL YOU PREPARE THE DUNNAGE IN THE CARGO HOLD FOR RICE CARGO?
A.059 DOUBLE DUNNAGE IS LAID ON THE TANK TOP CONSISTING OF 8cm², WOODEN BATTENS LAID ATHWARTSHIP AND 2½ cm×15cm APART AND TOP ONE 10 cm APART.

Q.060. WHY RICE BAGS ARE FILLED WITH A MIXTURE OF CLEAN RISE AND PADDY?
A.060 RICE BAGS ARE FILLED WITH A MIXTURE OF CLEAN RISE AND PADDY BECAUSE PADDY PREVENTS THE RICE GRAINS FROM FORMING AN AGGREGATE WHICH IS IMPERVIOUS TO VENTILATION AIR CURRENTS.

Q.061. WHAT IS THE AIM OF IMDG CODE?
A.061. 1. TO REGULATE THE TRANSPORT BY SEA OF DANGEROUS GOODS TO REASONABLY PREVENT INJURY TO PERSON OR DAMAGE TO THE SHIP.
2. TO REGULATE TRANSPORT BY SEA OF MARINE POLLUTANTS TO PREVENT HARM TO THE MARINE ENVIRONMENT.

Q.062. DEFINE DANGEROUS GOODS.
A.062. DANGEROUS GOODS MEANS THE SUBSTANCES, MATERIALS AND ARTICLE IN PACKAGED FORM COVERED BY IMDG CODE.

Q.063. DEFINE HAZARDOUS, DANGEROUS AND HARMFUL CARGO?
A.063. HAZARDOUS CARGO: - IT DOES NOT HAVE ANY INTENSIC DANGEROUS PROPERTIES BUT HAS A POTENTIAL TO CAUSE DANGER TO LIFE, PROPERTY AND ENVIORMENT IF NOT STORED, HANDLED, SECURED AND TRANSPORTED WITH PROPER PRECAUTION.

DANGEROUS CARGO: -WHICH HAS INTENSIC DANGEROUS PROPERTY THROUGH WHICH IT CAN CAUSE DANGEROUS TO LIFE AND PROPERTY.

HARMFUL CARGO: - HARMFUL SUBSTANCES MEANS ANY SUBSTANCES WHICH IS INTRODUCED INTO THE SEA IS LIABLE TO CREATE HAZARD TO HUMAN HEALTH, TO HARM- LIVING RESOURCE AND MARINE LIFE, TO DAMAGE AMMENTIES OR TO INTERFERE WITH OTHER LEGIMATE USES OF SEA AND INCLUDE ANY SUBS SUBJECTS TO CONTROL BY PRESENT CONVENTION.

Q.064. WHAT ARE THE CONTENTS OF IMDG CODE?
A.064. VOLUME-1
PART:-1 GENERAL PROVISION, DEFINATION AND TRAINING
PART:-2 CLASSIFICATION
PART:-4 PACKING AND TANK PROVISION
PART:-5 CONSIGNMENT PROCEDURE
PART:-6 CONSTRUCTION AND TESTING OF PACKINGS, INTERMEDIATE BULK CONTAINERS, LARGE-PACKINGS/PORTABLE TANKS & ROAD TANK-VEHICLES.
PART:-7 PROVISION CONCERNING TRANSPORT OPERATION

VOLUME-2
PART:-3 DANGEROUS GOODS LIST AND LIMITED QUANTITY EXCEPTIONS.

SUPPLEMENT-1

Q.065. WHAT ARE THE CONTENTS IN THE SUPPLEMENTS OF IMDG CODE?
A.065.
1. EMERGENCY RESPONSE PROCEDURE FOR SHIPS CARRYING DANGEROUS GOODS (EMS GUIDE)
2. MEDICAL FIRST GUIDE FOR USE IN ACCIDENT INVOLVING DANGEROUS GOODS (MFAG)
3. REPORTING PROCEDURES
4. IMO/ILO/UN . NO FOR PACKING CARGO TRANSPORT UNITS
5. RECOMMENDATIONS ON THE SAFE USE OF PESTICIDES IN SHIPS
6. INTERNATIONAL CODE FOR THE SAFE CARRIAGE OF PACKAGED IRRADIATED NUCLEAR FUEL, PLUTONIUM & HIGH LEVEL RADIO ACTIVE WASTES ONBOARD SHIPS (INF CODE)

Q.066. DEFINE UN NUMBER?
A.066. THE UNITED NATIONS COMMITTEE OF EXPERT ON TRANSPORTATION OF DANGEROUS GOODS HAS COMPILED A REPORT DEALING WITH THE CLASSIFICATION, LISTING AND LABELLING OF DANGEROUS GOODS AND THE TRANSPORT DOCUMENTS REQUIRED. IT HAS ASSIGNED A NUMBERS FOR EVERY SUBSTANCE, MATERIAL OR ARTICLE AND THIS NUMBER IS CALLED UN NUMBER.

Q.067. DEFINE PACKGING GROUP?
A.067. EXCEPT FOR CLASSES 1(EXPLOSIVE), 2(GASES, COMPRESSED, LIQUEFIED OR DISSOLVED UNDER PRESSURE), 6.2(INFECTIOUS SUBSTANCES) AND 7(RADIOACTIVE MATERIALS) DANGEROUS GOODS HAVE BEEN DIVIDED INTO THREE PACKAGING GROUPS ACCORDING TO THE DEGREE OF DANGER THEY PRESENT.

GREAT DANGER	-PACKAGING GROUP 1(I)
MEDIUM DANGER	-PACKAGING GROUP 2 (I I)
MINOR DANGER	-PACKAGING GROUP 3 (I I I)

Q.068. HOW WILL YOU DEFINE SUBSIDIARY RISK?
A.068. GOODS WHICH PRESENT A SECONDARY DANGEROUS PROPERTY. IT SHOULD BE LABELLED WITH A SECONDARY LABEL SHOWING THE HAZARDS.
CLASS NUMBER SHOULD NOT BE PRESENT ON A SUBSIDIARY RISK LABEL

Q.069. WHAT IS EMS NUMBER?
A.069. THE "EMERGENCY PROCEDURES FOR SHIPS CARRYING DANGEROUS GOODS" IS A SUPPLEMENT TO THE IMDG CODE.IT DESCRIBES THE ACTION, PROCEDURES AND EMERGENCY EQUIPMENT TO BE CARRIED WHEN CARRING GOODS OF THAT SCHEDULE NUMBER.

Q.070. WHAT IS USE OF MFAG TABLE? HOW WILL YOU USE IT?
A.070. THE "MEDICAL FIRST AID GUIDE FOR USE IN ACCIDENTS INVOLVING DANGEROUS GOODS" IS A SUPPLEMENT TO THE IMDG CODE. (Index)
AFTER LOOKING UP THE MFAG TABLE NO, SEE THE TABLE IN THE MFAG. IT GIVES LIKELY SIGNS, SYMPTOMS, TREATMENT AND OTHER ADVICE AS PER THE EFFECT OF GOODS UNDER THAT TABLE. IT SUGGESTS TREATMENT IN CASE OF SKIN CONTACT, EYE CONTACT, AND INHALATION. THE PROCEDURE FOR THE TREATMENT IS ALSO MENTIONED.

Q.071. DEFINE MARINE POLLUTANT? 100mm × 100mm
A.071. SUBSTANCES WHICH BECAUSE OF THEIR POTENTIAL TO BIOACCUMULATE IN SEAFOOD OR BECAUSE OF THEIR HIGH TOXICITY TO AQUATIC LIFE ARE CONSIDERED HARMFUL TO MARINE ENVIORMENT, ARE CODEFIED AS MARINE POLLUTANT.

Q.072. WHAT ARE THE SUB DIVISION FOR EXPLOSIVE?
A.072. CLASS 1 – EXPLOSIVES
1.1 SUBSTANCES AND ARTICLES WHICH HAVE A MASS EXPLOSION HAZARDS
1.2 SUBSTANCES AND ARTICLES WHICH HAVE A PROJECTION HAZARD BUT NOT A MASS EXPLOSION HAZARD.
1.3 SUBSTANCES AND ARTICLES WHICH HAVE A FIRE HAZARD AND EITHER A MINOR BLAST HAZARD OR A MINOR PROJECTION HAZARD OR BOTH, BUT NOT A MASS EXPLOSION HAZARD.
1.4 SUBSTANCES AND ARTICLES WHICH PRESENT NO SIGNIFICANT HAZARD.
1.5 VERY INSENSITIVE SUBSTANCES WHICH HAVE A MASS EXPLOSION HAZARD.
1.6 EXTREMELY INSENSITIVE ARTICLES WHICH DO NOT HAVE A MASS EXPLOSION HAZARD.

Q.073. HOW TO USE IMDG CODE?
A.073.

Q.074. WHAT DO YOU UNDERSTAND BY UNITISATION?
A.074. UNITISATION MEANS CONSOLIDATING, OF SEVERAL SMALL PACKAGES INTO ONE UNIT OR STANDARD SIZE.THE CARGO IS SECURED TOGETHER WITH BANDS OR SHRINK WRAPPERS TO FORM A UNIT WHICH TOGETHER WITH A BASE i.e. A PALLET OR A SKID ALLOWS MECHANICAL HANDLING EQUIPMENT SUCH AS FORK LIFTS TO LIFT AND TRANSPORT THE UNIT.

Q.075. WHAT IS PRESLUNG CARGO?
A.075. THE CARGO IS LOADED IN UNITS WITH THE LIFTING SLINGS IN PLACE SO THAT AT THE PORT OF DISCHARGE IS ONLY NECESSARY TO HOOK IN THE SLINGS AND LIFT OFF THE CARGO.

The cargo which is loaded with the lifting sling so that at the port of discharge just hook in to the sling and lift

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Q.076. WHAT IS THE STABILITY REQUIREMENTS FOR CONTAINER CARGO?
A.076. HEAVY CONTAINERS MUST BE STOWED AT THE BOTTOM AND LIGHT ONES AT THE TOP. THE WEIGHT OF EACH CONTAINER MUST BE FED INTO THE SHIP'S LOADICATOR TO ENSURE THAT THE STRESSES DO NOT EXCEED PERMISSIBLE LIMITS AND THE SHIP COMPLIES WITH THE MINIMUM STABILITY REQUIREMENTS AS PRESCRIBED BY IMO.

Q.077. WHAT MARKINGS APPEAR ON A CONTAINER?
A.077. THE CONTAINER IS MARKED ON THE SIDE AND END WALLS WITH THE
1. CONTAINER NUMBER : - SIX DIGITS FOLLOWED BY CHECK DIGIT IN SQUARE.
2. CONTAINER CODE : - IT CONSIST OF 4 LETTERS AND 4 NUMBERS. E.G. MOLU 2210
3. GROSS WEIGHT
4. NET WEIGHT
5. TARE WEIGHT
6. CUBIC CAPACITY

Q.078. WHAT DOES THE CODE MOLU 2210 STAND FOR?
A.078. CONTAINER CODE CONSISTS OF 4 LETTERS AND 4 NUMERRALS

MOL - THE FIRST 3 LETTERS ARE THE OWNER'S CODE & INDIACTE OWNER

U - IT INDICATES THAT THE CONTAINER IS A TRANSPORT UNIT

2 - THE FIRST DIGIT INDICATES THE LENGTH OF THE CONTAINER, 2 FOR TWENTY AND 4 FOR FOURTY FEET

2- THE SECOND DIGIT INDICATES THE HEIGHT OF THE CONTAINER AS PER THE FOLLOWING CODE:
0=8'0"
2=8'6" FOR TWENTY LENGTHS
3=8'6" FOR FOURTY LENGTHS
4=MORE THAN 8'6"
6=4'0"
8=4'3"
9=LESS THAN 4'0"

1- THE THIRD DIGIT INDICATES THE TYPE OF THE CONTAINER AS PER FOLLWING CODE:

0	CLOSED CONTAINERS
1	CLOSED AND HEATED CONTAINER
2	INSULATED AND HEATED CONTAINER
3	REFRIGERATED CONTAINER
4	REFRIGERATED CONTAINER WITH REMOVABLE EQUIPMENT
5	OPEN TOP CONTAINER
6	PLATFORM
7	TANK CONTAINER
8	BULK CONTAINER AND LIVESTOCK
9	AIR CONTAINER

0 - THE FOURTH DIGIT SPECIFIES THE PRECISE SUB-CATEGORY OF CONTAINER WITHIN THE ABOVE TYPE

22 -THESE TWO DIGITS ARE KNOWN AS THE SIZE CODE.
01 -THE LAST TWO DIGITS ARE KNOWN AS THE TYPE CODE.

Q.079. DEFINE TEUs and FEUs
A.079. A CONTAINER IS A BOX MADE OF STEEL, ALUMINIUM OR FIBRE GLASS. THE STANDARD SIZES AS RECOMMENDED BY THE INTERNATIONAL STANDARDS ORGANISATION IS 20 FEET LENGTH×8 FEET×8 FEET WIDTH, CALLED TEUS (TWENTY FEET EQUIVALENT UNITS) OR 40×8×8 CALLED FEUs (40 FEET EQUIVALENT UNITS)

Q.080. WHAT ARE THE FEATURE OF CONTAINERS?
A.080. A CONTAINER IS AN ARTICLE OF TRANSPORT EUIPMENT HAVING THE FOLLOWING FEATURES:
1. IT IS OF A PERMANENT CHARACTER, STRONG ENOUGH FOR REPETED USE.
2. IT IS DESIGNED TO FACILITATE THE TRANSPORT OF GOODS FROM ONE MODE TO ANOTHER.
3. IT IS DESIGNED SO AS TO BE EASY FOR STUFFING OR DESTUFFING.
4. IT IS FITTED WITH FACILITIES TO PERMIT EASY HANDLING WHEN TRANSFERRING FROM ONE MODE OF TRANSPORT TO ANOTHER.

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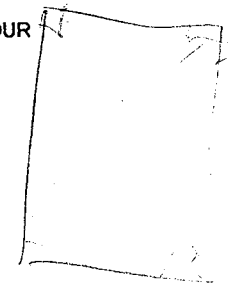
Q.081. TYPES OF CONTAINERS AND THEIR USES
A.081.

TYPES	UESES
CLOSED, GENERAL PURPOSE	USED FOR VARIOUS TYPE OF CARGO WHICH CAN BE UNPACKED OR PACKED IN BALES, CASES, CARTONS, BAGS, OR DRUM.
CLOSED CONTAINER VENTILATED	USED FOR CARRYING COMMODITIES SUCH AS TEA, COFFEE AND COCOA WHICH CAN GET DAMAGED BY MOISTURE OR WHICH GIVE OFF MOISTURE
INSULATED CONTAINERS	USED TO PROTECT WINE CARGOES FROM FREEZING IN COLD CLIMATES AND COMMODITIES SUCH AS BUTTER FROM MELTING IN WARM CLIMATES.
REFRIGERATED CONTAINER	USED FOR CHILLED CRGOES
OPEN TOP CONTAINERS	UESD FOR CARGOES SUCH AS GRANITES OR MARBLE SLABS, GLASS PLATES, PLYWOOD SHEETS, ETC...
OPEN SIDES CONTAINERS	CARGO CAN BE LOADED FROM THE SIDES BY FORKLIFTS WITHOUT REMOVING THE CONTAINER OFF THE TRUCK OR RAILCAR
HALF HEIGHT CONTAINERS	USED FOR HEAVY OR HIGH DENSITY CARGOES NOT REQUIRING SPECIAL PROTECTION SUCH AS IRON AND STEEL BARS OR SHEETS, PIPES AND INGOTS, OTHER METALS AND LQUIDS OR GRANULES IN DRUMS
PLATFORMS OR FLATRACKS	THEY ARE NORMALLY FITTED ONTO TRAILERS AND USED ON RORO SHIPS OR RAIL CARS.
BULK CONTAINERS	USED FOR CARRIAGE OF BULK CARGO
LIVESTOCK CONTAINERS OR PEN CONTAINER	USED FOR THE CARRIAGE OF SHEEP, HORSE, AND OTHER LIVESTOCKS
TANK CONTAINERS	THEY ARE USED FOR HARMLESS LIQUIDS CARGOES SUCH AS WINE, MILK OR FRUIT JUICES, DANGEROUS LIQUID CARGOES SUCH AS VEGETABLE OILS, PRODUCTS OR CHEMICALS OR COMPRESSED GAS
TILTABLE CONTAINERS	USED FOR GRAINS
COLLAPSIBLE CONTAINERS	

Q.082. CAN YOU LOAD CONTAINER IN GENERAL CARGO SHIP?
A.082. YES, IF SHIPS PROVIDED SPECIAL GEAR FOR LASHING AND SECURING THE CONTAINERS ARE AVILABLE.

Q.083. CAN YOU LOAD CONTAINER ON TANKERS?
A.083. NO, BECAUSE DON'T HAVE CSS CODE AND LASHING ARRENGEMENT FOR CONTAINERS.

Q.084. HOW YOU WILL DISCHARGE THE CONTAINERS IN GENERAL CARGO SHIP, IF SHORE CRANE IS NOT AVAILABLE?
A.084. I WILL CONNECT THE CONTAINER SLING CONSISTING OF A RECTANGULAR FRAME WITH FOUR HOOKS HANGING VERTICALLY, TO THE SHIPS CRANE FOR DISCHARGING CONTAINERS.



Q.085. WHERE YOU WILL FIND STACK WEIGHT?
A.085. ON A CSC PLATE AND A BAY PLAN.

Q.086. WHY NOW DAYS BRIDGE FITTING ARE NOT USED ON CONTAINER SHIPS?
A.086. RACKING STRESSES

Q.087. HOW YOU WILL LOAD CARGO ON BOARD?
A.087. REFER CAPACITY PLAN AND CHECK STRESSES. what is it?

Q.088. WHAT IS CLASS 6.2 OF IMDG? IS IT INCLUDED IN THE DOC CERTIFIACTE?
A.088. CLASS 6.2 INFECTIOUS SUBSTANCES
CLASS 7 RADIO ACTIVE MATERIALS
WHEN YOU LOAD ABOVE CARGO, THEN YOU DON'T REQUIRED DOC CERTIFICATE.

Q.089. WHAT ARE THE CONTAINS ON THE CSC PLATE?
A.089. NAME OF OWNER, NAME OF MANUFACTURER, DATE OF LAST SURVEY, RACKING STRESSES, STACK WEIGHT, NATURE OF TIMER TREATMENT.

Q.090. DEFINE TORSIONAL STRESSES OF CONTAINER VESSEL?
A.090. TORSIONAL STRESSES ARIES WHEN THE SHIP IS UNEVENLY LOADED ALONG THE FORE AND AFT LINE.

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Q.091. DEFINE STACK WEIGHT OR STACK LOAD?
A.091. STACK WEIGHT IS THE MAXIMUM WEIGHT THAT CAN BE BORNE BY THE DECK, HATCH COVERS OR TANK TOP AT THE CORNERS OF A BOTTOM SLOT NEAR THE CELL GUIDES. THE WEIGHT OF A CONTAINER IS DISTRIBUTED OVER THE FOUR CORNER FITTINGS AND NOT OVER THE ENTIRE AREA OCCUPIED BY THE CONTAINER.

Q.092. ON WHICH FACTOR THE LIFE OF CONTAINERS ARE DEPENDS?
A.092. THE LIFE OF CONTAINER DEPENDS ON THE CARE AND MAINTENANCE IT RECEIVES.

Q.093. WHAT IS LASH SHIPS?
A.093. LASH STANDS FOR LIGHTER ABOARD SHIP.

Q.094. WHAT IS RORO SHIPS?
A.094. THE ROLL ON ROLL OFF
THE GREATEST ADVANTAGE OF RORO SHIPS IS THE SPEED AT WHICH CARGO CAN BE LOADED AND DISCHARGED.IT IS POSSIBLE TO COMPLETELY LOAD OR DISCHARGE THE SHIP IN LESS THAN A DAY.

Q.095. WHAT TEMPERATURE YOU WILL MAINTAIN FOR FROZEN CARGO, CHILLED CARGO AND AIR COLLED CARGO, AND WHAT ARE THEY?
A.095.

CARGO	PRODUCTS	TEMPERATURE
FROZEN CARGO	MEAT, BUTTER,POULTRY AND FISH	-8°C TO -12°C
CHILLED CARGO	CHEESE, EGGS AND FRESH VEGETABLES. BEEF	-2°C TO 6°C
AIR COOLED CARGO	FRUITS	2°C TO 12°C

Q.096. WHAT IS THE FUNCTION OF BRINE TRAPS?
A.096. BRINE TRAPS PREVENTS WARM AIR FROM ENTERING THE COMPARTMENT AND COLD AIR FROM ESCAPING AND AT THE SAME TIME ALLOWING DRAINAGE OF WATER.

Q.097. WHICH INSTRUMENT YOU WILL USED FOR CHECKING CONCENTRATION OF CO2 ?
A.097. THERMOSCOPE.

Q.098. AT WHAT READING YOU WILL VENTILATE THE COMPARTMENT OF REFRIGERATED CARGO?
A.098. IF THE CONCENTRATION OF CO2 IS HIGHER THAN 7% THE COMPARTMENT MUST BE VENTED WITH FRESH AIR PRIOR TO MAN ENTRY FOR DISCHARGE.

Q.099. WHAT ARE THE DOCUMENTS REQUIRED FOR IMDG CARGO?
A.099. (1) SHIPPING DECLERATION
(2) DOCUMENT OF COMPLIANCE (DOC)
(3) DANGEROUS GOODS MANIFEAST
DOCUMENTS SHOULD BE RETAINED ON BOARD.

Q.100. WHICH IMDG CARGO IS NOT REQUIRED CARRYING DOCUMENTS OF COMPLIANCES?
A.100. SOLID DANGEROUS GOODS IN BULK AND THOSE CARGOES SPECIFIED AS CLASS 6.2 (INFECTIOUS SUBSTANCES) AND CLASS 7 (RADIOACTIVE MATERIALS) AND DANGEROUS GOODS IN LIMITED QUANTITIES.

Q.101. DEFINE LFL AND UFL?
A.101. LOWER FLAMMABLE LIMIT (LFL) OR LOWER EXPLOSIVE LIMITS (LEL):-IT IS THE CONCENTRATION OF CH GAS IN AIR BELOW WHICH THERE IS INSUFFICIENT CH TO SUPPORT AND PROPAGATE COMBUSTION.

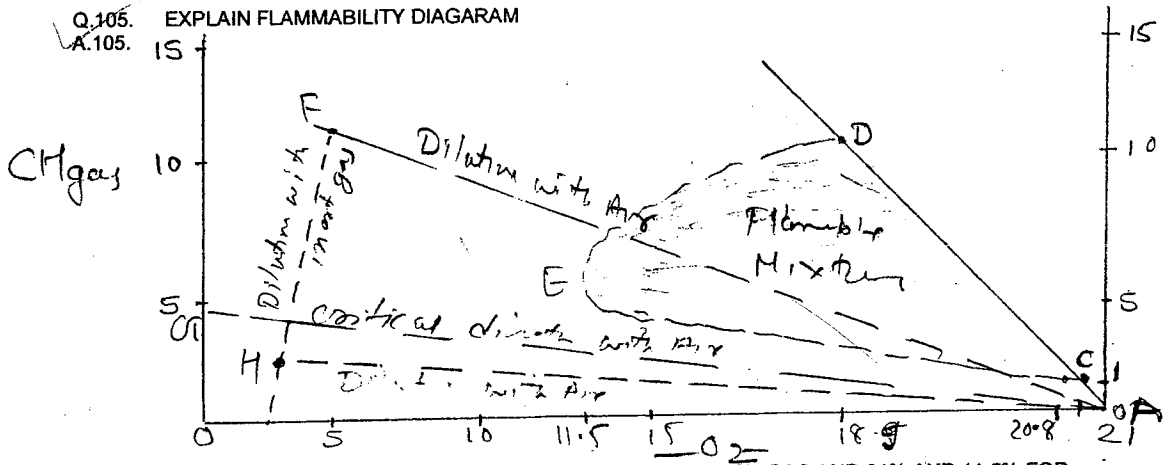
UPPER FLAMMABLE LIMIT (UFL) OR UPPER EXPLOSIVE LIMIT (UEL):-IT IS THE CONCENTRATION OF CH GAS IN AIR ABOVE WHICH THERE IS
INSUFFICIENT AIR TO SUPPORT AND PROPOGATE COMBUSTION.

Q.102. DEFINE FLAMMABLE RANGE?
A.102. PETROLEUM GAS AND AIR FORMS A FLAMMABLE AND EXPLOSIVE MIXTURE.IF THE PERCENTAGE OF CH VAPOUR IS TOO LOW THE MIXTURE WILL NOT IGNITE AND IS SAID TO BE 'TOO LEAN". IF THE PERCENTAGE OF CH VAPOUR IS TOO HIGH, THE CORRESPONDING PERCENTAGE OF AIR WILL BE TOO LOW AND THE MIXTURE WILL NOT SUPPORT COMBUSTION. IT IS THEN SAID TO BE "TOO RICH". THE MIXTURE WILL ONLY IGNITE WHEN THE VAPOUR-GAS PROPOGATION IS WITHIN A CERTAIN RANGE CALLED THE FLAMMABLE RANGE.

Q.103. EXPLAIN THE METHODS OF GAS FREEING TANKS
A.103. INERT GAS, AIR OR STEAM IS USED TO REPLACE THE TANK ATMOSPHERE
(1) USING INERT GAS: - THE TANK ATMOSPHERE CAN BE DILUTED WITH INERT GAS OR DISPLACED BY PURGING.
(2) BY AIR: HYDRAULIC, PNEUMATIC OR STEAM DRIVEN FANS MAY BE USED TO BLOW IN AIR OR EXTRACT THE GAS.
(3) BY STEAM: - STEAM WAS USED PREVIOUSLY TO INERT TANKS BEFORE INERT GAS BECAME AVAILABLE.

Q.104. WHAT IS THE HAZARD ASSOCIATED WITH STEAM, WHILE GAS FREEING TANKS?
A.104. THE HAZARD WITH STEAM IS THAT BECAUSE OF ITS HIGH TEMPERATURE, IT ASSISTS THE EVAPORATION OF OIL, ESPECIALLY WITH VOLATILE OILS, FORMING FLAMMABLE MIXURES.

Q.105. EXPLAIN FLAMMABILITY DIAGARAM
A.105.



THE FLAMMABLE RANGE IS BETWEEN 1% AND 10% FOR CH GAS AND 21% AND 11.5% FOR OXYGEN. IF 10% OF CH GAS IS INTRODUCED IN AIR, THE PROPOGATION OF OXYGEN REDUCED TO 18.9% (POINT 'D') WHEN OXYGEN IS MINIMUM (11.5%) THAN CH GAS MUST BE ATLEAST 1.5% (POINT 'E') AT 1% CH GAS, THE OXYGEN MUST BE AT LEAST 20.8%FOR THE MIXTURE TO BE FLAMMABLE (POINT'C') IF THE CONCENTRATION OF CH GAS AND OXYGEN IS OUTSIDE THE FLAMMABLE RANGE, THAN THE MIXTURE WILL NOT BURN. WHEN WE DILUTE A CH GAS-AIR MIXTURE WITH AIR (POINT 'F').AIR WILL SLOWLY REPLACE THE CH GAS TILL THE MIXTURE BECOMES 100% AIR. THE CONCENTRATION OF CH GAS AND OXYGEN WILL TAKE THE PATH 'FA'. THE PATH PASSES THROUGH THE FLAMMABLE RANGE AND IF DURING THE DILUTION THE MIXTURE COULD EXPLODE IF A SPARK WAS APPLIED. TO AVOID PASSING THROUGH THE FLAMMBLE RANGE DURING DILUTION WITH AIR.WE DILUTE WITH INERT GAS (ALONG A LINE 'FH') TILL A POINT 'H' IS REACHED BELOW THE CRITICAL DILUTION LINE.THIS IS KNOWN BY SAMPLING AND TESTING THE TANK ATMOSPHERE WITH GAS MEASURING INSTRUMENTS. NOW DILUTION TAKE PLACE ALONG LINE 'HA', WITHOUT PASSING THROUGH THE FLAMMABLE RANGE AT ANY TIME CAUSING NO DANGER OF FIRE OR EXPLOSION.

Q.106. EXPLAIN THE DILUTION AND DISPLACEMENT METHOD FOR GAS FREEING?
A.106. DISPLACEMENT METHOD: THE INERT GAS ENTERS FROM THE TOP OF THE TANK AT A LOW VELOCITY. THE INTERFACE OF THE INCOMING AND OUTGOING GAS MUST BE STABLE WITHOUT ANY TURBULENCE.THE CH GAS ESCAPES THROGH SUITABLE PIPING LEADING OUT FROM THE BOTTOM OF THE TANK.

DILUTION METHOD: THE INERT GAS IS INTRODUCED AT A HIGH VELOCITY INTO THE TANK TO PENETRATE TO THE BOTTOM AS CH GAS IS HEAVIER THEN INERT GAS OR AIR. TO MAINTAIN THIS VELOCITY, MANY TANKS SHOULD NOT BE DILUTED AT THE SAME TIME.

Q.107. WHAT IS CLEAN BALLAST?
A.107. CLEAN BALLAST MEANS THE BALLAST IN A TANK WHICH, SINCE OIL WAS LAST CARRIED THEREIN, HAS BEEN SO CLEANED THAT EFFLUENT THEREFROM IF IT WERE DISCHARGED FROM A SHIP WHICH IS STATIONARY INTO CLEAN CALM WATER ON A CLEAR DAY WOULD NOT PRODUCE VISIBLE TRACES OF OIL ON THE SURFACE OF THE WATER OR ON ADJOINING SHORELINES OR CAUSE A SLUDGE OR EMULSION TO BE DEPOSITED BENEATH THE SURFACE OF WATER OR UPON ADJOINING SHORELINES.

Q.108. WHAT DO YOU UNDERSTAND BY SAGREGATED BALLAST?
A.108. SEGREGATED BALLAST MEANS THE BALLAST WATER INTRODUCED IN THE TANK WHICH COMPLETELY SEPARATED FROM THE CARGO OIL AND OIL FUEL SYSTEM AND WHICH IS PERMANENTLY ALLOCATED TO THE CARRIAGE OF BALLAST ~~OR TO THE CARRIAGE OF BALLAST~~ OR CARGOES OTHER THAN OIL OR NOXIOUS LIQUID SUBSTANCES AS VARIOUSLY DEFINED IN THE ANNEXES OF THE PRESENT CONVENTION.

Q.109. DEFINE EROSION?
A.109. EROSION MAY BE DEFINED AS THE DESTRUCTION OF MATERIAL BY THE ABRASIVE ACTION OF A LIQUID OR GAS.

Q.110. HOW WILL YOU DO ZERO CALIBRATION OF OXYGEN ANALYSER?
A.110. ZERO CALIBRATION CAN BE DONE BY IMMERSING THE PROBE IN NITROGEN OR CARBONDIOXIDE, MAXIMUM CHECK IS CARRIED OUT IN AIR.

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Q.111. WHAT IS DREGER TUBE?
A.111. IT IS A MULTI GAS DETECTOR, ITS WORKS ON THE PRINCIPLE OF CHEMICAL ABSORPTION OF THE GAS TO BE DETECTED BY A RE-AGENT WHICH GETS DISCOLOURED. DIFFERENT TUBES ARE USED FOR DETECTION OF DIFFERENT GASES.

Q.112. WHAT IS THE MAJOR DANGER ASSOCIATED WITH STEEL CARGO?
A.112. THE DANGER WITH STEEL CARGOES IS THAT IF THEY SHIFT, THEY CAN DAMAGE OTHER CARGOES, BECAUSE OF THEIR WEIGHT OR EVEN RAPTURES THE SHIP'S SIDE.

Q.113. SAFETY PARAMETER OF IG?
A.113. DECK SEAL, NON RETURN VALVE, PV VALVE, PV BREAKER,MAST RAISER.

Q.114. EMERGENCY TOWING WIRE (FIRE WIRE)
A.114. AT LEAST 5 TURN ON BOLLARDS
NO SLACK ON DECK AS PER ISGOTT (PORT REG. KEEP SLACK)

DWT	DIAMETER OF WIRE	LENGTH OF WIRE
20000-100000	28 mm	45
100000-300000	38 mm	60
ABOVE 300000	42 mm	70

Q.115. CONTENTS OF IG?
A.115.

SULPHUR DIOXIDE	→	50 PPM
CARBON MONOXIDE	→	TRACE
NITROGEN OXIDE	→	TRACE
WATER VAPOUR	→	TRACE (HIGH IF NOT DRIED)
ASH AND SHOOT	→	TRACE
DENSITY	→	1.044

NITROGEN	83%
CARBON DIOXIDE	12% TO 14%
OXYGEN	2% TO 4%

Q.116. WHAT ACTION YOU WILL TAKE IF IG FAILS?
A.116. (1) STOP DISCHARGING AND BALLAST OPERATION
(2) CLOSE IG DECK ISOLATING VALVE
(3) THE VENT VALVE BETWEEN IT OPEN MAST RAISER
(4) INFORM MASTER, E/R, TERMINAL OPERATOR, PORT
(5) CARRY OUT REPAIR WORK AS SOON AS POSSIBLE
(6) NO SOUNDING, ULLAGING, DIPPING

Q.117. WHAT IS THE ADVANTAGE OF IG?
A.117. (1) USE FOR FIRE FIGHTING
(2) REDUCE OXYGEN CONTENT
(3) INCREASE DISCHARGE RATE
(4) PHYROPHORIC IRON SULPHIDE

Q.118. DEFINE FLASH POINT?
A.118. FLASH POINT IS THE LOWEST TEMPERATURE AT WHICH LIQUID GIVES OFF SUFFICIENT GAS TO FORM A FLAMMABLE GAS MIXTURE NEAR THE SURFACE OF LIQUID.

Q.119. DEFINE INERT GAS?
A.119. A GAS OR MIXTURE OF GASES SUCH AS FLUE GAS, CONTAINING INSUFFICIENT OXYGEN TO SUPPORT THE COMBUSTION OF HYDRO CARBONS.

Q.120. IG PLANT?
A.120. ALL EQUIPMENT FITTED TO SUPPLY, COOL, CLEAN, PRESSURISE, MONITOR AND CONTROL THE DELIVERY OF IG TO THE CARGO TANK SYSTEM.

Q.121. MSDS?
A.121. MATERIAL SAFETY DATA SHEET: - A DOCUMENT IDENTIFYING THE SUBSTANCE AND ALL ITS CONSTITUENTS, PROVIDING THE RECIPIENT WITH ALL NECESSARY INFORMATION TO SAFETY MANAGES THE SUBSTANCE. IT INCLUDES:-
(1) MATERIAL IDENTIFICATION AND DESCRIPTION
(2) INGREDIENTS AND OCCUPATIONAL EXPOSURE LIMITS
(3) PHYSICAL DATA
(4) REACTIVITY DATA
(5) HEALTH AND HAZARD DATA
(6) SPILL, LEAK AND DISPOSAL PROCEDURE
(7) SPECIAL PROTECTION DATA
(8) SPECIAL PRECAUTION AND COMMENTS

Q.122. COLD WORK?
A.122. WORK WHICH CANNOT CREATE A SOURCE OF IGNITION.

25

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Q.122. COLD WORK?
A.122. WORK WHICH CANNOT CREATE A SOURCE OF IGNITION.

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Q.130. TYPES OF CARGO PIPELINE SYSTEMS
A.130.

THE FREE FLOW SYSTEM	THE DIRECT LINE SYSTEM	THE RING MAIN SYSTEM
USED ON LARGE CRUDE CARRIERS	USED ON VLCC	USED ON PRODUCT CARRIERS
CARRY ONLY ONE GARDE OF CARGO	CARRY TWO OR THREE GARDE OF CARGO	CARRY SEVERAL DIFFERENT PRODUCTS
LARGE GATE VALVE BUILT IN THE BULKHEAD	SIMPLE LINES LEADING IN THE TANKS	
STERN TRIM CAUSE THE OIL TO FLOW TO THE AFTERMOST TANK	DUE TO STRAIGHT LENGTH OF PIPELINE, THERE IS BETTER SUCTION & LESS LOSS OF PRESSURE	DUE TO THE NUMBER OF BENDS, JOINTS AND VALVE IT TAKE LONGER TIME
SUCTION MAIN CARGO PUMP SITUATED IN AFT	FEWER VALVE & BENDS MEANS LESS EROSION & LEAK	DUE TO THE NUMBER OF BENDS, JOINTS AND VALVE MEANS MORE EROSION & LEAKS
	LESS MAINTENANCE REQUIRED	MORE MAINTENANCE REQUIRED
	THROUGH WASHING OF LINE IS NOT POSSIBLE UNLESS THE WASHING ARE FLUSHED INTO THE TANK & DISCHARGED FROM THERE.	THROUGH WASHING OF LINE IS POSSIBLE WITHOUT FLUSHING INTO THE TANK
	DUE TO FEWER VALVES LEAKS ARE DIFFICULT TO CONTROL	
	VALVE SEGREGATION NOT PROVIDED	REQUIRED TWO VALVE SEGREGATION BETWEEN PRODUCTS
	THE INITIAL COST OF FITTING IS LESS THAN RING MAIN SYSTEM	THE INITIAL COST OF FITTING IS HIGHER

Q.131. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING VALUABLE CARGO? (Red)
A.131. PRECAUTIONS WHILE LOADING VALUABLE CARGO:-
(1) VALUABLE CARGOES SHOULD BE STORED IN LOCKERS WHICH CAN BE LOCKED OR IT SHOULD BE OVERSTOWED WITH OTHER SUITABLE CARGO.
(2) PREFERABLY WORK ONLY BY DAY, IF NIGHT WORK IS UNAVOIDABLE, GOOD LIGHTING IN ALL CORNERS OF THE HOLD TO BE PROVIDED.
(3) WATCHMAN TO BE PUT ON DUTY, IF SHORE WATCHMAN IS USED, SHIP'S OFFICER MUST CHECK ON THEM FREQUENTLY.
(4) VENTILATION AND OTHER MEANS OF ACCESS SHOULD BE COVERED.
(5) HOLD ACCESSES TO BE LOCKED AFTER CARGO WORK & OTHER MEANS OF ENTRY LIKE PORTABLE LADDERS TO BE REMOVED.

Q.132. WHAT PRECAUTIONS YOU WILL TAKE WHILE BALLASTING/DEBALLASTING?
A.132. PRECAUTIONS WHILE BALLASTING/DEBALLASTING:-
(1) THIS SHOULD BE CARRIED OUT ACCORDING TO THE MATE'S INSTRUCTIONS.
(2) WHEN BALLASTING TANK, DB TANKS MUST NOT BE PRESSED UP, AS SHOULD THERE BE A LEAK IN THE TANKTOP, CARGO WOULD BE DAMAGED.
(3) BALLAST AND LIQUID CARGO OPERATIONS MUST BE CARRIED OUT IN CLOSE LIAISON & CO-OPERATION WITH THE ENGINE ROOM STAFF.
(4) SOUNDING AND FLOW RATES MUST BE MONITORED CONTINUOUSLY.
(5) ENSURE THAT MOORING IS TAUT & SHIP IS ALONGSIDE THE JETTY & GANGWAY IS CLEAR OFF OBSTRUCTION.

Q.133. WHAT ENTRIES YOU WILL MAKE IN DECK LOG BOOK?
A.133. ENTRIES IN DECK LOG BOOK:-
AT PORT
(1) INSPECTION OF THE CARGO HOLD BY SURVEYOR PRIOR TO LOADING.
(2) OPENING AND CLOSING OF THE HATCHES.
(3) TIME OF ARRIVAL & DEPARTURE OF THE STEVEDORE LABOUR ON THE SHIP & THE NUMBER OF GANGS.
(4) TIME OF COMMENCEMENT & CEASING OF CARGO WORK.
(5) ANY INTERRUPTION OR STOPPAGES DURING CARGO WORK &THEIR REASON.
(6) THE HATCH NUMBERS BEING WORKED.
(7) THE MORNING & EVENING DRAFT AT SEA
(8) WEATHER AND SEA CONDITIONS
(9) TIME WHEN VENTILATION IS CARRIED OUT.
(10) WET AND DRY BULB OF TEMPERATURE.
(11) INSPECTION AND TIGHTENING OF CARGO LASHING.

Q.134. WHAT PRECAUTIONS YOU WILL TAKE WHILE USING UNION PURCHASE?
A.134. PRECAUTIONS WHILE USING UNION PURCHASE:-
(1) THE SWL OF A UNION PURCHASE RIG MUST BE CALCULATED IN ACCORDANCE WITH CLASSIFICATION SOCIETY OR DECK LABOUR REGULATIONS.
(2) THE OPERATING ANGLE OF THE DERRICK SHOULD PREFERABLY BE NOT LESS THAN 30° TO THE HORIZONTAL AND IN NO CASE SHOULD IT BE LESS THAN 15°.
(3) THE MAXIMUM INCLUDED ANGLE BETWEEN THE CARGOS WIRES SHOULD NOT EXCEED 120° SO THAT FORCES IN THE RIG IS KEPT TO MINIMUM.
(4) UNDULY LONG SLINGS MUST NOT BE USED.
(5) WINCHMEN MUST NOT LIFTS THE LOAD ABOVE GUARD RAILS & HATCH COMINGS BEYOND THE MINIMUM REQUIRED FOR SAFETY.
(6) RUNNERS SHOULD NOT BE ALLOWED TO RUB AGAINST THE HATCH COMINGS.
(7) WINCHMEN SHOULD BE EXPERIENCED AND SHOULD COORDINATE WELL.

Q.135. WHAT PRECAUTIONS YOU WILL TAKE WHILE USING HEAVY LIFTS?
A.135. PRECAUTIONS WHILE USING HEAVY LIFTS:
(1) ALL GEAR INVOLVED SHOULD BE CAREFULLY EXAMINED BEFORE USE.
(2) ALL WIRES AND BLOCKS TO BE CHECKED FOR ANY DEFECTS.
(3) SHEAVES TO BE EXAMINED FOR FREE ROTATION.
(4) ALL GEAR SELECTED SHOULD BE OF ADEQUATE SWL.
(5) ALLOWANCE SHOULD BE MADE FOR THE WEIGHT LIFTED PLUS THE PURCHASE WEIGHT.
(6) END LINKS, RINGS OR SHACKLES TO RIDE FREELY FROM WHICHEVER POINT THEY HANG.
(7) STROPS, WIRE SLINGS, EYE BOLTS ETC. TO BE EXAMINED THAT THEY ARE OF ADEQUATE STRENGTH.
(8) WHILE SLINGING, WOOD OR OTHER PACKING TO BE USED TO PROTECT THE SLING FROM ANY SHARP EDGES ON THE LOAD AND TO PREVENT THE SLING FROM CUTTING INTO THE LOAD.
(9) AVOID SHOCKS DUE TO LOAD SLIPPING OR SUDDEN STARTS.
(10) THE SHIP MUST HAVE ADEQUATE GM, NEGATIVE METACENTRIC HEIGHT MUST BE AVOIDED.
(11) THE VESSEL SHOULD BE INITIALLY UPRIGHT WITH MOORINGS TAUT AND MANNED.
(12) GANGWAY MUST BE CLEAR OF THE JETTY
(13) BARGES THAT ARE NOT IN USE MUST BE CAST OFF.
(14) PREVENTER STAYS MAY HAVE TO BE RIGGED ONTO THE MAST.
(15) WINCHES MUST BE PUT IN DOUBLE GEAR.
(16) STEADYING LINES MUST BESECURED IF POSSIBLE TO THE CORNERS OF THE LOAD.
(17) REMOVE GUARD RAILS IF POSSIBLE.

Q.136. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING BULK CARGOS?
A.136. PRECAUTIONS WHILE LOADING BULK CARGOS:-
(1) INSPECT HOLD FOR SUITABILITY PRIOR LOADING
(2) ENSURE THAT BILGE WELLS, STRAINER PLATE, SOUNDING PIPES, BILGE SUCTION ETC. ARE TESTED AND SATISFACTORY.
(3) PROTECT DECK MACHINERY AGAINST DUST.
(4) ACCOMODATION AIR-CONDITIONING SYSTEM TO BE SCREENED & PUT ON RECIRCULATION.
(5) SOUND BILGES BEFORE AND AFTER LOADING.
(6) WHILE LOADING HIGH DENSITY CARGO THE CARGO SHOULD NOT FALL DIRECTLY INTO THE EMPTY HOLD AS THE TANK TOP MAY GET DAMAGED.
(7) DEBALLASTING, LOADING SEQUENCE, TRIM, LIST, GANGWAY, MOORINGS ETC. MUST ALL BE ATTENDED TO.

Q.137. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING CONCENTRATES?
A.137. PRECAUTIONS WHILE LOADING CONCENTRATES:-
(1) GENERAL CARGO VESSELS MAY CARRY CONCENTRATES ONLY WHEN CARGO IS AT OR BELOW THE TML
(2) WET CARGOES OR LIQUIDS SHOULD NOT BE LOADED IN THE SAME COMPARTMENT AS CONCENTRATES.
(3) CARGO WORK SHOULD NOT BE CARRIED OUT DURING RAIN.
(4) TO DECREASE THE EFFECT OF OXIDATION THE CARGO SHOULD BE TRIMMED REASONABLY LEVEL ON COMPLETION IRRESPECTIVE OF THE ANGLE OF REPOSE, TO REDUSE THE SURFACE AREA.
(5) SOME CONCENTRATES SUCH AS SULPHIDE ARE SUBJECTED TO OXIDATION & SPONTANEOUS COMBUSTION IF THE MOISTURE CONTENT IS VERY LOW. IN SUCH CASES, WATER MAY BE USED ONLY AS A SPRAY TO COOL THE CARGO AND BRING UP THE MOISTURE CONTENT, HOWEVER, A FLOW STATE SHOULD NOT BE ALLOWED TO DEVELOP.
(6) SHIPPER MUST PRODUCE A CERTIFICATE FROM A COMPETENT LABORATORY STATING THE FMP, TML, & MC. TEST SAMPLES TO BE TAKEN FROM THE STOCK PILE NEAREST TO THE SHIPPING POINT.
(7) IN CASE THE STOCK PILE IS EXPOSED TO PRECIPITATION THEN TEST SAMPLES MUST BE TAKEN JUST PRIOR TO LOADING.
(8) WHEN DELIVERY OF CARGO IS BY ROAD, RAIL, OR BARGE AND ENTRY OF WATER INTO THE VEHICLE IS SUSPECTED, THEN RANDOM CHECKS AT THE SURFACE AND AT HALF DEPTH SHOULD BE MADE OF ONE IN FIVE VEHICLES.

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Q.138. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING & CARRYNG COAL?
A.138. PRECAUTIONS WHILE LOADING & CARRYING COAL:-
(1) SURRFACE VENTILATION IS AN IMPORTANT NECESSITY DURING THE CARRIAGE OF COAL.
(2) MONITORING OF TEMPERATURE AT THREE LEVELS IN THE HOLD TO BE DONE AT LEAST ONCE A DAY.
(3) THE DECKS ARE TO BE KEPT COOL IN TROPIACL AREAS BY RIGGING AWNINGS, COVERING WITH DUNNAGE OR RUNNING DECK WATER.
(4) TEMPERATURE PIPES ARE TO BE CLOSED TO PREVENT ENTRY OF AIR INTO THE CARGO.
(5) "NO SMOKING" SIGNS PUT UP & STRICTLY ENFORCED.
(6) "NO NAKED LIGHTS" PERMITTED ON THE DECK OR IN THE HOLDS.
(7) FIRE HOSES TO BE RIGGED, FIRE MAIN CHARGED & OTHER FIRE FIGHTING APPARATUS KEPT IN A CONSTANT STATE OF READINESS.
(8) SPARK ARRESTERS TO BE FITTED OVER THE FUNNEL, GALLEY –EXHAUSTS & HOLD VENTILATORS.
(9) NO HOT WORK, CHIPPING OR PAINTING TO BE IN PROGRESS ON DECK TO AVOID CREATING SOURCES OF IGNITION.
(10) FLASHLIGHTS, WALKIE-TALKIES ETC. TO BE INTRINSICALLY SAFE.
(11) NO OILY WASTE, WOOD, ROPE, GUNNY, ETC. TO BE LEFT IN HOLD OR ON DECK WHERE IT CAN CATCH FIRE BY SPONTANEOUS HEATING.
(12) FIRE PATROL & GANGWAY WATCHES TO BE MAINTAINED.
(13) A SUFFICIENT NUMBER OF SAFETY LAMPS ARE TO BE CARRIED IN ALL COAL CARRYING VESSELS.
(14) ALL ELECTRICAL CABLES & COMPONENTS SITUATED IN CARGO SPACE SHOULD BE FREE FROM DEFECTS & SUITABLE FOR USE IN A METHANE/DUST ATMOSPHERE.
(15) POINTS OF ENTRY & EXIT OF CABLES SHOULD BE SEALED TO PREVENT PASSAGE OF GAS INTO ADJACENT SPACES.
(16) IF THERE IS EVIDENCE OF CARGO BURNING, THE SPACE SHOULD BE CLOSED, VENTILATION STOPPED & SEALED AGAINST ENTRY OF AIR.
(17) BOUNDARY COOLING TO BE CARRIED OUT BUT AT SEA NO WATER OR STEAM TO BE DIRECTLY APPLIED TO THE COAL AS COAL REDUCES THE WATER TO HYDROGEN & FORMS CARBON MONOXIDE BOTH FLAMMABLE GASES.
(18) THE SHIP SHOULD REGULARLY MONITOR THE METHANE, OXYGEN & CARBON MONOXIDE CONCENTRATIONS IN THE HOLD & IN SPACES WHERE THE GASES COULD ACCUMULATE WITH SUITABLY CALIBRATED INSTRUMENTS.
(19) A CERTIFICATE IS OBTAINED FORM SHIPPERS STATING THE MOISTURE CONTENT OF THE CARGO, IF THIS FIGURE IS SUSPECTED,AN ON BOARD TEST OF THE MOISTURE CONTENT IS TO BE CARRIED OUT & ASCERTAINED THAT IT IS NOT HIGHER THAN THE TML.
(20) PRECAUTIONS SHOULD BE TAKEN TO PREVENTINGRESS OF WATER INTO THE CARGO.
(21) CARGO WORK TO BE SUSPENDED & HATCHES CLOSED DURING WET WEATHER.
(22) STOCK PILES MUST BE DRAINED & FRESHLY TESTED FOR MOISTURE CONTENT BEFORE LOADING.
(23) THE CARGO SHOULD BE TRIMMED INTO THE WINGS & ENDS OF THE COMPARTMENT AS FAR AS IS REASONABLE & PRACTICABLE.
(24) HOLD BILGES SHOULD BE REGULARLY PUMPED OUT TO REMOVE ANY WATER.

Q.139. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING & CARRYING SULPHUR?
A.139. PRECAUTIONS WHILE LOADING/DISCHARGING/CARRYING SULPHUR:-
(1) "NO SMOKING" SIGNS PUT UP & STRICTLY ENFORCED.
(2) "NO NAKED LIGHTS" PERMITTED ON THE DECK OR IN THE HOLDS.
(3) FIRE HOSES TO BE RIGGED, FIRE MAIN CHARGED & OTHER FIRE FIGHTING APPARATUS KEPT IN A CONSTANT STATE OF READINESS.
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(9) NO LOOSE METAL OBJECTS E.G. BILGE COVERS, LASHING GEAR, ETC TO BE LEFT IN HOLD, AS DURING DISCHARGE THE GRAB COULD STRIKE AGAINST IT & PRODUCE A SPARK.
(10) FRESH WATER HOSES TO BE RIGGED ON DECK.
(11) IF FIRE OCCURS A FINE SPRAY OF FRESH WATER MAY BE USED OR MORE SULPHUR SHOVELLED ONTO THE BURNING AREA TO SMOTHE IT. IF THE FIRE LARGE, CLOSED THE HATCHES & HATCH ENTRANCES AND USE CO2
(12) AVOID SWEEPING THE HOLD, CLEAN HOLD BY HOSING DOWN INSTEAD OF SWEEPING.
(13) HOLD MUST BE COATED WITH LIME, PARTICULARLY AREAS WHERE THE PAINT COATING IS REMOVED.

Q.140. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/CARRYING/DISCHARGING THE COTTON?
A.140. PRECAUTIONS WHILE LOADING/CARRYING/DISCHARGING COTTON:-
(1) THE HOLD MUST BE CLEAN, PERFECTLY DRY, WELL AIRED & ABSOLUTELY FREE OF OIL OR GREASE.
(2) COTTON MUST NOT BE STOWED IN FRESHLY PAINTED HOLDS.
(3) FIRE FIGHTING EQUIPMENT MUST BE TESTED & READY FOR IMMEDIATE USE & ALL OTHER PRECAUTIONS OBSERVED.
(4) "NO SMOKING" SIGNS PUT UP & STRICTLY ENFORCED.
(5) "NO NAKED LIGHTS" PERMITTED ON THE DECK OR IN THE HOLDS.
(6) FIRE HOSES TO BE RIGGED, FIRE MAIN CHARGED & OTHER FIRE FIGHTING APPARATUS KEPT IN A CONSTANT STATE OF READINESS.
(7) SPARK ARRESTERS TO BE FITTED OVER THE FUNNEL, GALLEY –EXHAUSTS & HOLD VENTILATORS.
(8) NO HOT WORK, CHIPPING OR PAINTING TO BE IN PROGRESS ON DECK TO AVOID CREATING SOURCES OF IGNITION.
(9) FLASHLIGHTS, WALKIE-TALKIES ETC. TO BE INTRINSICALLY SAFE.
(10) NO OILY WASTE, WOOD, ROPE, GUNNY, ETC. TO BE LEFT IN HOLD OR ON DECK WHERE IT CAN CATCH FIRE BY SPONTANEOUS HEATING.
(11) FIRE PATROL & GANGWAY WATCHES TO BE MAINTAINED.
(12) ALL BALES SHOULD BE CLEAN, PERFECTLY DRY, FREE FROM ANY GREASE OR OIL STAINS.
(13) WET & DRY BALES SHOULD NOT BE STOWED TOGETHER.
(14) LOOSELY PACKED BALES OR THOSE WITH BROKEN BANDS & TORN WRAPPING SHOULD BE REJECTED AS THESE PERMIT AIR-CIRCULATION & CATCH FIRE EASILY.
(15) NEW MATERIAL MUST BE USED FOR WRAPPING & FOR REPLACING PARTS OF WRAPPING CUT OFF FOR SAMPLING OR GRADING OF THE CARGO.
(16) PORT MARKS SHOULD NOT BE OBLITERATED & THE CARGO SHOULD BE WELL SEGREGATED TO PREVENT OVER CARRIAGE OR DELAY IN DISCHARGE.
(17) DUNNAGE USED SHOULD BE CLEAN, DRY, & FREE FROM OIL OR GREASE.

Q.141. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING CEMENT? BAGS?
A.141. PRECAUTIONS WHILE LOADING CEMENT:-
(1) CARE MUST BE TAKEN TO AVOID DAMAGE TO CONTAINERS DURING LOADING.
(2) CANVAS SLINGS TO BE USED WITH BAGS
(3) SLINGS MUST NOT BE DRAGGED & A POPER LANDING PLATFORM SHOULD BE USED.
(4) CEMENT SHOULD NOT BE LOADED IN THE SAME COMPARTMENT AS SUGAR, AMMONIA OR ITS SULPHATE AS THEIR FUMES OR GAS ALTERS THE CHARACTER OF THE CEMENT TO A QUICK-DRYING CEMENT.
(5) WHEN OVERSTOWING OTHER CARGO WITH BAGGED CEMENT A FIRM & LEVEL FLOOR OR PLATFORM IS ESSENTIAL. BOARDS SHOULD BE PLACED SO AS TO WITHSTAND THE WEIGHT.
(6) AS THERE WILL BE A LOTS OF DUST, ANY GOODS WHICH MIGHT BE ADVERSELY AFFECTED SHOULD NOT BE OVERSTOWED WITH CEMENT. ANY FINE GOODS SHOULD BE CAREFULLY COVERED.
(7) DURING THE VOYAGE, SWEAT & ANY FORM OF MOISTURE MUST BE KEPT TO A MINIMUM. TO ACHIEVE THIS CAREFUL ATTENTION MUST BE PAID TO VENTILATION.
(8) DURING DISCHARGING THE SAME CARE MUST BE TAKEN AS IN LOADING TO PREVENT EXCESS LEAKAGE.

Q.142. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/CARRYING/DISCHARGING DANGEROUS GOODS?
A.142. PRECAUTIONS WHILE LOADING/CARRYING/DISCHARGING DANGEROUS GOODS:-
(1) "NO SMOKING" SIGNS PUT UP & STRICTLY ENFORCED.
(2) "NO NAKED LIGHTS" PERMITTED ON THE DECK OR IN THE HOLDS.
(3) FIRE HOSES TO BE RIGGED, FIRE MAIN CHARGED & OTHER FIRE FIGHTING APPARATUS KEPT IN A CONSTANT STATE OF READINESS.
(4) SPARK ARRESTERS TO BE FITTED OVER THE FUNNEL, GALLEY –EXHAUSTS & HOLD VENTILATORS.
(5) NO HOT WORK, CHIPPING OR PAINTING TO BE IN PROGRESS ON DECK TO AVOID CREATING SOURCES OF IGNITION.
(6) FLASHLIGHTS, WALKIE-TALKIES ETC. TO BE INTRINSICALLY SAFE.
(7) NO OILY WASTE, WOOD, ROPE, GUNNY, ETC. TO BE LEFT IN HOLD OR ON DECK WHERE IT CAN CATCH FIRE BY SPONTANEOUS HEATING.
(8) FIRE PATROL & GANGWAY WATCHES TO BE MAINTAINED.
(9) REFER TO THE IMDG CODE & FINDOUT THE PARTICULARS FOR THE CARGO TO BE LOADED WITH REGARD TO HAZARDS. (COMPATIBILITY, STOWAGE, SEGREGATION)
(10) THE APPROPRIATE INTERNATIONAL CODE OF SIGNALS BY DAY & BY NIGHT IS TO BE DISPLAYED.
(11) NO BUNKERING OPERATION IS TO BE CARRIED OUT DURING LOADING OR DISCHARGING.
(12) WIRELESS TRANSMISSION SHOULD NOT BE DONE OF VOLTAGE EXCEEDING 50 VOLTS
(13) RADAR SHOULD NOT BE OPERATED DURING LOADING OR DISCHARGE.
(14) FORKLIFTS SHOULD NOT BE USED IN THE VICINITY OF DANGEROUS GOODS.
(15) LOADING IS TO BE SUSPENDED IF INCLEMENT WEATHER THREATENS.
(16) DEFECTIVE PACKAGES SHOULD NOT BE ACCEPTED.
(17) PORT REGULATION IS TO BE COMPLIED.
(18) EXPLOSIVE MUST BE STOWED IN A MAGAZINE, WHICH IS A WOODLINED COMPARTMENT, SOMETIMES SPECIALLY CONSTRUCTED TO STOW EXPLOSIVES SAFELY.

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(19) NO ELECTRIC CABLES SHOULD PASS THROUGH THE MAGAZINE, IF THIS IS UNAVOIDABLE, THE CABLE SHOULD BE SHEATHED BY AN APPROVED, SEALED, NON COMBUSTIBLE BARRIER & TESTED BEFORE LOADING.
(20) EXPLOSIVE ARE UNSTABLE WHEN WET & SHOULD BE STOWED IN A COOL, DRY, WELL VENTILATED SPACE AWAY FROM HOT BULKHEAD OR DECKS.
(21) ELECTRICAL FITTINGS MUST BE DISCONNECTED IN COMPARTMENTS CONTAINING DANGEROUS GOODS.
(22) VENTILATION FANS TO THE SPACE MUST BE FLAME-PROOF, IF NOT DISCONNECTED.
(23) EXPLOSIVES MUST BE STOWED AWAY FROM LIVING QUARTERS.
(24) MASTS MUST BE FITTED WITH AN EFFICIENT LIGHTNING CONDUCTOR AS LIGHTNING PRESENTS A GRAVE DANGER.

Q.143. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING REFER CONTAINER?
A.143. PRECAUTIONS WHILE LOADING/CARRYING REFER CONTAINERS:-
(1) PRIOR TO LOADING CHECK THAT THE PLUG POINTS ARE OKAY & SUFFICIENT SPARES FOR REEFER MACHINERY ARE CARRIED.
(2) A REEFER MANIFEST MUST BE OBTAINED FROM ASHORE & DETAILS OF STOWAGE CHECKED BY THE CHIEFOFFICER & ELECTRICIAN.
(3) THE STOWAGE OF CONTAINERS ON DECK MUST BE PLANNED ONLY IN THOSE BAYS WHERE REEFER PLUG POINTS ARE AVAILABLE.
(4) THE GANTRY OPERATOR MUST BE MADE AWARE OF THE POSITION OF THE REEFER MACHINERY & THE PLUG POINT AS THE CONTAINER CANNOT BE TURNED AROUND.
(5) ON LOADING, PLUG IN THE REEFER & CHECK THE WORKING OF THE MACHINERY.
(6) CHECK THE TEMPERATURE READING & COMPARE IT WITH THE SET TEMPERATURE AS MENTIONED IN THE MANIFEST, IF THE DIFFERENCE IS TOO LARGE, REFUSE THE CONTAINER FOR SHIPMENT OR LODGE A PROTEST.
(7) CHECK THE TEMPERATURE CHART FOR ANY DIFFERENCE BETWEEN THE ACTUAL TEMPERATURE & THAT BEING RECORDED.
(8) CHECK THE CHART FOR PROPER SETTING OF DATE & TIME & FOR PROPER FUNCTIONING.
(9) CHECK VENTILATOR SETTINGS, IF ALL IS OKAY, ACCEPT THE CONTAINER FOR SHIPMENT, IF NOT ASK THE PORT TO CORRECT THE DEFICIENCIES OR NOTE A PROTEST.
(10) ONCE ON BOARD ENSURE THAT THE CONTAINERS IS LASHED PROPERLY.
(11) PRIOR TO SAILING, PREPARE A DETAILED LIST OF REEFERS ON BOARD,THEIR LOCATION & TEMPERATURE SETTINGS.
(12) CHECK THE TEMPERATURE DAILY OR AS PER COMPANY'S INSTRUCTIONS.
(13) IN THE CASE OF REEFER FAILURE OR LARGE DIFFERENCE IN TEMPERATURES, ATTEND TO IT IMMEDIATELY & INFORM THE COMPANY & CHARTERERS.
(14) ON ARRIVAL, DISCONNECT THE REEFERS PRIOR DISCHARGE.

Q.144. PRECAUTIONS FOR DANGEROUS CARGOES IN CONTAINER VESSEL?
A.144. PRECAUTIONS FOR DANGEROUS CARGOES IN CONTAINERS:-
(1) BEFORE LOADING DANGEROUS CARGO, THE COMPANY OR AGENT MUST MAKE AVAILABLE TO THE SHIP A COPY OF THE SHIPPER'S DECLARATION WHICH CONTAINS THE
→ CORRECT TECHNICAL NAME OF THE CONTENTS OF THE CONTAINER.
→ U.N.NUMBER
→ CLASS ACCORDING TO THE IMDG CODE
→ WEIGHT
→ CONTAINER NUMBER
→ A STATEMENT THAT THE GOODS HAVE BEEN PROPERLY PACKED & THE CONTAINER IS LABELED.
(2) FROM THE TECHNICAL NAME, LOOK UP THE INDEX IN VOLUME I OF THE IMDG CODE & FIND OUT THE VOLUME & PAGE NUMBER WHERE THE INDIVIDUAL SCHEDULE OF THE CARGO IS LISTED. ALSO IDENTIFY THE EMS & MFAG NUMBERS.
(3) STUDY THE PROPERTIES & PRECAUTIONS LISTED IN THE CODE.
(4) FROM EMS & MFAG FIND OUT THE ACTION TO BE TAKEN IN CASE OF VARIOUS EMERGENCIES, MEDICAL AID & PROMULGATE THIS IFORMATION TO CONCERNED MEMBERS OF THE SHIP'S STAFF.
(5) IF ANY SPECIAL EQUIPMENT SUCH AS MEDICINES, SAFETY EQUIPMENT,GAS DETECTORS, ETC IS REQUIRED, THEY SHOULD BE ON BOARD BEFORE LOADING COMMENCES.
(6) PLAN THE STOWAGE AS RECOMMENDED BY THE CODE & IN ACCORDANCE WITH COMPANY DIRECTIVES OR PORT REGULATION.
(7) WHEN CONTAINERS CONTAINING DIFFERENT CLASSES OF DANGEROUS CARGOES ARE TO BE LOADED, THEY ARE TO BE SEGREGATED ACCORDING TO THE SEGREGATION TABLE PROVIDED FOR CONTAINER SHIP.
(8) PREPARE A FILE SHIPPERS & ALL OTHER DECLARATIONS & MAINTAIN IT UPTO DATE FOR EVERY VOYAGE, OLD DECLERATION BEING REMOVED ONCE THE CONTAINERS ARE DISCHARGED.
(9) PRIOR LOADING ENSURE ALL EMERGENCY EQUIPMENT IS IN READINESS & THE DUTY OFFICER IS BRIEFFED ON THE STOWAGE PLAN & SLOT ALLOCATED FOR DANGEROUS CARGO CONTAINERS.
(10) ENSURE THAT THE CONTAINER IS STOWED IN THE PLANNED SLOT & THAT IT IS PROPERLY MARKED & LABELED.
(11) VISUALLY CHECK THE CONTAINER FOR ANY DAMAGE, LEAKAGE, EMISSION OF SMOKE OR FUMES, SOUNDS INCLUDING MOVEMENT OF GOODS OR OTHER SIGNS OF IMPROPER STOWAGE.

(12) SECURE THE CONTAINER WELL.
(13) PREPARE A DETAILED LIST OF MANIFIEST OF ALL DANGEROUS CARGO CONTAINERS ON BOARD & MARK THEIR LOCATION ON THE STOWAGE PLAN.KEEP A COPY OF THIS PLAN ON BRIDGE OR FIRE CONTROL ROOM FOR EMERGENCY & THIS SHOULD BE ACCOMPANIED BY A COPY OF THE EMS & MFAG PROCEDURES.
(14) CARRY OUT DRILLS & INSTRUCT THE CREW MEMBERS REGARDING ACTION TO BE TAKEN IN AN EMERGENCY & USE OF EMERGENCY EQUIPMENT.
(15) CHECK LASHING FREQUENTLY ESPECIALLY IF BAD WEATHER IS EXPECTED.
(16) OBTAIN WEATHER REPORTS REGULARLY & NAVIGATE THE WEATHER WITH PRUDENCE.
(17) ON ARRIVAL, THESE CONTAINERS SHOULD BE PROMPTLY & PROPERLY DISCHARGED.

Q.145. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOAD ING VEHICLE ON RORO SHIP?
A.145. PRECAUTIONS WHILE LOADING VEHICLES ON RORO SHIP:-
(1) DECKS SHOULD NOT BE WET, GREASY OR SLIPPERY.
(2) ALL VEHICLES BRAKES SHOULD BE ON & THE ENGINE IN GEAR.
(3) FOR HEAVY VEHICLES, BESIDES THE NORMAL SECURING ARRANGEMENT, MOVEMENT MUST BE RESISTED BY JACKING OR PLACING ROUGH MATERIAL BETWEEN THE UNIT & THE DECK TO INCREASE THE FRICTION.
(4) MOORING MUST BE ALL TIME TAUT.
(5) THE RAMPS REST ON THE JETTY & CAN BE RAISED OR LOWERED TO TAKE CHANGES IN THE SHIP'S DRAFT OR TIDAL EFFECTS, SO SPECIAL ATTENTION MUST BE TAKEN FOR THAT.
(6) THE MAIN DECK MAY BE FITTED WITH CELL GUIDES TO STOW CONTAINERS.
(7) CARGO IS LOADED ON A TRAILER & PROPERLY SECURED TO FORM A UNIT.

Q.146. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/CARRYING/DISCHARGING REFRIGERATED CARGO?
A.146. PRECAUTIONS WHILE LOADING/CARRYING/DISCHARGING REFRIGERATED CARGO:-
(1) LOCAL PORT REGULATION SHOULD BE KNOWN TO SHIP'S OFFICERS WITH RESPECT TO OPENING & CLOSING OF COMPARTMENTS & ACCEPTED WORKING TEMPERATURES FOR STEVEDORES TO AVOID FRICTION WITH THEM & DELAY TO THE SHIP.
(2) CLEAN CARGO SHOULD NOT COME IN CONTACT WITH DIRTY CARGO.
(3) DAMAGED CARGO MUST BE REJECTED.
(4) WHEN LOADING A LOWER HOLD THROUGH A REFRIGERATED T'WEENDECK, CANVAS OR TARPAULIN MUST BE HUNG AROUND THE OPENING TO RESTRICT THE ESCAPE OF COLD AIR.
(5) TEMPERATURE MUST BE MAINTAINED DURING STOPPAGES FOR MEALS,ETC.
(6) DURING LOADING OR DISCHARGING WHEN THE COMPARTMENT IS OPEN FROST MAY FORM ONTO THE BRINE PIPES, THIS MUST BE BRUSHED AWAY ONTO TARPAULINS & REMOVED TO PREVENT ITS FALLING ON CARGO & CAUSING DAMAGE BY WETTING.
(7) AFTER LOADING ALL OUTSIDE ACCESSES SHOULD BE SEALED WITH PAPER TO ENSURE GOOD CIRCULATION.
(8) SHIPPER MUST PROVIDE THE VESSEL WITH LOADING & CARRYING TEMPERATURES & ANY OTHER REQUIREMENTS.
(9) TEMPERATURE CONTROL IS MOST ESSENTIAL & MUST BE STRICTLY MAINTAINED.
(10) DAILY RECORDS SHOWING THE TEMPERATURE IN EACH COMPARTMENT ARE TO BE KEPT FOR EACH WATCH.
(11) DURING TRANSIT KEEP RECORD & CONTROL OF CO_2 CONCENTRATION
(12) COMPARTMENT MUST BE VENTILATED WITH FRESH AIR PRIOR TO MAN ENTRY FOR DISCHARGE

Q.147. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING HEAVY LIFT?
A.147. PRECAUTIONS WHILE LOADING HAEVYLIFT ON DECK:-
(1) THE DECK LOAD SHOULD NOT BE CONCENTRATED BUT SHOULD BE DISTRIBUTED OVER A LARGE AREA BY USING DUNNAGE TO SPREAD THE LOAD.
(2) THE LOAD DENSITY OF THE DECK MUST NEVER BE EXCEEDED.
(3) THE METACENTRIC HEIGHT (GM) WHICH IS A MEASURE OF THE SHIP'S STABILITY SHOULD BE ADEQUATE AT ALL STAGES OF THE VOYAGES
(4) SHIFT OF THE CENTRE OF GRAVITY DUE TO FUEL OR WATER CONSUMPTION FROM DB TANKS, CREATION OF FREE SURFACE EFFECTS OR ACCUMULATION OF WATER, ICE OR SNOW ON DECK SHOULD NOT ADVERSELY AFFECT THE STABILITY.
(5) THE WEIGHT SHOULD BE PROPERLY DISTRIBUTED TO AVOID ANY LIST OR EXCESSIVE TRIM.
(6) ALL OPENINGS IN THE WEATHER DECK, E.G.HATCH COVERS, HATCH ACCCESSES, ETC.MUST BE SECURELY CLOSED & BATTENED DOWN BEFORE DECK CARGO IS STOWED ON TOP OF THEM.
(7) VENTILATORS, AIR PIPES & OTHER WORKING GEAR MUST BE IN GOOD ORDER & PROTECTED FROM DAMAGE.
(8) ACCESS IS TO BE MAINTAINED TO SAFETY EQUIPMENT, CONTROLS FOR REMOTE OPERATION OF VALVES, PUMPS, ETC.EMERGENCY STEERING GEAR, SOUNDING PIPES, MACHINERY SPACES, CREW QUARTERS & ALL FORE & AFT PARTS USED FOR THE WORKING OF THE VESSEL LIKE STOREROOMS, ETC.
(9) HEIGHT OF DECK CARGO SHOULD BE SUCH AS NOT TO IMPAIR VISIBILITY FROM THE BRIDGE.
(10) DECK CARGO SHOULD NOT BE EXTENDING BEYOND THE SHIPSIDE.
(11) PROPER LASHING IS TO BE DONE.
(12) LASHING MUST BE CARRIED OUT BY COMPETENT PERSONS IN ACCORDANCE WITH THE

administration :-
Competent authority :-

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CARGO SECURING MANUAL OR CODE OF SAFE PRACTICE FOR CARGOO STOWAGE & SECURING.
(13) THE SIZE OF LASHING MATERIAL SHOULD TAKE INTO ACCOUNT THE FORCES EXERTED ON THE CARGO AS A RESULT OF THE MOTION OF THE SHIP IN THE MOST SEVERE WEATHER CONDITIONS EXPECTED FOR THAT VOYAGE.
(14) THE METHOD OF LASHING IS TO BE APPROPRIATE FOR THAT TYPE, SIZE & WEIGHT OF CARGO.
(15) CHOCKING HAVE TO BE CARRIED OUT IN BETWEEN THE SPACES OF CARGO BY USING DUNNAGE.
(16) EYES & LASHING SHOULD BE WELDED AT STRENGTHENED POINTS.
(17) LASHING SHOULD BE REGULARLY INSPECTED & TIGHTENED.
(18) ALL PARTICULARS TO BE ENTERED IN THE MATE'S LOG BOOK.
(19) A CLEAR WALKING SPACE ON DECK AT LAEST 600mm WIDE SHOULD BEPROVIDED FOR ACCESS FOR PERSONNEL TO & FROM THEIR WORK PLACES.IF THIS IS NOT POSSIBLE, & THEN A WALKWAY IS TO BE BUILT OVER THE DECK CARGO.
(20) THE WALKWAY IS TO BE OF SOUND CONSTRUCTION & FIRMLY SECURED.
(21) THREE COURSES OF WIRE OR RAILS TO A HEIGHT OF 1 METRE ARE TO RUN ON EACH SIDE OF THE WALKWAY, SUPPORTED BY STAUNCHIONS ALONG THE LENGTH.
(22) PROJECTIONS, SLACK STEEL BANDS & OTHER SUCH FOOT TRAPS & HAZARDS SHOULD BE MARKED & HIGHLIGHTED.

Q.148. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/DISCHARGING SUGAR?
A.148. PRECAUTIONS WHILE LOADING/DISCHARGING SUGAR:-
(1) THE CARGO SHOULD BE INSPECTED BEFORE LOADING ESPECIALLY IF IT IS ARRIVING BY BARGES.
(2) THE CARGO SHOULD NOT BE WETTED BY SALT WATER.
(3) BAGS SHOULD NOT BE TORN & BLEEDING
(4) PORT MARKS TO BE CLEARLY LEGIBLE ON THE BAGS.
(5) SEPARATION OF THE CARGO SHOULD NOT BE CARRIED OUT BY PAINT MARKS OR WATER MARKS.
(6) THE CARGO MUST BE LOAD ALL OVER THE HOLD.
(7) NO LOADING SHOULD BE CARRIED OUT DURING WET OR THREATENING WEATHER AS SUGAR FERMENTS IN THE PRESENCE OF MOISTURE.
(8) THE FERMENTATION CAN BE DETECTED BY THE PRESENCE OF ALCOHOLIC VAPOURS.WHEN SUCH VAPOURS ARE DETECTED THOROUGH VENTILATION SHOULD BECARRIED OUT.
(9) NO NAKED LIGHT SHOULD BE PERMITTED IN THE VICINITY OF THE HOLD.
(10) ANY ENTRY INSIDE THE HOLD SHOULD BE WITH PROPER BREATHING APPARATUS
(11) IN CASE OF FIRE, FLOODING OF THE COMPARTMENT IS RECOMMENDED BUT THIS SHOULD NOT BE CARRIED OUT IN OPEN SEAS.
(12) VENTILATION SHOULD NOT BE RESTRICTED DURING THE VOYAGE EXCEPT WET & DAMP WEATHER.
(13) BEFORE DISCHARGING, THE HOLD SHOULD BE THOROUGHLY VENTILATED BEFORE ENTRY IS ALLOWED INTO THE COMPARTMENT
(14) AFTER COMPLETION OF DISCHARGE, THE HOLD SHOULD BE THOROUGHLY WASHED WITH SALT WATER & RINSED WITH FRESH WATER.

Q.149. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/DISCHARGING/CARRYING SALT?
A.149. PRECAUTIONS WHILE LOADING/DISCHARGING/CARRYING SALT:-
(1) SALT MUST BE NEATLY TRIMMED FROM SIDE TO SIDE.
(2) GOOD VENTILATION MUST BE MAINTAINED THROUGH OUT THE VOYAGE TO PREVENT SWEAT FORMATION.
(3) THE AIR INSIDE THE HOLD MUST BE KEPT DRY.
(4) DRY GOODS LIABLE TO CAKE FROM MOISTURE SHOULD NOT BE STOWED WITH SALT.
(5) SALT SHOULD NEITHER BE STOWED NEAR WET OR MOIST GOODS OR IN INSULATED COMPARTMENTS OR REFRIGERATED CONTAINERS.
(6) ON COMPLETION OF DISCHARGE, THE HOLD SHOULD BE THOROUGHLY HOSED DOWN, REMOVING ALL TRACES OF SALT PARTICLES & FINALLY RINSED WITH FRESH WATER TO ENSURE PROPER CLEANING.

Q.150. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING/DISCHARGING/CARRYING RUBBER?
A.150. PRECAUTIONS WHILE LOADING/DISCHARGING/CARRYING RUBBER:-
(1) RUBBER IS READILY DAMAGED BY HEAT, HENCE EFFECTIVE VENTILATION SHOULD BE CARRIED OUT TO PREVENT ACCUMULATION OF HEAT.
(2) RUBBER SHOULD BE EFFECTIVELY SEPARATED FROM OILY CARGOES.
(3) THOROUGH WATCH SHOULD BE KEPT & STAINED PACKAGES SHOULD BE REJECTED.
(4) WHEN USING DUNNAGE ONLY THOROUGHLY DRIED DUNNAGE IS TO BE USED.
(5) RUBBER SHOULD NOT BE STOWED ON ROUGH, UNEVEN SURFACE TO PREVENT CRUSHING DAMAGE.
(6) TALC SHOULD BE ONLY SPARINGLY USED TO PREVENT STICKING OF OPPOSITION BY LABOUR IN SOME COUNTRIES.
(7) CARGO SHOULD BE SEPARATED FROM LADDERS, PILLARS, STIFFENERS, BRACKETS ETC. BY DUNNAGE & MATTING TO PREVENT CONTACT WITH SWEAT.
(8) WHILE DISCHARGING BY SLINGS, CARE SHOULD BE TAKEN THAT THE BALE IN THE SLING IS NOT STUCK TO THE ONE IN THE HOLD, AS IT IS LIABLE TO FALL WHEN THE LOAD IS LIFTED.

Q.151. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING PULP?
A.151. PRECAUTIONS WHILE LOADING/DISCHARGING/CARRYING PULP:-
(1) WOOD PULP IS VERY LIABLE TO DAMAGE & CONTAMINATION BY DIRT OR THE REMNANTS OF PREVIOUS COMMMODITIES IN A SHIP HOLD.DURING HANDLING IT MUST BE KEPT CLEAR OF ANY CONTACT WITH ROPES, ETC.
(2) PULP SHOULD BE LOADED & DISCHARGED WITH WIRE OR CHAIN SLING
(3) REMNANTS OF THE PREVIOUS CARGO SHOULD BE CAREFULLY REMOVED & THE SPACE CLEANED BEFORE THE COMMENCEMENT OF LOADING PULP.
(4) BALES OF PULP MAY BE UNITISED WITH WIRE BANDS SECURING THE BALES & IF IT IS ACCEPTABLE TO LIFT BY THESE BANDS, IT IS ADVISABLE, THAT CERTIFICATES OF STRENGTH BE PROVIDED FOR THE BENDING.

Q.152. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING COILS OF SHEET METALS OR STEEL WIRE?
A.152. PRECAUTIONS WHILE LOADING COILS OF SHEET METALS OR STEEL WIRE:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.
(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) THEY SHOULD BE STOWED IN REGULAR TIERS FROM SIDE TO SIDE MAKING MAXIMUM USE OF PILLARS, BULKHEADS ETC.
(5) EACH COIL IS STOWED HARD AGAINST ITS NEIGHBOUR & WEDGES OF DUNNAGE DRIVEN UNDER THE ROUNDS, TO PREVENT THE COIL FROM ROLLING.
(6) LOCKING COILS SHOULD BE LASHED TO THE TWO COILS SUPPORTING IT.
(7) STOW SHOULD BE SECURED BY USING WIRE LASHINGS TO SECURE THE COILS TOGETHER & TO LASH EACH ROW TO THE BULKHEAD.
(8) DUNNAGE IS TO BE FILLING IN THE GAPS.
(9) WIRE COILS MAY BE STOWED FLAT & TIGHT AGAINST ONE ANOTHER.

Q.153. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING STEEL BILLETS?
A.153. PRECAUTIONS WHILE LOADING STEEL BILLETS:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.
(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) STEEL BILLETS SHOULD BE STOWED FROM BULKHAED TO BULKHEAD TIGHTLY.
(5) ANY EMPTY SPACE SHOULD BE FITTED WITH DUNNAGE TO PREVENT THE CARGO FROM SHIFTING.
(6) DUNNAGE SHOULD ALSO BE USED TO MAKE A LEVEL PLATFORM FOR LOADING THE BILLETS ESPECIALLY WHEN THEY ARE IRREGULARLY SHAPED.
(7) THE CARGO SHOULD BE OVERSTOWED & ADDITIONAL PRECAUTION SUCH AS TOMMING & LASHING MAY BE TAKEN.

Q.154. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING PIG IRON?
A.154. PRECAUTIONS WHILE LOADING PIG IRON:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.
(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) THE CARGO SHOULD BE SPREAD OVER THE ENTIRE TANK TOP & TRIMMED LEVEL AS FAR AS POSSIBLE.
(5) IT SHOULD BE OVER STOWED WITH OTHER SUITABLE CARGO TO PREVENT IT SHIFTING.IF THIS IS NOT POSSIBLE THEN SHIFTING BOARDS OR BINS, OF ROBUST CONSTRUCTION RISING TO A HEIGHT ABOVE THE LEVEL OF PIG IRON, WILL HAVE TO BE FITTED.

Q.155. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING ROUND BARS & PIPES?
A.155. PRECAUTIONS WHILE LOADING ROUND BARS & PIPES:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.
(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) THESE SHOULD BE STOWED FORE & AFT, LEVEL, FROM BULKHEAD TO BULKHEAD & CAREFULLY TOMMED & LASHED TO PREVENT SHIFTING.
(5) OVERSTOWING MAY ALSO BE NECESSARY.
(6) SPACES BETWEEN LARGE DIAMETER PIPES SHOULD BE LOCKED.

Q.156. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING STEEL PLATES?
A.156. PRECAUTIONS WHILE LOADING STEEL PLATES:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.

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(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) THESE CARGOES MUST BE STOWED ON FIRM BASES.
(5) THEY ARE PRONE TO SLIP OVER DECKS, OTHER CARGOES OR THEIR OWN SURFACE, SO FRICTION MUST BE INCREASED BY INSERTING DRY DUNNAGE BETWEEN THE PLATES.
(6) WHEN THEY MOVE, RESTOWAGE AT SEA IS IMPOSSIBLE SO THEY SHOULD BE SECURED BY CHAIN OR WIRE LASHINGS AS WELL AS BY TOMMING.

Q.157. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING STEEL SCRAP & SWARF?
A.157. PRECAUTIONS WHILE LOADING STEEL SCRAP & SWARF:-
(1) REFER TO MS NOTICE NO. M831 & THE STOWAGE & SECURING CODE.
(2) CARGOES ARE HEAVY THEY MUST NOT BE CARRIED IN THE TWEEN DECK AS THE GM REDUCES & THERE IS A GREATER RISK OF CARGO SHIFT.
(3) THE HEIGHT TO WHICH THESE CARGOES CAN BE STOWED IS RESTRICTED BY THE LOAD DENSITY OF THE DECK & TANK TOP.
(4) THIS IS LOADED IN BULK NAD MUST BE LEVELLED.
(5) THE TANK TOP MUST BE PROTECTED BY LOWERING A FEW SLINGS GENTLY AT FIRST TILL A CUSHION IS FORMED TO ABSORB THE IMPACT OF CARGO FALLING FROM THE CONVEYOR BELT.
(6) METAL SCRAP MAY ALSO INCLUDED LARGE PIECES IN VARIOUS SIZES,SHAPES & MASS, LOADED BY SLINGS, SUCH CARGO IS TO BE SECURELY LASHED TO PREVENT SHIFTING.
(7) HOLD MUST BE VENTILATED BEFORE MAN ENTRY IN THE HOLD.
(8) THE CARGO MAY CONSIST OF TURNING WHICH ARE OIL STAINED AS WELL AS RAGS & OTHER IMPURITIES WHICH MAKE IT SPONTANEOUSLY COMBUSTIBLE, SO PROPER FIRE PRECAUTION MUST BE FOLLOWED.

Q.158. WHAT PRECAUTIONS YOU WILL TAKE WHILE LOADING TIMER CARGO?
A.158. PRECAUTIONS DURING LOADING TIMBER CARGO:-
(1) CONSTANT SUPERVISION IS NECESSARY TO ACHIEVE A SOLID STOW AT ALL STAGES OF LOADING.
(2) THE SHIP MUST BE KEPT UPRIGHT AT ALL TIMES TO PREVENT UNNECESSARY STRESS ON THE UPRIGHTS & A SHIFT OF CARGO OR UNSYMMETRICAL LOADING.
(3) APPENDIX 'A' OF THE CODE PROVIDES GUIDELINES ON STOWAGE FOR SPECIFIC TYPES OF TIMER CARGO.
(4) THE CARGO MUST BE KEPT FREE OF ACCUMULATION OF ICE & SNOW.
(5) SAFE & SATISFACTORY MEANS OF ACCESS TO CREW QUARTERS, PILOT BOARDING AREA, MACHINERY SPACES & ALL OTHER AREAS USED FOR THE NECESSARY WORKING OF THE SHIP MUST BE PROVIDED AT ALL TIMES.
(6) ACCESS IS TO BE MAINTAINED TO SAFETY EQUIPMENT, CONTROLS FOR REMOTE OPERATION OF VALVES, PUMPS, ETC.EMERGENCY STEERING GEAR, SOUNDING PIPES, MACHINERY SPACES, CREW QUARTERS & ALL FORE & AFT PARTS USED FOR THE WORKING OF THE VESSEL LIKE STOREROOMS, ETC.
(7) HEIGHT OF DECK CARGO SHOULD BE SUCH AS NOT TO IMPAIR VISIBILITY FROM THE BRIDGE.
(8) DECK CARGO SHOULD NOT BE EXTENDING BEYOND THE SHIPSIDE.
(9) PROPER LASHING IS TO BE DONE.
(10) LASHING MUST BE CARRIED OUT BY COMPETENT PERSONS IN ACCORDANCE WITH THE CARGO SECURING MANUAL OR CODE OF SAFE PRACTICE FOR CARGOO STOWAGE & SECURING.
(11) THE SIZE OF LASHING MATERIAL SHOULD TAKE INTO ACCOUNT THE FORCES EXERTED ON THE CARGO AS A RESULT OF THE MOTION OF THE SHIP IN THE MOST SEVERE WEATHER CONDITIONS EXPECTED FOR THAT VOYAGE.
(12) THE METHOD OF LASHING IS TO BE APPROPRIATE FOR THAT TYPE, SIZE & WEIGHT OF CARGO.
(13) CHOCKING HAVE TO BE CARRIED OUT IN BETWEEN THE SPACES OF CARGO BY USING DUNNAGE.
(14) EYES & LASHING SHOULD BE WELDED AT STRENGTHENED POINTS.
(15) LASHING SHOULD BE REGULARLY INSPECTED & TIGHTENED.
(16) ALL PARTICULARS TO BE ENTERED IN THE MATE'S LOG BOOK.
(17) A CLEAR WALKING SPACE ON DECK AT LAEST 600mm WIDE SHOULD BE PROVIDED FOR ACCESS FOR PERSONNEL TO & FROM THEIR WORK PLACES.IF THIS IS NOT POSSIBLE, & THEN A WALKWAY IS TO BE BUILT OVER THE DECK CARGO.
(18) THE WALKWAY IS TO BE OF SOUND CONSTRUCTION & FIRMLY SECURED.
(19) THREE COURSES OF WIRE OR RAILS TO A HEIGHT OF 1 METRE ARE TO RUN ON EACH SIDE OF THE WALKWAY, SUPPORTED BY STAUNCHIONS ALONG THE LENGTH.
(20) PROJECTIONS, SLACK STEEL BANDS & OTHER SUCH FOOT TRAPS & HAZARDS SHOULD BE MARKED & HIGHLIGHTED.

Q.159. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING SULPHUR?
A.159. HOLD PREPARATION FOR LOADING SULPHUR
(1) HOLDS SHOULD BE CLEANED THROUGHLY & ALL INFLAMMABLE MATERIALS LIKE RAGS, PIECES OF WOOD, ETC TO BE REMOVED. NO LOOSE METAL OBJECT TO BE LEFT IN THE HOLD.
(2) BILBES TO BE TESTED & COVERED WITH LIMBER BOARDS. ANY CHINKS SHOULD BE CAULKED, TO PREVENT DUST FROM FONDING ITS WAY INTO THE BILGES.
(3) HOLDS TO BE LIME WASHED PRIOR LOADING.
(4) CO2 SYSTEM TO BE TRIED OUT.
(5) ON DISCHARGE, HOLDS TO BE CLEANED WITH PARTICULAR ATTENTION BEING PAID TO UNDERSIDE OF HATCH COVERS, BOX BEAMS & LEDGES WHERE DUST CAN LODGE.

— Cadd 1-6 points from precaution)

Q.160. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING COAL?
A.160. HOLD PREPARTION FOR LODING COAL
(1) HOLDS TO BE SWEPT & WASHED DEPENDING ON THE CARGO TO BE LOADED. A FINAL RINSE WITH FRESH WATER RETARDS CORROSION & ACCLERATES DRYING. SPECIAL ATTENTION TO BE PAID TO INACCESSIBLE PLACES E.G. BEHIND FRAMES, TOP OF BEAMS, UNDERSIDE OF THE HATCH COVERS ETC.
(2) BILGES TO BE THROUGHLY CLEANED & WASHED. BILGES SUCTION TO BE TRIED OUT SATISFACTORILY.
(3) ROSE BOXES (STRUM BOX) TO BE CLEANED & PLACED SECURELY IN POSITION.
(4) BILGES MAY BE LIME OR CEMENT WASHED OR COATED WITH BITUMASTIC PAINT.
(5) BILGES SHOULD BE FREE FROM ANY TRACES OF PREVIOUS CARGO & CONTAIN NO WATER OR FOUL ODOURS. T'WEEN DECK SCUPPERS SHOULD BE CLEAR.
(6) VENTILATION SYSTEM TO BE TRIED OUT FOR PROPER & EFFICIENT FUNCTIONING. FLAPS TO ROTATE FREELY. VENTILATION SYSTEM MAY BE USED TO DRY THE HOLD AFTER WASHING.
(7) CO2 SYSTM & SMOKE DETECTING SYSTEM TO BE CHECKED. CO2 SYSTEM IS TO BE BLOWN THROUGH WITH COMPRESSED AIR AT REGULAR INTERVALS & CHECKED THAT ALL NOZZLES ARE CLEAR.
(8) SPAR CEILING TO BE EXAMINED & REPAIRED IF REQUIRED.
(9) HATCH BOARDS & TARPAULINS TO BE CHECKED TO BE IN GOOD CONDTION. IF MECHANICAL HATCH ARE FITTED CHECK THAT THEY ARE WEATHER TIGHT, THE TRACK WAYS ARE CLEAR & THE UNDER SIDE OF THE PONTOONS ARE FREE FROM ANY RESIDUES OF THE PREVIUOS CARGO.
(10) GUARD RAILS, CHAINS & STAUNCHIONS ARE TO BE PLACED AROUND T'WEEN DECKS AS PER DOCK REGULATIONS.
(11) BILGES TO BE COVERED WITH BURLAP & SEALED WITH CEMENT.
(12) LIGHTING IN THE HOLD TO BE PROPERLY FUNCTIONING.
(13) MEANS OF ACCESS TO BE CLEAR & SAFE FROM HAZARDS.
(14) CARGO GEAR TO BE THROUGHLY CHECKED TO BE IN GOOD CONDITION & IS TO BE RIGGED READY FOR LOADING. WINCHES TO BE TESTED & CONFIRMED WORKING.
(15) ALL CARGO BATTERNS SHOULD BE REMOVED TO PREVENT AIR POCKETS FORMING & HELPING THOUGH CIRCULATION OF AIR.
(16) BOUNDRIES OF CARGO COMPARTMENTS SHOULD BE RESISTANT TO FIRE & LIQUID. COAL SHOULD NOT BE STOWED AGAINST HOT BULKHEADS. SEGREGATION AS PER IMDG RULES ARE TO BE CARRIED OUT.

Q.161. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING RICE?
A.161. HOLD PREPARATION FOR LOADING RICE:
(1) HOLD SHOULD BE CLEANED & MADE FREE FROM FOUL ODOURS BY THROUGH WASHING & THEN COMPLETE DRYING.
(2) BILGES TO BE CLEANED & SWEETENED.
(3) NO DAMPNESS TO BE PRESENT IN THE HOLDS OR BILGES.
(4) IF SUFFICIENT TIME IS NOT AVAILABLE FOR WASHING & DRYING, THEN THE HOLDS MAY BE SPRINKLED WITH SAWDUST & BROOMED DOWN THROUGHLY WITH HARD BROOMS.
(5) DOUBLE DUNNAGE IS LAID ON THE TANK TOP CONSISTING OF 8CM2 WOODEN BATTENS LAID ATHWARTSHIPS & 2½ CM X 15CM WOODEN PLANKS LAID ON TOP OF THEM.
(6) THE LOWER BATTERNSARE SPACED 25 CM APART & THE TOP ONES 10CM APART
(7) SPAR CEILING IS TO BE CLOSELY SPACED & CARRIED WELL UPTO THE TOP OF THE HOLD, IF NOT, BAMBOO IS TO BE SECURED TO THE SAME,CLOSELY SPACED , TO PREVENT ANY BAGS COMING INTO CONTACT WITH PLATING, FRAMES ETC. AS WELL AS TO ENSURE THE FREE CIRCULATION OF AIR BETWEEN THE SHIP SIDE & THE CARGO.
(8) MATTING TO PLACE OVER ANY STEELPARTS NOT COVERED BY SPAR CEILING. E.G. PILLARS, BEAMS, ETC.
(9) THE CARGO MUST BE INSPECTED BEFOR IT IS LOADED.
(10) BAGS ARE CHECKED THAT THEY ARE DRY & NOT TORN OR BLEEDING.
(11) BAGS ARE FILLED WITH A MIXTURE OF CLEAN RICE & PADDY.
(12) TEMPORARY VERTICAL BOX VENTILATORS ARE FITTED IN POSITION AS ONE AT EACH CORNER OF THE HATCHWAY & ONE IN THE MIDDLE OF THE HATCH COAMING ON EACH SIDE MAKING SIX IN ALL FOR THE HATCHWAY.TWO FITTED AT EACH END OF THE HOLD, ONE TO PORT & ONE TO STARBOARD. THESE LEADS TO PERMANENT VENTILATOR SHAFTS.

Q.162. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING CEMENT? BAGS ?
A.162. HOLD PREPARATION FOR LOADING CEMENT BAGS :-

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(1) HOLDS SHOULD BE WELL SWEPT.
(2) THE LIMBER BOARDS MADE DUST TIGHT.
(3) CLEANING OF FRAMES, BEAMS ETC SHOULD BE THROUGH.
(4) THE HOLD CAREFULLY INSPECTED PRIOR TO LOADING AS SUGAR, TO THE EXTENT OF ONLY .001 PERCENT MIXING WITH CEMENT HAS THE EFFECT OF RENDERING THE CEMENT WORTHLESS AS A BINDING MIXTURE
(5) THE HOLD SHOULD BE WELL DUNNAGED TO PREVENT THE BAGS COMING INTO CONTACT WITH THE STEELWORK. USE COULD BE MADE OF DUNNAGE, PAPER & BAMBOO MATS TO COVER BULKHEADS AND PILLARS.

Q.163. HOW DO YOU PREPARE COMPARTMENT FOR REFRIGERATED CARGO?
A.163. PREPARATION OF THE COMPARTMENT FOR REFRIGERATED CARGO:-
(1) THE COMPARTMENT MUST BE CLEAN, DRY & FREE FROM ANY ODOUR OR TAINT.
(2) BILGES ARE TO BE CLEANED, DEODORISED & SUCTIONS CHECKED.
(3) THE INSULATION & PERMANENT DUNNAGE IS TO BE CHECKED & REPAIRED AS NECESSARY.
(4) SCUPPERS ARE TO BE CLEANED & BRINE TRAPS CHECKED, TESTED & REFILLED.
(5) BRINE TRAPS PREVENTS WARM AIR FROM ENTERING THE COMPARTMENT & COLD AIR FROM ESCAPING, AT THE SAME TIME ALLOWING DRAINAGE OF WATER.
(6) THERMOMETERS SHOULD BE IN POSITION.
(7) VENTILATOR PLUGS TO THE COMPARTMENT FITTED IN PLACE & TIGHTLY WEDGED.
(8) BRINE PIPES ARE TO BE TESTED TO ENSURE THAT THEY ARE NOT CHOKED & THAT NO LEAKS OCCUR AT THE JOINTS.
(9) THE COMPARTMENT SHOULD BE COOLED DOWN PRIOR TO LOADING, TO A TEMPERATURE SLIGHTLY LOWER THAN THE TRANSIT TEMPERATURE, TO ALLOW FOR FLUCTUATIONS DURING LOADING.
(10) DUNNAGE LAID IN THE COMPARTMENT IS ALSO TO BE COOLED BEFORE CARGO IS LOADED, OTHERWISE IT WILL STAIN THE CARGO IN CONTACT WITH IT.

Q.164. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING SALT?
A.164. PREPARATION OF HOLD PRIOR LOADING OF SALT:-
(1) ALL STEEL WORK IN THE HOLD IS GIVEN A COAT OF LIME (WHITE WASH)
(2) THE BILGES ARE CLEANED & SWEETENED.
(3) SIDE BATTENS MAY BE REMOVED OR COVERED WITH MATS, MADE OF PALM LEAVES.
(4) PILLARS IN THE HOLD MUST BE SIMILARLY COVERED
(5) SEPARATION CLOTH MAY BE USED TO KEEP THE SALT AWAY FROM THE STEELWORK.

Q.165. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING SUGAR?
A.165. HOLD PREPARATION FOR LOADING SUGAR:
(1) HOLD SHOULD BE MADE FREE OF ACID & OIL STAINS.
(2) HOLD SHOULD BE THOROUGHLY WASHED, CLEANED & DRIED.
(3) BILGES ARE TO BE WASHED, CLEANED, TESTED & CEMENT WASHED.
(4) DB TANK MANHOLES, SOUNDING PIPES & ALL AIR PIPE CONNECTIONS TO THE TOP PLATING SHOULD BE CHECKED FOR WATER TIGHTNESS.
(5) LIMBER BOARDS SHOULD BE MADE SUGAR TIGHT BY CAULKING.

Q.166. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING PAPER ROLL?
A.166. HOLD PREPARATION FOR LOADING PAPER ROLL:-
(1) HOLD MUST BE PROPERLY PREPARED BEFORE LOADING.
(2) HOLD MUST BE CLAEN & ANY SHARP PROTRUSIONS SHOULD BE CUSHIONED IN THE BEST POSSIBLE MANNER, TO AVOID DAMAGE TO THE PAPER.
(3) VENTILATOR OR FAN OPENINGS MUST HOWEVER BE LEFT FREE TO OPERATE AS AIR CIRCULATION IS VERY NECESSARY TO AVOID SWEAT DAMAGE TO THE PAPER.
(4) FEW SLINGS IN THE HATCH SQUARE MAY BE PRESLUNG, TO PROVIDE SPACE FOR LANDING & WORKING THE FORK LIFT AT THE DISCHARGE PORT.
(5) ROLLS OF PAPER SHOULD BE STOWED SOLID & WELL CHOCKED TO AVOID MOVEMENT WHEN THE VESSEL IS AT SEA.
(6) ALL STAUNCHIONS, LADDERS, ETC, SHOULD BE WELL COVERED WITH BURLAP OR OTHER PROTECTING MATERIAL TO AVOID CHAFING.
(7) DUNNAGE SHOULD BE USED THROUGHOUT TO FILL IN GAPS & PREVENT MOVEMENT OF THE ROLLS.
(8) IN CASE OF FIRE IN A HOLD CONTAINING PAPER, NEVER USE WATER, CLOSE ALL OPENINGS & FLOOD THE HOLD WITH CO2.

Q.167. HOW WILL YOU PREPARE YOUR HOLD FOR LOADING PULP?
A.167. HOLD PREPARATION FOR LOADING PULP:-
(1) HOLD MUST BE PROPERLY PREPARED BEFORE LOADING.
(2) HOLD MUST BE CLAEN & ANY SHARP PROTRUSIONS SHOULD BE CUSHIONED IN THE BEST POSSIBLE MANNER, TO AVOID DAMAGE TO THE PULP.
(3) VENTILATOR OR FAN OPENINGS MUST HOWEVER BE LEFT FREE TO OPERATE AS AIR CIRCULATION IS VERY NECESSARY TO AVOID SWEAT DAMAGE TO THE PULP.
(4) REMMANTS OF THE PREVIOUS CARGO & THE SPACE CLEANED BEFORE THE COMPARTMENT OF LOADING PULP
(5) BALES OF PULP MAY BE UNITISED WITH WIRE BANDS SECURING THE BALES

(6) FEW SLINGS IN THE HATCH SQUARE MAY BE PRESLUNG, TO PROVIDE SPACE FOR LANDING & WORKING THE FORK LIFT AT THE DISCHARGE PORT.
(7) ROLLS OF PAPER SHOULD BE STOWED SOLID & WELL CHOCKED TO AVOID MOVEMENT WHEN THE VESSEL IS AT SEA.
(8) ALL STAUNCHIONS, LADDERS, ETC, SHOULD BE WELL COVERED WITH BURLAP OR OTHER PROTECTING MATERIAL TO AVOID CHAFING.
(9) DUNNAGE SHOULD BE USED THROUGHOUT TO FILL IN GAPS & PREVENT MOVEMENT OF THE ROLLS.
(10) IN CASE OF FIRE IN A HOLD CONTAINING PAPER, NEVER USE WATER, CLOSE ALL OPENINGS & FLOOD THE HOLD WITH CO2.
(11) DURING HANDLING IT MUST BE KEPT CLEAR OF ANY CONTACT WITH ROPES, ETC.
(12) BALES OF PULP MAY BE UNITISED WITH WIRE BANDS SECURING THE BALES

Q.168. WHAT HAZARDS ARE ASSOCIATED WITH SULPHUR?
A.168. HAZARDS ASSOCIATED WITH SULPHUR ARE
(1) FIRE
(2) DUST EXPLOSION
(3) CORROSION

Q.169. WHAT HAZARDS ARE ASSOCIATED WITH COTTON?
A.169. HAZARDS ASSOCIATED WITH COTTON ARE
(1) FIRE

Q.170. WHAT HAZARDS ARE ASSOCIATED WITH COAL?
A.170. HAZARDS ASSOCIATED WITH COAL ARE
(1) SPONTANEOUS HEATING
(2) EMISSION OF METHANE
(3) CORROSION
(4) LIQUEFACTION

Q.171. WHAT HAZARDS ARE ASSOCIATED WITH GRAIN CARGO?
A.171. HAZARDS ASSOCIATED WITH GRAIN ARE
(1) GRAIN SHIFT

Q.172. WHAT HAZARDS ARE ASSOCIATED WITH BULK CARGO?
A.172. HAZARDS ASSOCIATED WITH BULK CARGO ARE
(1) STRUCTURAL
(2) STABILITY
(3) CHEMICAL

Q.173. WHAT IS ADVANTAGE & DISADVANTAGE OF PALLETISATION?
A.173. ADVANTAGES:-
(1) IT ELIMINATES THE COST OF HEAVY PACKAGING
(2) IT REDUCES HANDLING & THEREBY THE LABOUR REQUIRED.
(3) INCREASES THE SPEED OF LOADING & DISCHARGING.
(4) REDUCES THE AMOUNT OF DUNNAGE REQUIRED.
(5) PERMITS CARGO TO BE STORED COMPACTLY & TIDILY THEREBY REDUCING BROKEN STOWAGE
(6) FACILITIES TALLYING OF CARGO.

DISADVANTAGES:-
(1) LOSS OF SPACE IF THE CARGO HOLDS IS OTHER THAN SQUARE SHAPE.
(2) LOSS OF SPACE BELOW THE DECKHEAD.
(3) LOSS OF SPACE DUE TO THE SPACE OCCUPIED BY THE PALLET.
(4) EXTRA COST FOR THE PALLET.

Q.174. WHAT IS ADVANTAGE & DISADVANTAGE OF CONTAINERISATION?
A.174. ADVANTAGES:-
(1) SAVING IN PACKING COSTS
(2) LESS DAMAGE TO CARGO DURING HANDLING
(3) PREVENTION OF THEFT & PILFERAGE
(4) LESS HANDLING TIME AT EVERY PORT RESULTING IN COST SAVING
(5) LOWER INSURANCE PREMIUM FOR SHIPPERS DUE TO LESS CHANCES OF DAMAGE & PILFERAGE.
(6) PRESERVES THE QUALITY & PURITY OF CARGO FROM TAINT
(7) REDUCES THE PORT TIME FOR SHIP & IMPROVES THE WORKING RATIO
(8) EASY TALLYING & DOCUMENTATION
(9) AMENABLE TO COMPUTERISATION
(10) FOR A SHIPPER LESS INVENTORY COSTS
(11) IT OFFERS DOOR TO DOOR DELIVERY ON AN INTERNATIONAL SCALE VIA INTERMODAL TRANSPORTATION SYSTEMS OR COMBINED TRANSPORT SYSTEM.

DISADVANTAGES:-
(1) HIGHLY CAPITAL INTENSIVE AS CONTAINER SHIPS COST TWICE AS OTHER SHIPS & SHIPPERS HAVE TO PAY FOR LEASING OF THE CONTAINERS.

(2) HIGH DEGREE OF TRAINING IS NECESSARY FOR SMOOTH OPERATION
(3) REPOSITIONING OF CONTAINERS AFTER DISCHARGE IS REUIRED
(4) INFRASTRUCTURE ON LAND LIKE ROADS, BRIDGE & AVAILABILITY OF TRANSPORT HAS TO BE DEVELOPED FOR SUCCESSFUL TRANSPORTATION OF CONTAINERS ON LAND

Q.175. WHAT IS REGULATION FOR MARKING, LABELLING & PLACARDING OF DANGEROUS GOODS?
A.175. MARKING, LABELLING & PLACARDING:
(1) CORRECT TEECHNICAL NAME IS TO BE DURABLY MARKED, NOT TRADE OR LOCAL NAME ALONE.
(2) PACKAGES ARE TO BE PROVIDED WITH DISTINCTIVE LABELS
(3) STENCILS OF THE LABELS OR PLACARDS TO MAKE CLEAR THE DANGEROUS PROPERTIES OF THE GOODS
(4) THE INFORMATION PROVIDED BY LABELS OR PLACARDS ARE TO BE IDENTIFIABLE ON PACKAGES SURVIVING AT LEAST THREE MONTHS IMMERSION IN THE SEA.
(5) PACKAGES CONTAINING DANGEROUS GOODS OF A LOW HAZARD, OR PACKED IN LIMITED QUANTITIES OR IF STOWED & HANDLED IN UNITS THAT ARE IDENTIFIED BY LABELS OR PLACARDS ARE EXEMPTED FROM THE REQUIREMENTS OF THIS REGULATION.

Q.176. WHAT ARE THE STOWAGE REQUIREMENTS FOR DANGEROUS GOODS?
A.176. THE STOWAGE REQUIREMENTS FOR DANGEROUS GOODS ARE
(1) DANGEROUS GOODS ARE TO BE STOWED SAFELY & APPROPRIATELY ACCORDING TO THE NATURE OF THE GOODS
(2) INCOMPATIBLE GOODS SHALL BE SEGREGATED FROM ONE ANOTHER
(3) EXPLOSIVE ARE TO BE STOWED IN A MAGAZINE, SECURELY CLOSED WHILE AT SEA & SEGREGATED FROM DETONATORS.
(4) ELECTRICAL APPARATUS & CABLING IN SUCH COMPARTMENTS SHALL BE SO DESIGNED & USED AS TO MINIMIZE THE RISK OF THE FIRE OR EXPLOSION
(5) DANGEROUS GOODS IN PACKAGED FROM WHICH GIVE OFF VAPOURS SHALL BE STOWED IN A MECHANICALLY VENTILATED SPACE OR ON DECK
(6) DANGEROUS GOODS IN SOLID FORM IN BULK WHICH GIVE OFF DANGEROUS VAPOURS SHALL BE STOWED IN A WELL VENTILATED SPACE
(7) IN SHIPS CARRYING FLAMMABLE GASES OR LIQUIDS SPECIAL PRECAUTIONS SHALL BE TAKEN AGAINST FIRE OR EXPLOSION
(8) SUBSTANCES WHICH ARE LIABLE TO SPONTANEOUS HEATING OR COMBUSTION SHALL NOT BE CARRIED UNLESS ADEQUATE PRECAUTIONS AGAINST FIRE ARE TAKEN

Q.177. HOW ARE THE DANGEROUS GOODS ARE CLASSIFIED AS PER IMDG CODE?
A.177. DANGEROUS GOODS ARE DIVIDED INTO THE NINE CLASS & THEIR SUB CLASS AS FOLLOW

CLASS 1	EXPLOSIVE
CLASS 1.1	SUBSTANCES & ARTICLES WHICH HAVE A MASS EXPLOSION HAZARDS
CLASS 1.2	SUBSTANCES & ARTICLES WHICH HAVE A PROJECTION HAZARDS BUT NOT A MASS EXPLOSION HAZARD
CLASS 1.3	SUBSTANCE & ARTICLES WHICH HAVE A FIRE HAZARDS & EITHER A MINOR BLAST HAZARD OR A MINOR PROJCTION HAZARD OR BOTH BUT NOT MASS EXPLOSION HAZARD
CLASS 1.4	SUBSTANCE & ARTICLES WHICH PRESENT NO SIGNIFICANT HAZARD
CLASS 1.5	VERY INSENTIVE SUBSTANCES WHICH HAVE A MASS EXPLOSION HAZARD
CLASS 1.6	EXTREMELY INSENSITIVE ARTICLES WHICH DO NOT HAVE A MASS EXPLOSION HAZARD
CLASS 2	GASES, COMPRESSED, LIQUEFIED OR DISSOLVED UNDER PRESSURE.
CLASS 3	FLAMMABLE LIQUIDS
CLASS 4.1	FLAMMABLE SOLIDS
CLASS 4.2	SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION
CLASS 4.3	SUBSTANCES WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES
CLASS 5.1	OXIDISING SUBSTANCES
CLASS 5.2	ORGANIC PEROXIDES
CLASS 6.1	POISONOUS (TOXIC) SUBSTANCES
CLASS 6.2	INFECTIOUS SUBSTANCES
CLASS 7	RADIOACTIVE MATERIALS
CLASS 8	CORROSIVES
CLASS 9	MISCELLANEOUS DANGEROUS SUBSTANCES

Q.178. TYPE OF SEGREGATIION AS PER IMDG CODE?
A.178. (1) AWAY FROM: MAY BE CARRIED IN THE SAME COMPARTMENT OR ON DECK PROVIDED A MINIMUM HORIZONTAL SEPARATION OF 3 METER PROJECTED VERTICALLY IS MAINTAINED.

(2) SEPARATED FROM: CAN BE CARRIED IN THE SAME COMPARTMENT, IF THE INTERVENING DECK IS RESISTANT TO FIRE & LIQUIDS. OTHERWISE SEPARATE HOLDS.
ON DECK: A HORIZONTAL SEPARATIION OF ATLEAST 6 METER

(3) SEPARATED BY A COMPLETE COMPARTMENT OR HOLD FROM: THERE MUST BE EITHER A VERTICAL OR LONGITUDINAL SEPARATION BY A COMPLETE COMPARTMENT OR HOLD & TWO BULK HEADS OR DECKS RESISTANCE TO FIRE & LIQUIDS
ON DECK: A HORIZONTAL SEPARATION OF AT LEAST 12 METER EVEN IF ONE PACKAGE IS STOWED BELOW DECK.

(4) SEPARATED LONGITUDINALLY BY AN INTERVENING COMPLETE COMPARTMENT OR HOLD FROM: A VERTICAL SEPARATION IS NOT ALLOWED.THE PACKAGES MUST BE HORIZONTALLY SEPARATED BY A COMPLETE COMPARTMENT.
ON DECK: A HORIZONTAL SEPARATION OF ATLEAST 24 METER IS REQUIRED & BETWEEN AN "ON DECK" & "UNDERDECK" PACKAGE, 24+ AN INTERVENING COMPARTMENT.

Q.179. WHAT IS INTERNATIONAL LOAD LINE CONVENTION? IT'S CONTENTS? WHEN DID IT APPLY?
A.179. IT'S A REGULATION FOR DETERMINING LOAD LINES
CONTENTS:-
ANNEX 1 - REGULATION FOR DETERMINING LOAD LINES
CHAPTER 1 - GENERAL
CHAPTER 2 - CONDITION OF ASSIGNMENT OF FREEBOARDS
CHAPTER 3 - FREEBOARDS
CHAPTER 4 - SPECIAL REQUIREMENT FOR SHIP ASSIGNED TIMBER FREEBOARDS
ANNEX 2 - ZONES, AREAS & SEASONAL PERIODS
ANNEX 3 - CERTIFICATES

CONVENTION APPLIES TO:-
(1) SHIP REGISTERED IN COUNTRIES WHO ARE CONTRACTING PARTIS TO ILL CONVENTION OF 66
(2) SHIPS ENGAGED IN INTERNATIONAL VOYAGE
(3) SHIPS WITH MECHANICAL MEANS OF PROPULSION
(4) LIGHTER OR BARGES WITH MECHANICAL MEANS OF PROPULSION
(5) SHIPS CARRYING TIMBER CARGOES MAY BE ASSIGNED ADDITIONAL FREEBOARDS
(6) TUGS HAVING SOLE MEANS OF PROPULSIONS
(7) SAILING SHIP
(8) SHIP OF WOOD OR COMPOSITE CONSTRUCTION MAY BE ASSIGNED IN ACCORDANCE WITH THE ADMINISTRATION

CONVENTION NOT APPLIES TO:-
(1) WARSHIPS
(2) SHIPS LESS THAN 24 METER IN LENGTH
(3) EXISTING SHIP OF LESS THAN 150 GRT
(4) PLEASURE YACHTS NOT ENGAGED IN TRADES
(5) FISHING VESSEL

ILL 1966 ARE NOT APPLICABLE TO SHIPS FLYING IN FOLLOWING WATERS:-
(1) PORTS OF GREAT LAKES
(2) SAINT LAWRENCE RIVER
(3) CASPIAN SEAS
(4) UPPER PORTS OF RIVER PLATE (ARGENTINA)

CONDITION OF ASSIGNMENT FOR ILL 1966:-
(1) SUPER STRUCTURE & BULKHEAD
(2) WATER TIGHT DOORS
(3) HATCHWAYS & VENTILATORS
(4) HATCH CLOSING PONTOONS
(5) CLEATS
(6) SECURING SYSTEM OF HATCH COVERS
(7) HATCH WAY COAMING
(8) AIR PIPES
(9) SCUPPER INLETS & DISCHARGE
(10) MEANS FOR SECURING WEATHER TIGHTNESS
(11) SIDE SCUTTLES
(12) PROTECTION OF CREW INCLUDING WEATHER TIGHTNESS OF PORTHOLES,WATER TIGHT DOORS,SCUTTLES
(13) DRAFT MARKS,DECK LINES, PLIMSOL MARK, GAUGING & MARKING OF THESE MARKS

NOTE: - ILL66 CERTIFICATE SHALL BE ISSUED FOR A PERIOD SPECIFIED BY THE ADMINISTRATION WHICH SHALL NOT EXCEED 5 YEARS FROM THE DATE OF ISSUE

India Sailing duration 21x38.

mechanical & chemical reaction

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Q.180. WHAT ARE THE CONTENTS OF LOAD LINE CERTIFICATE? DCP & foam.
A.180. THE CONTENTS OF LOAD LINE CERTIFICATE ARE
(1) LOAD LINE MARK
(2) TYPE OF SHIPS (A OR B)
(3) DISTANCE FROM VARIOUS LOADLINE MARKS FROM DECK LINE
(4) FWA FOR ALL LOADLINES MARKS
(5) TIMBER LOADLINE & FWA (IF APPLICABLE)
(6) VALIDITY OF CERTIFICATE

Q.181. WHAT ARE THE TYPE 'A' & TYPE 'B' SHIPS?
A.181. TYPE 'A' SHIPS: - TYPE 'A' SHIPS IS ONE WHICH DESIGNED TO CARRY ONLY LIQUID CARGOES IN BULK & IN WHICH CARGO TANKS HAVE ONLY SMALL ACCESS OPENING CLOSED BY WATERTIGHT GASKET COVER OF STEEL OR EQUIVALENT MATERIALS.
SUCH SHIPS HAVE FOLLOWING FEATUREES:-
(1) HIGH DEGREE OF SAFETY AGAINST FLOODING
(2) HIGH INTEGRITY OF EXPOSED DECK

TYPE 'B' SHIPS: - ALL SHIPS WHICH DO NOT COME WITHIN THE PROVISIONS REGARDING TYPE 'A' SHIPS ARE TYPE 'B' SHIPS

Q.182. WHAT DO YOU KNOW ABOUT CLASSIFICCATION SOCIETIES?
A.182. THESE SOCIETIES WERE FORMED AS NEUTRAL 3RD PARTIES, CARRYOUT SURVEYS & INSPECTION TO SUPPORT THE INSURANCER IN ACCORDANCE WITH THE RULES & REGULATION.ENFORCED BY THE ADMINISTRATION.
THE MAIN SERVICE OFFERED BY THE CLASSIFICATION SOCITIEES ARE
(1) CLASSIFICATION OF SHIPS
(2) INSPECTS SHIPS STRUCTURE
(3) CARRYOUT COMPULSORY CERTIFICATION
(4) CHECK OR INSPECT LIFTING GEAR
(5) CHECK ENGINEERING SYSTEM
(6) ADVISORY SERVICE
(7) MARINE QUALITY SERVICE
(8) DATA BASE INFORMATION

NOTE: - I.A.C.S WAS FORMED TO HAVE UNIFORMLY OF RULES, REGULATION & REQUIREMENT WITH REGARDS TO SAFETY OF VESSELS. THE MEMBERS OF I.A.C.S ARE (1) DNV (2) NKK (3) ABS (4) IR

Q.183. WHAT IS THE HARMONISED SYSTEM OF SURVEY?
A.183. HARMONISED SYSTEM OF SURVEY: - IT CAME IN FORCE ON 03/02/2000. IT COVERS SOLAS, MARPOL, ILL-66, IBC CODE, IGC CODE

AIM OF THIS SURVEY IS TO REMOVE PROBLEM CAUSED BY SURVEY DATES & INTERVAL BETWEEN SURVEY

Q.184. WHAT IS THE INITIAL SURVEY, PERIODICAL SURVEY & INTERMEDIATE SURVEY?
A.184. INITIAL SURVEY: A COMPLETE INSPECTION OF ALL ITEMS RELATING TO A PARTICULAR SURVEY BEFORE SHIP IS PUT INTO SERVCE

PERIODICAL SURVEY: INSPCTION OF ITEM RELATING TO PARTICULAR CERTIFICATE & CONFIRMING THAT THEY ARE IN SATISFACTORY CONDITION & FIT FOR SERVICE

INTERMEDIATE SURVEY: INSPECTION OF ITEM TO BE CARRIED OUT ALONG WITH 2ND ANNIVERSARY OR 3RD ANNIVERSARY INSPECTION

Q.185. LIST OF CERTIFICATES FOR HSSC Harmonised System & survey
A.185. STATUTORY CERTIFICATES:
(1) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATES
(2) CARGO SAFETY EQUIPMENT CERTIFICATES
(3) CARGO SHIP SAFETY RADIO TELEPHONY CERTIFICATES
(4) SAFETY MANAGEMENT CERTIFICATES

IN ADDITIONAL ABOVE
(1) INTERNATIONAL LOAD LINE CERTIFICATES
(2) INTERNATIONAL TONNAGE CERTIFICATES
(3) MINIMUM SAFE MANNING CERTIFICATES
(4) IOPP CERTIFICATE
(5) INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICAL IN BULK (CHEMICAL TANKER)
(6) INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF GAS LIQUIFIED GASES IN BULK

Q.186. WHAT DO YOU KNOW ABOUT CARGO SECURING MANUAL?
A.186. THIS MANUAL IS REQUIRED ON ALL TYPES OF SHIPS ENGAGED IN THE CARRIAGE OF ALL CARGOES OTHER THAN SOLID & LIQUID CARGOES.
(a) SHIP CARRYING CARGO UNITS & OTHER ENTITIES
(b) SHIP CARRYING VEHICLES
(c) ROAD VEHICLES ON RO-RO SHIPS
(d) CARGO IN FREIG CONTAINER
A CARGO SECURING ARRANGEMENT IS DETAILED IN THE CARGO SECURING MANUAL

CONTENTS OF CARGO SECURING MANUAL:

CHAPTER 1	-	GENERAL DEFINATION & GENERAL INFORMATION
CHAPTER 2	-	SECURING DEVICE & ARRANGEMENTS
2.1	-	SPECIFICATION FOR FIXED CARGO SECURING DEVICE
2.2	-	SPECIFICATION FOR PORTABLE CARGO SECURING DEVICE
2.3	-	INSPECTION & MAINTENANCE SCHEME
CHAPTER 3	-	STOWAGE & SECURING OF NON STANDARDISED SEMISTANDARDISED CARGO.
CHAPTER 4	-	STOWAGE & SECURING OF CONTAINERS & OTHER STANDARDISED CARGO.

Q.187. WHAT IS THE INFORMATION GIVEN IN CARGO SECURING MANUAL?
A.187. INFORMATION CONTAINED IN THE CARGO SECURING MANUAL:
(a) DETAILS OF FIXED SECURING ARRANGEMENT & THEIR LOCATION Eg. EYE PAD, EYE BOLT, ETC
(b) LOCATION & STOWAGE OF PORTABLE SECURING GEAR
(c) DETAILS OF PORTABLE SECURING GEAR INCLUDING AN INVENTORY OF ITEM PROVIDED & THEIR STRENGTHS
(d) EXAMPLES OF CORRECT APPLICATION OF PORTABLE SECURING GEAR ON VARIOUS CARGO UNITS, VEHICLES & OTHER ENTITIES CARRIED ON THE SHIP.
(e) INDICATION OF THE VARIATION OF TRASVERSE, LONGITUDINAL & VERTICAL ACCELERATION TO BE EXPECTED IN VARIOUS POSITIONS ON BOARD THE SHIP

Q.188. WHAT DO YOU KNOW ABOUT BHC CODE?
A.188. CODE FOR THE CONSTRUCTION & EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICAL IN BULK UNDER THE PROVISION OF ANNEX II OF THE MARPOL 73/78 CHEMICAL TANKER CONSTRUCTED BEFORE 1JULY 1986 MUST COMPLY WITH THIS CODE. THOSE BUILT ON OR AFTER THAT DATE MUST COMPLY WITH IBC CODE FOR THE PURPOSE OF MARPOL 73/78 & SOLAS 74
PURPOSE: THIS CODE IS TO RECOMMEND SUITABLE DESIGN CRITERIA,CONSTRUCTION STANDARD & OTHER SAFELY MEASURES FOR SHIPS TRANSPORTING DANGEROUS & NOXIOUS CHEMICAL SUBSTANCE IN BULK SO AS TO MINIMIZE THE RISK TO THE SHIP, IT'S CREW & ENVIRONMENT

CONTENT:

CHAPTER 1	-	GENERAL
CHAPTER 2	-	CARGO CONTAINMENT
CHAPTER 3	-	SAFETY EQUIPMENT & RELATED CONSIDERTION
CHAPTER 4	-	SPECIAL REQUIREMENT
CHAPTER 5	-	OPERATIONAL REQUIREMENT
CHAPTER 5.1	-	ADDITIONAL MEASURES FOR THE PROTECTION OF THE MARINE ENVIRMENT
CHAPTER 6	-	SUMMARRY OF MINIMUM REQUIREMENT
CHAPTER 7	-	LIST OF CHEMICAL TO WHICH THE CODE DOES NOT APPLY
CHAPTER 8	-	TRANSPORT OF LIQUID CHEMICAL WASTE

APPENDIX

Q.189. WHAT DO YOU KNOW ABOUT IBC CODE?
A.189. INTERNATIONAL CODE FOR THE CONSTRUCTION & EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICAL IN BULK

APPLICATION: THIS CODE APPLIES TO SHIPS REGARDSLESS OF SIZE ENGAGED IN CARRIAGE OF BULK CARGOES OF DANGEROUS OR NOXIOUS LIQUID CHEMICAL SUBSTANCE OTHER THAN PETROLEUM OR SIMILAR FLAMMABLE PRODUCT AS FOLLOW:
(1) PRODUCT HAVING SIGNIFICATE FIRE HAZARDS IN EXCESS OF THERE PETROLEUM PRODUCTS & SIMILAR FLAMMABLE PRODUCTS
(2) PRODUCT HAVING SIGNIFICANT HAZARDS IN ADDITION TO OR OTHER THAN FLAMMABILITY.

CONTENTS:

CHAPTER 1	-	GENERAL
CHAPTER 2	-	SHIP SURVIVAL CAPABILITY & LOCATION OF CARGO

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CHAPTER 3	-	SHIP ARRANGEMENT
CHAPTER 4	-	CARGO CONTAINMENT
CHAPTER 5	-	MATERIAL OF CONSTRUCTION
CHAPTER 6	-	CARGO TEMPERATURE CONTROL
CHAPTER 7	-	CARGO TANK VENTING & ARRANGEMENT
CHAPTER 8	-	CARGO TANK VENTING & GAS FREEING ARRANGEMENT
CHAPTER 9	-	ENVIRONMENT CONTROL
CHAPTER 10	-	ELECTRICAL INSTALLATIONS
CHAPTER 11	-	FIRE PROTECTION & FIRE DETECTION
CHAPTER 12	-	MECHANICAL VENTILATION IN THE CARGO AREA
CHAPTER 13	-	INSTRUMENTATION
CHAPTER 14	-	PERSONNEL PROTECTION
CHAPTER 15	-	SPECIAL REQUIREMENT & OPERATIONAL REQUIREMENT
CHAPTER 16	-	ADDITIONAL MEASURE FOR THE PROTECTION & MARINE ENVIRONMENT
CHAPTER 17	-	SUMMARY OF MINIMUM REQUIREMENT
CHAPTER 18	-	LIST OF CHEMICAL TO WHICH CODE DOES NOT APPLY
CHAPTER 19	-	REQUIREMENT FOR THE SHIP ENGAGED IN THE INCINERATION AT SEA OF LIQUID CHEMICAL WASTE
CHAPTER 20	-	TRANSPORT OF LIQUID CHEMICAL WASTE
APPENDIX	-	MODEL FOR CARRIAGE OF DANGEROUS CHEMICAL IN BULK INDEX OF DANGEROUS CHEMICAL IN BULK

Q.190. WHAT DO YOU KNOW ABOUT TIMBER CODE 1991?
A.190. CODE OF SAFE PRACTICE FOR SHIPS CARRYING TIMBER DECK CARGOES

PURPOSE: TO MAKE RECOMMENDATION ON STOWAGE & SECURING & OTHER OPERATIONAL SAFETY MEASURE DESIGNED TO ENSURE THE SAFE TRANSPORT OF MAINLY TIMBER DECK CARGOS

APPLICATION: TO SHIP ≥24 METER ALSO COMPLY WITH TIMBER LOADLINE REQUIREMENT OF 1966 CONVENTION

CONTENTS:

CHAPTER 1	-	GENERAL
CHAPTER 2	-	STABILITY
CHAPTER 3	-	STOWAGE
CHAPTER 4	-	SECURING
CHAPTER 5	-	PERSONAL PROTECTION & SAFETY DEVICES
CHAPTER 6	-	ACTION TO BE TAKEN DURING VOYAGE

TIMBER DECK CARGO GIVES
(1) ADDITIONAL RESERVE BUOYANCY TO THE VESSEL ONLY IF THE CARGO IS LASHED & WELL SECURED TO THE VESSEL
(2) CAN LOAD TO MORE DRAFT i.e UPTO TIMBER LOAD LINE PROVIDE ADDITIONAL PROTECTION TO DECK

PREPARTION TO LOAD TIMBER DECK CARGO:
(1) ALL SECURING EQUIPMENT SHOULD BE LAID ON DECK.VISUAL EXAMINATION OF ALL LASHING EQUIPMENT TO BE CARRIED OUT
(2) ALL VENTILATORS, AIR PIPES, SOUNDING PIPES, WINCHES SHOULD BE ADEQUATELY PROTECTED BEFORE LOADING
(3) ALL OPENING ON DECK, HATCH COVERS,WATER TIGHT DOORS, ETC SHOULD BE BATTENED DOWN & SECURED
(4) PROVISIONS SHOULD BE MADE TO RIG HOSES & OTHER FFA EQUIPMENT
(5) PILOT BOARDING ARRANGEMENT TO BE MADE AS PER REGULATION REQUIREMENT
(6) DECK SHOULD BE FREE OF OIL STAINS TO AVOID CARGO DAMAGE
(7) PACKAGED TIMBER OF DECK TO BE INSPECTED & LOOSE PACKING REJECTED
(8) EACH TIER SHOULD BE CHECKED BEFORE COMMENCING LOADING OF A NEW TIER
(9) PROPER LADDER TO BE PROVIDED TO ACCESS ON TOP OF CARGO
(10) HEIGHT SHOULD NOT BE EXCESSIVE AS THE RISK OF SHIFTING INCREASES & NAVIGATIONAL VISIBILITY IS NOT RESTRICTED
(11) SHOULD NOT EXCEED THE LOAD DENSITY OF THE HATCH & DECK
(12) ADEQUATE GM SHOULD BE THERE
(13) SHOULD BE EFFICIENTLY BY INDEPENDENT OVERALL LASHING NOT MORE THAN 3 METER APART
(14) LASHING SHOULD BE NOT LESS THAN 133KN BREAKING STRESS
(15) ALWAYS RIG HOG WIRES WHEN USING THE DECK SIDE UPRIGHT FOR LOGS,PACKAGES & LOOSE TIMBER

PREPARATION TO LOAD TIMBER IN HOLD:
(1) EACH CARGO SPACE CONFIGURATION IS DETERMINED IN CUBIC BALE CAPACITY
(2) THE CARGO SPACES & RELATED EQUIPMENT SHOULD BE EXAMINED TO DETERMINE THE

SAFE CARRIAGE OF THE LOG CARGO
(3) THE BILGE SUCTION SCREENS SHOULD BE EXAMINED TO ENSURE THEY ARE CLEAN
(4) THE BILGE WELL SHOULD BE FREE OF EXTRANEOUS MATERIALS SUCH AS WOOD BARK & WOOD SPLINTERS
(5) SIDE SPARRING, PIPE GUARDS ETC DESIGNED TO PROTECT INTERNAL HULL MEMBERS SHOULD BE IN PLACE
(6) THE MASTER SHOULD ENSURE THAT OPENING & CLOSING OF ANY HIGH BALLAST TANK DUMP VALVES ARE PROPERLY LOGGED

Q.191. WHAT ARE THE LASHING REQUIREMENTS FOR TIMBER DECK CARGOES AS PER TIMBER CODE 1991?

A.191. LASHING REQUIREMENT FOR TIMBER DECK CARGOES:
(1) EVERY LASHING SHOULD PASS OVER THE TIMBER DECK CARGO & BE SHACKLED TO EYE PLATE OR STRONG POINT
(2) ALL LASHING & COMPONENTS USED FOR SECURING SHOULD POSSESS BREAKING STRENGTH OF NOT LESS THAN 133KN
(3) EVERY LASHING SHOULD BE PROVIDED WITH A TIGHTENING DEVICE OR SYSTEM SO PLACED THAT IT CAN SAFELY & EFFICIENTLY OPERATE WHEN REQUIRED
(4) THE LOAD TO BE PRODUCED BY THE TIGHTENING DEVICE OR SYSTEM SHOULD NOT LESS THAN 27 KN IN THE HORIZONTAL PART & 16 KN IN THE VERTICAL PART
(5) UPON COMPLETION & AFTER THE INITIAL SECURING THE TIGHTENING DEVICE OR SYSTEM BE LEFT WITH NOT LESS THAN HALF THE THREADED LENGTH OF SCREW OR OF TIGHTENING CAPACITY AVAILABLE FOR FUTURE USE
(6) EVERY LASHING SHOULD BE PROVIDED WITH A DEVCE OR AN INSTALLATION TO PERMIT THE LENGTH OF THE LASHING TO BE ADJUSTED
(7) THE SPACING OF THE LASHING SHOULD BE SUCH THAT THE TWO LASHINGS AT EACH END OF EACH LENGTH OF CONTINUOUS DECK STOW ARE POSITIONED AS CLOSE AS PRACTICABLE TO THE EXTREME END OF THE TIMBER DECK CARGO
(8) IF WIRE ROPE CLIPS ARE USED TO MAKE A JOINT IN A WIRE LASHING, THAN THE SADDLE PORTION OF THE CLIP SHOULD BE APPLIED TO THE LIVE LOAD SEGMENT & THE 'U' BOLT TO THE DEAD OR SHORTENED END SEGMENT.ROPE CLIPS SHOULD BE INTIALLY TIGHTENED SO THAT THEY VISIBLE PENETRATE INTO THE WIRE ROPE AND SUBSEQUENTLY BE RETIGHTENED AFTER THE LASHING HAS BEEN STRESSED
(9) GREASING THE THREADS OF GRIPS, CLIPS, SHACKLES &TURNBUCKLES, INCREASES THEIR HOLDING CAPACITY & PREVENT CORROSION
(10) LOOSE OR PACKAGED SAWN TIMBER DECK CARGO SHOULD BE SECURED THROUGHOUT ITS LENGTH BY INDEPENDENT LASHINGS
(11) THE PACKAGES STOWED AT THE UPPER OUTBOARD EDGE OF THE STOW SHOULD BE SECURED BY ATLEAST TWO LASHING EACH
(12) LOGS, POLES, CANTS OR SIMILAR TIMBER DECK CARGOES SHOULD BE SECURED THROUGHOUT ITS LENGTH BY INDEPENDENT LASHINGS NOT MORE THAN 3 METER APART.
(13) ALL LASHING & COMPONENTS USED FOR SECURING OF TIMBER DECK CARGO SHOULD BE TESTED, MARKED & CERTIFIED ACCORDING NATIONAL REGULATIONS & CERTIFICATE SHOULD BE KEPT ON BOARD

Q.192. WHAT DO YOU KNOW ABOUT CHAIN REGISTER & VARIOUS ENTRIES THAT ARE MADE IN IT?

A.192. CHAIN REGISTER IS A BOOK, WHICH REGISTERS LOAD BEARING MACHINERY, CHAINS & WIRE ROPES
OR
A RECORDS OF PARTICULARS OF TEST & EXAMINATION OF LIFTING APPLIANCES, LOOSE GEAR & HEAT TREATMENT SHALL BE ENTERED & MAINTAINED IN THE REGISTER OF MACHINERY, CHAINS, ETC & WIRE ROPES CALLED CHAIN REGISTER.
CERTIFICATE SHALL BE OBTAINED FROM A COMPETENT PERSON IN RESPECT OF THE FOLLOWING & ATTACHED TO THE REGISTER. sufficient Knowledge, experience, skills pertaining's job

THE CHAIN REGISTER CONTAINS FOLLOWING THREE PARTS:

PART 1	-	INITIAL & PERIODICAL LOAD TEST OF LIFTING APPLIANCES & THEIR ANNUAL THROUGH EXAMINATION
PART 2	-	INITIAL AND PERIODICAL LOAD TEST OF LOOSE GEAR & THEIR ANNUAL THROUGH EXAMINATION
PART 3	-	ANNEALING OF CHAINS, RINGS, HOOKS, SHACKLES, SWIVELS (OTHER THAN THOSE EXEMPTED)

VARIOUS ENTRIES IN CHAIN REGISTER ARE

(1) NAME OF THE SHIP
(2) PORT OF REGISTRY
(3) OWNERS NAME & ADDRESS
(4) ENTRIES CONCERNING FOUR YEARLY EXAMINATION & ANNUAL EXAMINATIONS
(5) THROUGH ANNUAL EXAMINATION OF CRANES,WINCHES,& HOISTS
(6) ACCESSORY GEAR OTHER THAN DERRICKS
(7) THE THROUGH ANNUAL FOR GEAR EXEMPTED FROM ANNEALING
(8) THE ANNEALING OF GEAR
(9) RECOMMENDED FACTORS OF SAFETY. Eg. CHAIN/WIRE=5,ROPE=6,DERRICK=9

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Q.193. WHAT IS THROUGH EXAMINATION?
A.193. THROUGH EXAMINATION MEANS A VISUAL EXAMINATION SUPPLEMENT IF NECESSARY BY OTHER MEANS SUCH AS A HAMMER TEST CARRIED OUT AS CAREFULLY AS THE CONDITIONS PERMIT, IN ORDER TO ARRIVE AT A RELIABLE CONCLUSION AS TO THE SAFETY OF THE PARTS EXAMINED & IF NECESSARY FOR THE PURPOSE, PARTS OF THE LIFTING MACHINERY & GEAR SHALL BE DISMANTLED.

Q.194. WHAT IS ANNEALING?
A.194. IT IS A PROCESS OF HEATING & SUBSEQUENT COOLING TO ACHIEVE THE SOFTNESS, DUCTILITY & RELIEVES ANY INTERNAL STRESS. THE METAL IS HEATED TO ABOUT 20°-30°C ABOVE THE CRITICAL POINT. AFTER BEING HELD FOR A WHILE AT THIS TEMPERATURE IT IS COOLED SLOWLY AT A RATE OF ABOUT 50°C/HRS. IN THIS PROCESS STRESS ES IS ALSO RELIVES.
FOLLOWING IS EXEMPTED FROM ANNEALING;
(1) CHAINS MADE OF CAST IRON
(2) PLATE LINK CHAIN
(3) CHAIN,RINGS,HOOK, SHACKLES & SWIVELS MADE OF STEEL
(4) PULLY BLOCKS
(5) HOOK & SWIVELS HAVING SCREW THREADED PART OR BALL BEARING

Q.195. HOW WILL YOU DO THE MAINTENANCE OF ROPES & WIRES?
A.195. CARE & MAINTENANCE OF ROPES & WIRES:
(1) ROPES SHOULD BE STOWED IN DRY & WELL VENTILATED COMPARTMENT
(2) THEY SHOULD NOT BE STOWED TOGETHER WITH PAINTS OR CHEMICAL
(3) ROPES SHOULD NOT BE STOWED ON DECK OR EXPOSED TO RAIN, SUN OR HEAT
(4) THEY SHOULD BE STOWED ON GRATING SO THAT WATER AMY DRAIN & VENTILATION CAN TAKE PLACE
(5) THEY SHOULD BE DRIED BEFORE STOWING
(6) ROPES SHOULD BE EXAMINED EXTERNALLY FOR WEAR & TEAR & DAMAGE, WHICH WILL BE EVIDENT FROM THE HAIRY SURFACE.FUSION OF COMPRESSION OF STRANDS, BROKEN STRANDS, ETC
(7) THEY SHOULD BE EXAMINED INTERNALLY BY OPENING UP THE STRANDS & VIEWING THE CORE FOR POWDERING
(8) ROPES & WIRES SHOULD BE WOUND ON SPECIFIC DRUMS

Q.196. HOW WILL YOU DO THE MAINTENANCE OF BLOCKS?
A.196. CARE & MAINTENANCE OF BLOCKS:
(1) BLOCKS SHOULD BE HANDLED WITH CARE & NOT THROWN ON DECK OR MISHANDLED
(2) THEY SHOULD BE REGULARLY GREASED THROUGH THE GREASE NIPPLES PROVIDED
(3) ONLY THE OUTER CHEEKS MAY BE PAINTED. THE REMAINING PART SHOULD BE OILED AS PAINT HIDES DEFECTS & BLOCKED THE GREASE NIPPLES
(4) EACH BLOCK MUST BE OPENED UP FOR THROUGH EXAMINATION ATLEAST ONCE A YEAR
(5) THE WEAR DOWN OF BALL BEARING MUST NOT BE EXCESSIVE
(6) THE SWIVEL MUST BE FREE TO ROTATE
(7) A VISUAL EXAMINATION IS TO BE CARRIED OUT OF ALL PARTS FOR CRACK & DEFORMATION

Q.197. HOW WILL YOU DO THE MAINTENANCE OF HATCHES & HATCH COVERS?
A.197. CARE & MAINTENANCE OF HATCHES & HATCH COVERS:
(1) THE TOP SIDE & SIDE OF THE HATCH COVERS COAMING & STAYS MUST BE THROUGHLY CHECKED FOR SIGNS OF CORROSION & REDUCTION IN PLATE THICKNESS
(2) CHECK DIRT & CARGO RESIDUES ON THE TRACKWAYS & RUBBER PACKING, WHICH WILL PREVENT WATERTIGHTNESS
(3) TESTING OF HATCH COVERS FOR WEATHERTIGHTNESS IS MANDATORY FOR EVERY VOYAGE
(4) A CAREFUL WATCH MUST BE MAINTAINED FOR DAMAGE TO HATCHES, HATCH COVERS
(5) COMPRESSION BARS MUST BE OF AN EVEN HEIGHT WITH A ROUNDE PROFILE & NO SHARP EDGES DUE TO CORROSION AS THIS DAMAGE THE RUBBER PACKING
(6) THE RUBBER PACKING ALL AROUND THE HATCH COVERS & ACROSS EACH PANEL SHOULD BE IN A GOOD CONDITION, ELASTIC & NOT HARDED
(7) RUBBER PACKING SHOULD BE PROTECTED FROM PAINT & CHEMICAL
(8) ECCENTRIC WHEELS SHOULD FREELY ROTATE EVEN BY HAND.THEY SHOULD BE GREASED
(9) TOWING CHAINS ARE SUSCEPTIBLE TO ELONGATION AS THEY BEAR A LOT OF STRESS WHEN PULLING THE COVERS
(10) NON RETURN DRAIN VALVE AT THE HATCH CORNERS SHOULD BE CHECKED FOR CLOGGING BY DUST OR CARGO RESIDUE & TESTED FOR EFFICIENT FUNCTIONING
(11) GREASE NIPPLE SHOULD BE FREE FROM PAINT

Q.198. WHAT DO YOU KNOW ABOUT MODU CODE?
A.198. CODE FOR THE CONSTRUCTION & EQUIPMENT OF MOBILE OFFSHORE DRILLING UNIT (MODU)
PUPOSE: THE PURPOSE OF THE MODU CODE IS TO RECOMMEND DESIGN CRITERIA, CONSTRUCTION STANDARD & OTHER SAFETY MEASURE FOR MOBILE OFFSHORE DRILL UNIT IN ORDER TO MINIMIZE THE RISK TO SUCH UNITS TO THE PERSONNEL ONBOARD & TO THE ENVIRONMENT

Q.199. WHAT DO YOU KNOW ABOUT MSDS?
A.199. MATERIAL SAFETY DATA SHEET

CONTAINS:
(1) APPERANCE
(2) ODOUR
(3) MAIN HAZARDS
(4) EMERGENCY PROCEDURE FOR (a) FIRE, (b) SKIN CONTACT,(c) SPILLAGE,(d) LIQUID IN EYE CONTACT,(e) VAPOUR INHALED
(5) FIRE & EXPLOSION DATA ie. (a) FLASH POINT,(b) FLAMABILITY LIMIT,(c) AUTO IGNITION TEMPERATURE, (d) EXPLOSION HAZARDS
(6) CHEMICAL DATA ie. (a) FORMULA (b) CHEMICAL NAME
(7) PHYSICAL DATA ie. (a) SPECIFIC GRAVITY (b) BOILING POINT, (c) FREEZING POINT, (d) VAPOUR PRESSURE, (e) COEFFICIENT OF EXPANSION ,(f) VAPOUR DENSITY
(8) HANDLING & STOWAGE RECOMMENDATION (a) NORMAL CARRIAGE TEMPERATURE & PRESSURE
(9) HEALTH HAZARDS (a) TLV
(10) PPE REQUIRED WHILE HANDLING
(11) SIGN & SYMPTOM IN CASE (a) CONTACT WITH EYE,SKIN (b) ANY ACUTE OR CHRONIC EFFECT

Q.200. WHAT DO YOU KNOW ABOUT BC CODE?
A.200. CODE OF SAFE PRACTICE FOR SOLID BULK CARGOES
AIM:
(1) HIGHLIGHT THE DANGER ASSOCIATED WITH THE SHIPMENT OF BULK CARGOES.
(2) GIVING GUIDANCE ON THE PROCEDURE TO BE ADOPTED WHEN THE SHIPMENT OF BULK CARGO.
(3) LISTING TYPICAL MATERIAL CURRENTLY SHIPPED IN BULK TOGETHER WITH ADVICE ON THEIR PROPERTIES & HANDLING
(4) TO DESCRIBE TEST PROCEDURE TO DETERMINE THE VARIOUS CHARATERISTICS OF BULK CARGO

CONTENTS:

(1) SECTION 1	-	DEFINATION
(2) SECTION 2	-	GENERAL PRECAUTION
(3) SECTION 3	-	SAFETY OF PERSONNEL & SHIP
(4) SECTION 4	-	ASSESSMENT OF ACCEPTABILITY OF CONSIGNMENTS FOR SAFE SHIPMENT
(5) SECTION 5	-	TRIMMINGPROCEDURE
(6) SECTION 6	-	METHODS OF DETERMINING THE ANGLE OF REPOSE
(7) SECTION 7	-	CARGOES WHICH MAY LIQUEFY
(8) SECTION 8	-	CARGOES WHICH MAY LIQUEFY TEST PROCEDURE
(9) SECTION 9	-	MATERIALS POSSESSING CHEMICAL HAZARDS
(10) SECTION 10	-	TRANSPORT OF SOLID WASTES IN BULK
(11) SECTION 11	-	STOWAGE FACTOR CONVERSION TABLES
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APPENDIX B	-	LIST OF BULK MATERIAL POSSESSING CHEMICAL HAZARDS
APPENDIX C	-	LIST OF BULK NEITHER LIQUEFY NOR POSSESSING CHEMICAL
APPENDIX D	-	LAB TEST PROCEDURES
APPENDIX E	-	Ems NO FOR (B)
APPENDIX F	-	RECOMMENDATION FOR ENTERING ENCLOSED SPACE
APPENDIX G	-	PROCEDURE FOR GAS MONITORING OF COAL CARGO

Q.201. WHAT DO YOU KNOW ABOUT BLU CODE?
A.201. CODE OF PRACTICE FOR SAFE LOADING /UNLOADING OF BULK CARRIER
AIM:
TO ASSIST IN SAFE LOADING OR UNLOADING OF BULK CARGOES. THE CODE EXCLUDE GARIN CARGO.TO MINIMIZE LOSS OF BULK CARRIER

CONTENTS:

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SECTION 2	-	SUITABILITY OF SHIP & TERMINAL
SECTION 3	-	PROCEDURE BETWEEN SHIP & SHORE PRIOR TO THE SHIP'S ARRIVE
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APPENDIX 5	-	FORM OF CARGO INFORMATION

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Q.202. WHAT IS THE INFORMATION TO BE SUPPLIED BY THE SHIPPER TO THE CARRIER WHEN SHIPPING BULK CARGO?

A.202. INFORMATION GIVEN BY THE TERMINAL TO THE SHIP
(1) NAME OF THE BERTH, THE ESTIMATED TIME FOR BERTHING.
(2) COMPLETION OF LOADING OR UNLOADING
(3) LOADING & UNLOADING EQUIPMENT, LOADING/UNLOADING RATE
(4) FEATURES OF THE BERTH OR JETTY
(5) MINIMUM DEPTH OF WATER ALONGSIDE
(6) WATER DENSITY AT THE BERTH
(7) MAXIMUM AIR DRAUGHT
(8) ARRANGEMENT FOR GANGWAYS & ACCESS
(9) SIDE OF ALONGSIDE
(10) MAX. ALLOWANCE SPEED OF APPROACH TO JETTY
(11) NUMBER OF TUGS
(12) LOADING SEQUENCE OF DIFFERENT CARGO
(13) ANY PROPERTIES OF CARGO TO BE LOADED
(14) CARGO HANDLING OPERATIONS
(15) TERMINAL LOADING/UNLOADING EQUIPMENT
(16) MOORING LINES REQUIRED
(17) ANY RESTRICTION ON DEBALLASTING
(18) MAXIMUM SAILING DRAUGHT PERMITTED
(19) ANY OTHER INFORMATION REQUESTED BY MASTER

Q.203. WHAT PRECAUTION YOU WILL TAKE WHILE CARRIAGE OF LIVESTOCK?

A.203. CARRIAGE OF LIVE STOCK:
(1) EVERY SHIP INTENDING TO LOAD OR DISCHARGE LIVESTOCK SHALL INFORM THE PRESCRIBED PORT AUTHORITY
(2) THE VESSEL MUST HAVE AN APPROVED 'LIVESTOCK CAPACITY PLAN' SHOWING FITTING & ARRANGEMENT FOR THE CONTAINMENT OF ANIMAL
(3) VENTILATION & LIGHTING ARRANGEMENT, PROVISION FOR STORAGE & DISTRIBUTION OF FOOD & WATER, DRAINAGE, FFA & STABILITY DATA
(4) THEY SHOULD BE PROTECTED FROM EXPOSURE TO THE WEATHER OR SEA
(5) THEY SHALL NOT BE CARRIED AGAINST HOT BULKHEAD
(6) FOOD & WATER SHOULD PREFERABLY BE AVAILABLE ALL THE TIME
(7) VENTILATION OF COMPARTMENT IS AN IMPORTANT ASPECT IN THE SUCCESSFUL CARRIAGE OF LIVESTOCK
(8) LIVESTOCK FITTING SHOULD HAVE ROUNDED CORNERS WITH NO SHARP CORNER
(9) LIGHTING SHOULD BE ADEQUATE,EMERGENCY LIGHTING SHOULD BE PROVIDE
(10) EVERY SPACE WHERE LIVESTOCK ARE CARRIED SHALL BE FITTED WITH EFFICIENT MEANS FOR CLEANING & DRAINAGE.

Q.204. WHAT TYPE OF GAS DETECTING INSTRUMENT ARE USED ON BOARD?

A.204. GAS DETECTING INSTRUMENTS:
EXPLOSIMETER: USED FOR THE DETECTION & MEASUREMENT OF COMBUSTIBLE GASES & VAPOURS. IT DEPENDS FOR ITS OPERATION ON THE HEAT DEVELOPED BY THE ACTUAL COMBUSTION OF THE FLAMMABLE PORTION OF THE SAMPLE. THE SAMPLE IS DRAWN OVER A HEATED FILAMENT WHICH FORMS ONE ARM OF A BALANCED WHEATSTONE'S BRIDGE CIRCUIT. THE CURRENT FOR THE CIRCUIT IS PROVIDED BY SIX STANDARDS DRY CELL.COMBUSTIBLE GAS IN THE SAMPLE IS BURNT ON THE FILAMENT. THUS ITS TEMPERATURE IS RAISED & ITS RESISTANCE INCREASES IN PROPORTION TO THE AMOUNT OF COMBUSTIBLE GAS IN THE SAMPLE. THE CIRCUIT IS NOW UNBALANCED WHICH CAUSES A DEFLECTION OF THE METER. THE SCALE IS GARDUATED IN PERCENTAGE OF THE LOWER EXPLOSIVE LIMIT. THE INITIAL BALANCE OF THE CIRCUIT IS ACHIEVED IN FRESH AIR WITH THE METER AT ZERO BY ADJUSTMENT OF A RHEOSTAT.

LIMITATION OF THE EXPLOSIMETER:
(1) EXPLOSIVEMETER ONLY INDICATES THE PRESENCE OF FLAMMABLE GAS & VAPOUR.
(2) A COMPARTMENT WHICH IS INITIALLY SAFE MAY BE RENDERED UNSAFE BY FUTURE OPERATION
(3) IF A COMPARTMENT HAVING HIGH BOILING POINT LIQUID IS HEATED BY WELDING OR OTHER PROCESSES THE VAPOUR CONCENTRATION WILL INCREASES & SUCH AN ATMOSHERE WHICH ORIGANALLY SHOWED A LOW CONCENTRATION VAPOUR MAY NOW BE RENDERED EXPLOSIVE
(4) WHEN TESTING AT A HIGH TEMPERATURE, SOME OF THE VAPOUR MAY CONDENSE IN THE SAMPLING TUBE OF THE INSTRUMENT, SO ONLY A SMALL CONCENTRATION OF VAPOUR WILL INDICATE BY THE INSTRUMENT
(5) IT CANNOT DETECT IN A STEAM OR INERT ATMOSPHERE DUE TO THE ABSENCE OF OXYGEN.

TANKSCOPE:
(1) THE SENSOR ELEMENT OF THIS INSTRUMENT IS A NON-CATALYTIC HOT FILAMENT.
(2) THE COMPOSTION OF THE SURROUNDING GAS IS DETERMINED FROM THE RATE OF LOSS OF HEAT FROM THE FILAMENT WITHOUT COMBUSTION WHICH IS INDICATED BY ITS TEMPERATURE & RESISTANCE

(3) THE PRESENCE OF CH GAS CHANGES THE RESISTANCE OF THE SENSOR FILAMENT & THIS IS SHOWN BY A REFLECTION ON THE WHITESTONE BRIDGE METER
(4) IT CAN USE IN INERT CONDITION

OXYZEN ANNALYSER:
THIS INSTUMENT IS USED TO CHECK THE OXYGEN CONTENT OF THE ATMOSPHERE WITHIN A TANK OR OTHER CONFINED SPACE.SAMPLE OF THE ATMOSPHERE ARE SHOWN BY MEANS OF A RUBBER ASPIRATOR BULB & PASSED OVER A SENSOR. THE SENSOR IS THE MOST IMPORTANT PART OF THE INSTRUMENT & CAN BE OF VARIOUS TYPE (1) PARAMAGNETIC SENSOR (2) ELECTRO MAGNETIC SENSOR (3) CHEMICAL ABSORPTION LIQUID.BEFORE USE THE OXYGEN ANALYSER MUST BE CORRECTLY CALIBARTED.ZERO CALIBRATION CAN BE DONE BY IMMERSING THE PROBE IN NITROGEN OR OXYGEN. MAXIMUM CHECK IS CARRIED OUT IN AIR.

Q.205. WHAT IS SHIPS MEDICAL GUIDE? IT'S FUNCTIONS? CONTENTS?
A.205. THE FUNCTION OF THE GUIDE
(1) TO ENABLE YOU TO DIAGNOSE & TREAT INJURED & SICK SEATEARES
(2) TO SERVE AS A TEXTBOOK FOR THE FIRST AID AT SEA
(3) TO HELP YOU TO GIVE SOME TRAINING TO YOUR CREW

CONTENTS:

INTRODUCTION	-	HOW TO USE THIS GUIDE
CHAPTER 1	-	FIRST AID
CHAPTER 2	-	TOXIC HAZARDS OF CHEMICAL INCLUDING POISONING
CHAPTER 3	-	GENERAL NURSING
CHAPTER 4	-	CARE OF THE INJURED
CHAPTER 5	-	CAUSE & PREVENTION OF DISEASES
CHAPTER 6	-	COMMUNICABLE DISEASES
CHAPTER 7	-	OTHER DISEASES & MEDICAL PROBLEMS
CHAPTER 8	-	DISEASES OF FISHERMAN
CHAPTER 9	-	PREGNANCY & FEMALE DISORDER
CHAPTER 10	-	CHILD BIRTH
CHAPTER 11	-	SURVIVORS
CHAPTER 12	-	THE DYING & THE DEAD
CHAPTER 13	-	EXTERNAL ASSISTANCE
ANNEX 1	-	ANATOMY & PHYSIOLOGY
ANNEX 2	-	STANDARD ANTIBOTIC TREATMENT
ANNEX 3	-	ADVICE ON MEDICINES

INDEX

Q.206. WHAT ARE THE CONTENTS OF EMS (EMERGENCY SCHEDULE NUMBER)?
A.206. CONTENTS OF EMS
(1) PRIMARY HAZARDS
(2) ASSOCIATED HAZARDS
(3) SPECIAL EMERGENCY EQUIPMENT TO BE CARRIED ie PPE & SCBA
(4) EMERGENCY PROCEDURE DURING SPILLAGE & FIRE

THE SCHEDULES ARE DIVIDED INTO FIVE SECTIONS NAMELY

SECTION 1	-	GROUP TITLE WITH EMS NO ie CLASS OR SUBCLASS
SECTION 2	-	SPECIAL EMERGENCY EQUIPMENT TO BE CARRIED
SECTION 3	-	EMERGENCY PROCEDURES
SECTION 4	-	EMERGENCY ACTION
SECTION 5	-	FIRST AID TREATMENT (MFAG)

Q.207. WHAT IS BONDING?
A.207. THE CONNECTING TOGETHER OF METAL PARTS TO ENSURE ELECTRICAL CONTINUITY.

Q.208. WHAT IS COMBUSTIBLE GAS DETECTOR?
A.208. AN INSTRUMENT FOR MEASURING THE COMPOSITION OF HYDROCARBON GAS/AIR MIXTURES, USUALLY GIVING THE RESULT AS A PERCENTAGE OF THE LOWER FLAMMABLE LIMIT (LFL).

Q.209. DEFINE DESIGNATED PERSON ASHORE?
A.209. UNDER THE ISM CODE, IS A PERSON OR PERSONS ASHORE WITHIN A SHIP'S MANAGING OFFICE (COMPANY) WITH DIRECT ACCESS TO THE HIGHEST LEVELS OF MANAGEMENT, WHO HAS OR HAVE THE RESPONSIBILITY AND THE AUTHORITY TO MONITOR THE SAFETY AND POLLUTION PREVENTION ASPECTS OF THE OPERATION OF EACH SHIP, AND TO ENSURE THAT ADEQUATE RESOURCES AND SHORE-BASED SUPPORT ARE APPLIED, AS REQUIRED.

Q.210. WHAT IS FLAME ARRESTOR?
A.210. A PERMEABLE MATRIX OF METAL, CERAMIC OR OTHER HEAT RESISTING MATERIALS WHICH CAN COOL A DEFLAGRATION FLAME, AND ANY FOLLOWING COMBUSTION PRODUCTS, BELOW THE TEMPERATURE REQUIRED FOR THE IGNITION OF THE FLAMMABLE GAS ON THE OTHER SIDE OF THE ARRESTER.

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Q.211. WHAT IS FLAMMABLE RANGE?
A.211. THE RANGE OF HYDROCARBON GAS CONCENTRATIONS IN AIR BETWEEN THE LOWER AND UPPER FLAMMABLE (EXPLOSIVE) LIMITS. MIXTURES WITHIN THIS RANGE ARE CAPABLE OF BEING IGNITED AND OF BURNING.

Q.212. DEFINE FLASH POINT?
A.212. THE LOWEST TEMPERATURE AT WHICH A LIQUID GIVES OFF SUFFICIENT GAS TO FORM A FLAMMABLE GAS MIXTURE NEAR THE SURFACE OF THE LIQUID. IT IS MEASURED IN A LABORATORY IN STANDARD APPARATUS USING A PRESCRIBED PROCEDURE.

Q.213. DEFINE GAS FREE?
A.213. A TANK, COMPARTMENT OR CONTAINER IS GAS FREE WHEN SUFFICIENT FRESH AIR HAS BEEN INTRODUCED INTO IT TO LOWER THE LEVEL OF ANY FLAMMABLE, TOXIC, OR INERT GAS TO THAT REQUIRED FOR A SPECIFIC PURPOSE, E.G. HOT WORK, ENTRY, ETC.

Q.214. WHAT IS ISM CODE?
A.214. INTERNATIONAL SAFETY MANAGEMENT CODE (ISM CODE) AN INTERNATIONAL STANDARD FOR THE SAFE MANAGEMENT & OPERATION OF SHIPS AND FOR POLLUTION PREVENTION. THE CODE ESTABLISHES SAFETY-MANAGEMENT OBJECTIVES AND REQUIRES A "SAFETY MANAGEMENT SYSTEM" (SMS) TO BE ESTABLISHED BY THE "COMPANY".

Q.215. PYROPHORIC IRON SULPHIDE
A.215. IRON SULPHIDE CAPABLE OF A RAPID EXOTHERMIC OXIDATION CAUSING INCANDESCENCE WHEN EXPOSED TO AIR AND POTENTIAL IGNITION OF FLAMMABLE HYDROCARBON GAS/AIR MIXTURES.

Q.216. SAFETY MANAGEMENT SYSTEM (SMS)
A.216. A FORMAL DOCUMENTED SYSTEM, REQUIRED BY THE ISM CODE, COMPLIANCE WITH WHICH WILL ENSURE THAT ALL OPERATIONS AND ACTIVITIES ONBOARD A SHIP ARE CARRIED OUT IN A SAFE MANNER.

Q.217. STATIC ELECTRICITY
A.217. THE ELECTRICITY PRODUCED BY DISSIMILAR MATERIALS THROUGH PHYSICAL CONTACT AND SEPARATION.

Q.218. WHAT PLANNING YOU WILL DO BEFORE GOING IN DRYDOCK (TANKER)
A.218. PRE-ARRIVAL PLANNING PRIOR TO ARRIVAL AT THE REPAIR BERTH, ANCHORAGE OR OTHER FACILITY, THE FOLLOWING SHOULD BE TAKEN INTO CONSIDERATION WHEN UNDERTAKING THE INITIAL PLANNING:
(1) TYPE AND LOCATION OF THE BERTH OR ANCHORAGE.
(2) MOORINGS – NUMBERS, TYPE.
(3) CONDITION OF THE VESSEL – GAS FREE / INERT.
(4) SAFE ACCESS – BY LAUNCH, GANGWAY OR OTHER MEANS.
(5) NUMBER OF PERSONS INVOLVED, INCLUDING CONTRACTORS.
(6) LOCATION OF WORK TO BE UNDERTAKEN – ENGINE ROOM, CARGO SPACES, ABOVE DECK, ACCOMMODATION, ETC.
(7) FACILITIES FOR DISPOSAL OF SLOPS / SLUDGE.
(8) ARRANGEMENTS FOR PERMITS AND CERTIFICATION.
(9) UNDERSTANDING OF PORT / TERMINAL REQUIREMENTS.
(10) AVAILABILITY OF MAIN POWER / MAIN ENGINE(S).
(11) EMERGENCY PROCEDURES, ONBOARD AND ASHORE.
(12) AVAILABILITY OF ASSISTANCE E.G. FIRE FIGHTING, MEDICAL FACILITIES,ETC.
(13) CONNECTION TO SHORE SIDE SERVICES – WATER, POWER ETC.
(14) WEATHER CONDITIONS.
(15) DRAUGHT / TRIM LIMITATIONS (TO AVOID UNNECESSARY BALLAST HANDLING).
(16) RESTRICTIONS ON SMOKING AND OTHER NAKED LIGHTS.

Q.219. WHAT IS EEBD?
A.219. EMERGENCY ESCAPE BREATHING DEVICE (EEBD)
THIS IS A COMPRESSED AIR OR OXYGEN BREATHING DEVICE USED FOR ESCAPE FROM A COMPARTMENT THAT HAS A HAZARDOUS ATMOSPHERE. IT IS PRIMARILY FOR USE IN ACCORDANCE WITH THE SOLAS REQUIREMENTS FOR ESCAPE FROM MACHINERY OR ACCOMMODATION SPACES IN THE EVENT OF A FIRE.ADDITIONAL SETS SHOULD BE PROVIDED FOR USE AS EMERGENCY ESCAPE EQUIPMENT DURING ENCLOSED SPACE ENTRY. EACH SET HAS DURATION OF NOT LESS THAN 10 MINUTES. THE DEVICE CAN BE ONE OF TWO TYPES:
COMPRESSED AIR TYPE
THESE SETS CONSIST OF AN AIR BOTTLE, REDUCING VALVE, AIR HOSE, FACEMASK OR HOOD AND A FLAME RETARDANT HIGH VISIBILITY BAG OR JACKET. THEY ARE NORMALLY CONSTANT FLOW DEVICES PROVIDING COMPRESSED AIR TO THE WEARER AT A RATE OF APPROXIMATELY 40 LITRES PER MINUTE, GIVING A DURATION OF 10 (AS A MINIMUM) OR 15 MINUTES, DEPENDING ON THE CAPACITY OF THE BOTTLE. COMPRESSED AIR EEBD'S CAN NORMALLY BE RECHARGED ONBOARD WITH A CONVENTIONAL SCBA COMPRESSOR.THE PRESSURE GAUGE, SUPPLY VALVE AND HOOD SHOULD BE CHECKED BEFORE USE.

RE-BREATHING TYPE
THESE SETS NORMALLY CONSIST OF A ROBUST WATERTIGHT CARRYING CASE, COMPRESSED OXYGEN CYLINDER, BREATHING BAG, MOUTHPIECE AND A FLAME RETARDANT HOOD. THEY ARE DESIGNED FOR SINGLE USE BY THE WEARER. WHEN THE HOOD IS PLACED OVER THE USER'S HEAD AND THE SET ACTIVATED, EXHALED AIR IS MIXED WITH COMPRESSED OXYGEN INSIDE THE BREATHING BAG TO ALLOW THE WEARER TO BREATH NORMALLY WHEN ESCAPING FROM A HAZARDOUS ATMOSPHERE. EEBDS SHOULD NOT BE USED FOR FIGHTING FIRES OR FOR ENTERING OXYGEN DEFICIENT COMPARTMENTS. A SELF CONTAINED BREATHING APPARATUS, WHICH IS SPECIFICALLY SUITED FOR SUCH PURPOSES, SHOULD BE USED.

Q.220. PRECAUTION WHILE ENTERING PUMPROOM?
A.220 PUMPROOM ENTRY PROCEDURES
BEFORE ANYONE ENTERS A PUMPROOM, IT SHOULD BE THOROUGHLY VENTILATED, THE OXYGEN CONTENT OF THE ATMOSPHERE SHOULD BE VERIFIED AND THE ATMOSPHERE CHECKED FOR THE PRESENCE OF HYDROCARBONS AND ANY TOXIC GAS ASSOCIATED WITH THE CARGO BEING HANDLED. FORMAL PROCEDURES SHOULD BE IN PLACE TO CONTROL PUMPROOM ENTRY. THE PROCEDURE USED SHOULD BE BASED ON A RISK ASSESSMENT, SHOULD ENSURE THAT RISK MITIGATION MEASURES ARE FOLLOWED, AND THAT ENTRIES INTO THE SPACE ARE RECORDED. WHERE A FIXED GAS DETECTION SYSTEM IS FITTED WHICH IS CORRECTLY CALIBRATED AND PROVIDES ACTUAL GAS READINGS AS A PERCENTAGE LFL (%LFL) AT REPRESENTATIVE LOCATIONS WITHIN THE PUMPROOM, IT CAN BE USED TO PROVIDE INFORMATION FOR SAFE ENTRY INTO THE SPACE. A COMMUNICATIONS SYSTEM SHOULD PROVIDE LINKS BETWEEN THE PUMPROOM, NAVIGATION BRIDGE, ENGINE ROOM AND CARGO CONTROL ROOM. IN ADDITION, AUDIBLE AND VISUAL REPEATERS FOR ESSENTIAL ALARM SYSTEMS, SUCH AS THE GENERAL ALARM AND THE FIXED EXTINGUISHING SYSTEM ALARM, SHOULD BE PROVIDED WITHIN THE PUMPROOM. ARRANGEMENTS SHOULD BE ESTABLISHED TO ENABLE EFFECTIVE COMMUNICATION TO BE MAINTAINED AT ALL TIMES BETWEEN PERSONNEL WITHIN THE PUMPROOM AND THOSE OUTSIDE. REGULAR COMMUNICATION CHECKS SHOULD BE MADE AT PRE-AGREED INTERVALS AND FAILURE TO RESPOND SHOULD BE CAUSE TO RAISE THE ALARM. VHF/UHF COMMUNICATION SHOULD NOT BE USED AS A PRIMARY COMMUNICATION METHOD WHERE IT IS KNOWN THAT RECEPTION MAY NOT BE RELIABLE OR PRACTICABLE DUE TO NOISE. WHERE COMMUNICATION BY VHF/UHF IS DIFFICULT, IT IS RECOMMENDED THAT A STAND-BY PERSON IS POSITIONED ON THE PUMP ROOM TOP AND THAT A VISUAL AND REMOTE COMMUNICATION PROCEDURE IS PUT IN PLACE THE FREQUENCY OF PUMPROOM ENTRY FOR ROUTINE INSPECTION PURPOSES DURING CARGO OPERATIONS SHOULD BE REVIEWED WITH A VIEW TO MINIMISING PERSONNEL EXPOSURE. NOTICES SHOULD BE DISPLAYED AT THE PUMPROOM ENTRANCE PROHIBITING ENTRY WITHOUT FORMAL PERMISSION.

Q.221. SHIP SHORE SAFETY CHECK LIST AS PER ISGOTT
A.221.
1. THERE IS SAFE ACCESS BETWEEN THE SHIP AND SHORE.
2. THE SHIP IS SECURELY MOORED.
3. THE AGREED SHIP/SHORE COMMUNICATION SYSTEM IS OPERATIVE.
4. EMERGENCY TOWING-OFF PENNANTS ARE CORRECTLY RIGGED & POSITIONED.
5. THE SHIP'S FIRE HOSES AND FIREFIGHTING EQUIPMENT IS POSITIONED & READY FOR IMMEDIATE USE.
6. THE TERMINAL'S FIRE-FIGHTING EQUIPMENT IS POSITIONED & READY FOR IMMEDIATE USE.
7. THE SHIP'S CARGO AND BUNKER HOSES, PIPELINES AND MANIFOLDS ARE IN GOOD CONDITION, PROPERLY RIGGED AND APPROPRIATE FOR THE SERVICE INTENDED.
8. THE TERMINAL'S CARGO AND BUNKER HOSES/ARMS ARE IN GOOD CONDITION, PROPERLY RIGGED AND APPROPRIATE FOR THE SERVICE INTENDED.
9. THE CARGO TRANSFER SYSTEM IS SUFFICIENTLY ISOLATED & DRAINED TO ALLOW SAFE REMOVAL OF BLANK FLANGES PRIOR TO CONNECTION.
10. SCUPPERS AND 'SAVE ALLS' ON BOARD ARE EFFECTIVELY PLUGGED AND DRIP TRAYS ARE IN POSITION AND EMPTY.
11. TEMPORARILY REMOVED SCUPPER PLUGS WILL BE CONSTANTLY MONITORED.
12. SHORE SPILL CONTAINMENT AND SUMPS ARE CORRECTLY MANAGED.
13. THE SHIP'S UNUSED CARGO AND BUNKER CONNECTIONS ARE PROPERLY SECURED WITH BLANK FLANGES FULLY BOLTED.
14. THE TERMINAL'S UNUSED CARGO AND BUNKER CONNECTIONS ARE PROPERLY SECURED WITH BLANK FLANGES FULLY BOLTED.
15. ALL CARGO, BALLAST AND BUNKER TANK LIDS ARE CLOSED.
16. SEA AND OVERBOARD DISCHARGE VALVES, WHEN NOT IN USE, ARE CLOSED AND VISIBLY SECURED.
17. ALL EXTERNAL DOORS, PORTS AND WINDOWS IN THE ACCOMMODATION, STORES & MACHINERY SPACES ARE CLOSED.ENGINE ROOM VENTS MAY BE OPEN.
18. THE SHIP'S EMERGENCY FIRE CONTROL PLANS ARE LOCATED EXTERNALLY.
19. FIXED IGS PRESSURE AND OXYGEN CONTENT RECORDERS ARE WORKING.
20. ALL CARGO TANK ATMOSPHERES ARE AT POSITIVE PRESSURE WITH OXYGEN CONTENT OF 8% OR LESS BY VOLUME
21. THE SHIP IS READY TO MOVE UNDER ITS OWN POWER.
22. THERE IS AN EFFECTIVE DECK WATCH IN ATTENDANCE ON BOARD & ADEQUATE SUPERVISION OF OPERATIONS ON THE SHIP AND IN THE TERMINAL.
23. THERE ARE SUFFICIENT PERSONNEL ON BOARD AND ASHORE TO DEAL WITH AN EMERGENCY.

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24. THE PROCEDURES FOR CARGO, BUNKER AND BALLAST HANDLING HAVE BEEN AGREED
25. THE EMERGENCY SIGNAL AND SHUTDOWN PROCEDURE TO BE USED BY THE SHIP & SHORE HAVE BEEN EXPLAINED AND UNDERSTOOD
26. MATERIAL SAFETY DATA SHEETS (MSDS) FOR THE CARGO TRANSFER HAVE BEEN EXCHANGED WHERE REQUESTED.
27. THE HAZARDS ASSOCIATED WITH TOXIC SUBSTANCES IN THE CARGO BEING HANDLED HAVE BEEN IDENTIFIED AND UNDERSTOOD.
28. AN INTERNATIONAL SHORE FIRE CONNECTION HAS BEEN PROVIDED.
29. THE AGREED TANK VENTING SYSTEM WILL BE USED.
30. THE REQUIREMENTS FOR CLOSED OPERATIONS HAVE BEEN AGREED.
31. THE OPERATION OF THE P/V SYSTEM HAS BEEN VERIFIED.
32. WHERE A VAPOUR RETURN LINE IS CONNECTED, OPERATING PARAMETERS HAVE BEEN AGREED.
33. INDEPENDENT HIGH LEVEL ALARMS, IF FITTED, ARE OPERATIONAL & HAVE BEEN TESTED.
34. ADEQUATE ELECTRICAL INSULATING MEANS ARE IN PLACE IN THE SHIP/SHORE CONNECTION.
35. SHORE LINES ARE FITTED WITH A NONRETURN VALVE OR PROCEDURES TO AVOID 'BACK FILLING'HAVE BEEN DISCUSSED.
36. SMOKING ROOMS HAVE BEEN IDENTIFIED AND SMOKING REQUIREMENTS ARE BEING OBSERVED.
37. NAKED LIGHT REGULATIONS ARE BEINGOBSERVED.
38. SHIP/SHORE TELEPHONES, MOBILE PHONES AND PAGER REQUIREMENTS ARE BEING OBSERVED.
39. HAND TORCHES (FLASHLIGHTS) ARE OF AN APPROVED TYPE.
40. FIXED VHF/UHF TRANSCEIVERS AND AIS EQUIPMENT ARE ON THE CORRECT POWER MODE OR SWITCHED OFF.
41. PORTABLE VHF/UHF TRANSCEIVERS ARE OF AN APPROVED TYPE.
42. THE SHIP'S MAIN RADIO TRANSMITTER AERIALS ARE EARTHED & RADARS ARE SWITCHED OFF.
43. ELECTRIC CABLES TO PORTABLE ELECTRICAL EQUIPMENT WITHIN THE HAZARDOUS AREA ARE DISCONNECTED FROM POWER.
44. WINDOW TYPE AIR CONDITIONING UNITS ARE DISCONNECTED.
45. POSITIVE PRESSURE IS BEING MAINTAINED INSIDE THE ACCOMMODATION.
46. MEASURES HAVE BEEN TAKEN TO ENSURE SUFFICIENT MECHANICAL VENTILATION IN THE PUMP ROOM.
47. THERE IS PROVISION FOR AN EMERGENCY ESCAPE.
48. THE MAXIMUM WIND AND SWELL CRITERIA FOR OPERATIONS HAS BEEN AGREED.
49. SECURITY PROTOCOLS HAVE BEEN AGREED BETWEEN THE SHIP SECURITY OFFICER & THE PORT FACILITY SECURITY OFFICER, IF APPROPRIATE.
50. THE IGS IS FULLY OPERATIONAL AND IN GOOD WORKING ORDER.
51. DECK SEALS, OR EQUIVALENT, ARE IN GOOD WORKING ORDER.
52. LIQUID LEVELS IN PRESSURE/VACUUM BREAKERS ARE CORRECT.
53. THE FIXED AND PORTABLE OXYGEN ANALYSERS HAVE BEEN CALIBRATED AND ARE WORKING PROPERLY.
54. ALL THE INDIVIDUAL TANK IGS VALVES (IF FITTED) ARE CORRECTLY SET AND LOCKED.
55. ALL PERSONNEL IN CHARGE OF CARGO OPERATIONS ARE AWARE THAT IN THE CASE OF FAILURE OF THE INERT GAS PLANT, DISCHARGE OPERATIONS SHOULD CEASE, AND THE TERMINAL IS ADVISED.
56. THE PRE-ARRIVAL COW CHECKLIST, AS CONTAINED IN THE APPROVED COW MANUAL, HAS BEEN SATISFACTORILY COMPLETED.
57. THE COW CHECK LISTS FOR USE BEFORE, DURING AND AFTER COW, AS CONTAINED IN THE APPROVED COW MANUAL, ARE AVAILABLE & BEING USED.
58. TANK CLEANING OPERATIONS ARE PLANNED DURING THE SHIP'S STAY ALONGSIDE THE SHORE INSTALLATION.
59. IF 'YES' THE PROCEDURES AND APPROVALS FOR TANK CLEANING HAVE BEEN AGREED.
60. PERMISSION HAS BEEN GRANTED FOR GAS FREEING OPERATIONS.

Q.222. UNDER THE DECK LABOUR REGULATIONS, WHAT IS THE POWER OF THE INSPECTORS?

A.222. POWER OF INSPECTORS:

(1) AN INSPECTOR MAY ENTER ANY DOCK OR VESSEL, WHERE DOCK WORKERS ARE EMPLOYED, WITH SUCH ASSISTANCE AS HE THINKS FIT
(2) HE CAN INSPECT, EXAMINE, ANY BUILDING, PLANT, MACHINERY, APPLIANCE OR EQUIPMENT UESD IN CONNECTION WITH THE LOADING, UNLOADING, MOVEMENTS OR STORAGES OF CARGOES
(3) HE CAN EXAMINE ANY REGISTER OR OTHER DOCUMENT RELATING TO THE EMPLOYMENT OF DOCK WORKERS
(4) HE CAN TAKE ON THE SPOT OR OTHERWISE THE STATEMENTS OF ANY PERSONS OR HOLD ENQUIRIES WHICH MAY CONSIDER NECESSARY.
(5) THE PORT AUTHORITIES, THE EMPLOYERS OF DOCK WORKERS & OWNER OF MACHINERY OR PLANT SHALL AFFERED ALL RESONABLE FACILITIES TO THE INSPECTOR FOR ENTRY, INSPECTION, EXAMINATION OR ENQUIRY.

OR

POWER OF INSPECTORS:

(1) HE CAN ENTER A SHIP/DOCK ETC FOR EXAMINATION
(2) HE CAN TAKE COPIES OF TEST CERTIFICATES OF LOADING & UNLOADING GEARS, WIRE ETC

(3) HE CAN TAKE PHOTOGRAPHS OF CERTIFICATES, EQUIPMENTS, ETC
(4) HE CAN HOLD AN EQUIRY, AFTER RECEIVING COMPLAINTS ETC
(5) HE CAN STOP THE CARGO WORK, IF CONDITIONS ARE DANGEROUS TO LIFE, SAFETY OR HEALTH OF DOCK WORKERS, UNTIL THE DEFECTS ARE RECTIFIED
(6) HE CAN MEDICALLY EXAMINED THE CREW
(7) HE CAN ISSUE THE CEASE NOTICES

Q.223. DEFINE AUTHORISED PERSON, COMPETENT PERSON, AND RESPONSIBLE PERSON?
A.223. AUTHORISED PERSON: MEANS A PERSON AUTHORISED BY EMPLOYER, MASTER OF SHIP OR A RESPONSIBLE PERSON TO UNDERTAKE A SPECIFIC TASK OR TASKS & WHO POSSESSES TO NECESSARY TECHNICAL KNOWLEDGE & EXPERIENCE TO UNDERTAKE THAT TASK

COMPETENT PERSON: MEANS A PERSON BELONGING TO A TESTING ESTABLISHMENT WHICH IS APPROVED BY CHIEF INSPECTOR, FOR THE PURPOSE OF TESTING, EXAMINATION, ANNEALING & CERTIFICATE OF LIFTING APPLIANCES,LOOSE GEAR,WIRE ROPE & INCLUDES PERSON RECOGNISED UNDER SIMILAR REGULATION ABROAD. Eg.TESTING,AUDITS

RESPONSIBLE PERSON: MEANS A PERSON APPOINTED BY THE EMPLOYER, MASTER OF THE SHIP OR THE OWNER OF GEAR OR PORT AUTHORITY AS THE CASE MAY BE, TO BE, RESPONSIBLE FOR THE PERFORMANCE OF A SPECIFIC DUTY OR DUTIES & WHO HAS SUFFICIENT KNOWLEDGE & EXPERIENCE & REQUISITE AUTHORITY FOR THE PROPER PERFORMANCE OF HIS DUTIES

Q.224. EXPLAIN THE FOLLOWINGS?
A.224. SCRUBBERS: THE PURPOSE OF THE SCRUBBER IS TO COOL THE FLUE GAS & REMOVE MOST OF THE SULPHUR DIOXIDE & PARTICULATE SOOT.ALL THREE ACTIONS ARE ACHIVED BY DIRECT CONTACT BETWEEN THE FLUE GAS & LARGE QUANTITIES OF SEA WATER.

INERT GAS BLOWER: BLOWER ARE USED TO DELIVER THE SCRUBBED FLUE GAS TO THE CARGO TANKS.REQUIRES THAT ATLEAST TWO BLOWER SHALL BE PROVIDED WHICH TOGETHER SHALL BE CAPABLE OF DELIVERING INERT GAS TO THE CARGO TANKS AT A RATE OF AT LEAST 125% OF THE MAXIMUM RATE OF DISCHARGE CAPACITY OF THE SHIP EXPRESSES AS A VOLUME

DECK SEAL: THIS IS THE PRINCIPAL BARRIER A WATER TRAP IS FITTED WHICH PERMITS INERT GAS TO BE DELIVERED TO THE DECK MAIN BUT PREVENT ANY BACKFLOW OF CARGO GAS EVEN WHEN THE IG PLANT IS SHUT DOWN (1) WET TYPE (2) SEMI-DRY TYPE (3) DRY TYPE

WET TYPE: THIS IS THE SIMPLEST TYPE OF WATER SEAL. THE DRAWBACK OF THIS TYPE OF WATER SEAL IS THAT WATER DROPLETS MAY BE CARRIED OVER WITH THE INERT GAS WHICH ALTHOUGH IT DOES NOT IMPAIR THE QUALITY OF THE INERT GAS COULD INCREASES CORROSION.A DEMISTER SHOULD THERE FORE BE FITTED IN THE GAS OUTLET FROM THE WATER SEAL TO REDUCE ANY CARRY OVER

SEMI-DRY TYPE: INSTEAD OF BUBBLING THROUGH THE WATER TRAP THE INERT GAS FLOW DRAWS THE SEALING WATER INTO A SEPARATE HOLDING CHAMBER BY VENTURI ACTION THUS AVOIDING OR AT LEAST REDUCING THE AMOUNT OF WATER DROPLETS BEING CARRIED OVER.OTHERWISE IT'S FUNCTIONALLY THE SAME AS WET TYPE

DRY TYPE: IN THIS TYPE THE WATER IS DRAINED WHEN THE INERT GAS IS IN OPERATION & FILLED WITH WATER WHEN THE INERT GAS PLANT IS EITHER SHUT DOWN OR THE TANK PRESSURE EXCEEDS THE INERT GAS BLOWER DISCHARGE PRESSURE.FILLING & DRAINGE ARE PERFORMED BY AUTOMATICALLY OPERATED VALVE CONTROLLED BY THE LEVELS IN THE WATER SEAL & DROP TANKS & BY THE OPERATING STATE OF THE BLOWERS. THE ADVANTAGE OF THIS TYPE IS THAT WATER CARRY OVER IS PREVENTED. THE MAJOR DRAWBACK COULD BE THE RISK OF FAILURE OF THE AUTOMATICALLY CONTROLLED VALVE.

Q.225. WHAT IS THE PROCEDURES FOR LOADING/DISCHARGING CARGO IN TANKERS?
A.225. THE PROCEDURES FOR LOADING:
(1) BEFORE THE TANKER ARRIVES AT THE BERTH AN EXCHANGE OF INFORMATION TAKES PLACE BETWEEN THE PORT & TERMINAL AUTHORITIES & THE SHIP REGARDING
   (a) PARTICULARS OF THE SHIP, DRAFT & TRIM.
   (b) ANY DEFECTS IN HULL, MACHINERY OR EQUIPMENT.
   (c) BERTHING ARRANGEMENTS, TUGS, MAXIMUM DRAFT AT BERTH, ETC.
   (d) STATE OF THE CARGO TANKS, WHETHER INERTED, WASHED, ETC. & THE OXYGEN CONCENTRATION IN THE TANKS.
   (e) SHIP'S MANIFOLD DETAILS, INCLUDING SIZE, LOCATION, NUMBER, TYPE & MATERIAL OF THE CONNECTIONS.
   (f) ANY REQUIREMENTS FOR TANK CLEANING, DISPOSAL OF SLOPS & OR OILY BALLAST RESIDUES
(2) AFTER THE SHIP IS BERTHED THE TERMINAL REPRESENTATIVE APPRAISES THE CHIEF OFFICER OF THE FOLLOWING
   (a) SPECIFICATION OF THE CARGO TO BE LOADED & ANY OTHER CHARACTERISTICS REQUIRING SPECIAL ATTENTION.

(b) QUANTITY OF THE CARGO TO BE LOADED & THE LOADING SEQUENCE
(c) NUMBER & SIZES OF THE HOSES OR ARMS AVAILABLE & THE MANIFOLD CONNECTIONS REQUIRED FOR EACH PRODUCT OR GARDE OF CARGO
(d) THE MAXIMUM SHORE PUMPING RATE, TOPPING OFF RATE & THE PRESSURE AVAILABLE AT THE MANIFOLD
(e) ESTABLISHMENT OF AN EFFICIENT COMMUNICATION SYSTEM WITH SIGNALS FOR EMERGENCY STOP & THE STANDBY TIME REQUIRED FOR NORMAL PUMP STOPPING

(3) THE CHIEF OFFICER INFORMS THE TERMINAL REPRESENTATIVE OF ANY LIMITATIONS WHICH MAY REQUIRE ADJUSTMENTS TO BE MADE TO THE LOADING OPERATION
(4) ON THE BASIS OF ~~THE BASIS OF~~ ABOVE EXCHANGED INFORMATION, AN OPERATIONAL AGREEMENT IN WRITING IS MADE BETWEEN A RESPONSIBLE SHIP'S OFFICER & THE TERMINAL REPRESENTATIVE
(5) A CARGO SURVEYOR OR INSPECTOR MAY BOARD THE VESSEL TO INSPECT THE SHIP'S TANK PRIOR TO LOADING.
(6) THE PIPELINES ARE NOW SET TO RECEIVE THE CARGO IN THE APPROPRIATE TANKS. THE VALVE POSITION MUST BE CHECKED BY THE DUTY OFFICER NOT ONLY FROM THE INDICATOR IN THE CARGO CONTROL ROOM BUT ALSO BY PHYSICAL VERIFICATION.DIRECT LOADING IS ACRRIED OUT BY PASSING THE PUMPROOM
(7) THE GAS RELIEF ARE SET UP BY SHUTTING THE BYPASS VALVES & CHECKING THAT THE PV VALVE & PV BREAKER ARE SET TO OPERATE AT THE CORRECT PRESSURE
(8) CARGO IS STARTED AT A SLOW RATE TO ENSURE THAT IT IS GOING INTO THE CORRECT TANK & TO REDUCE THE BUILD UP OF A STATIC CHARGE
(9) GANGWAY & MOORING MUST BE CONSTANTLY TENDED TO, ~~TO~~ PREVENT THE SHIP FROM SURGING OR RANGING WHICH MAY CAUSE THE HOSE TO RUPTURE
(10) AS THE CARGO IS BEING LOADED,SAMPLES OF THE CARGO,ITS TEMPERATURE & RELATIVE DENSITY IS TAKEN TO DETERMINE THE FINAL ULLAGE
(11) WHEN THE FINAL TANK IS BEING LOADED, THE PUMPING RATE FROM ASHORE IS FIRST REDUCED & FINALLY STOPPED WHEN THE REQUIRED ULLAGE IS ATTAINED.
(12) THE PIPE LINE IS EMPTIED INTO THE TANK BY BLOWING THROUGH WITH COMPRESSED AIR OR INERT GAS
(13) THE MANIFOLD VALVE IS CLOSED.FINAL ULLAGE,TEMPERATURE & RELATIVE DENSITY VALUES ARE TAKEN,QUANTITIES ARE DETERMINED & DOCUMENTS SIGNED
(14) OTHER VALVES,ULLAGE OPENINGS,ETC. ARE SECURELY CLOSED,PV VALVES ARE RESET,PIPELINE IS DISCONNECTED,OIL SPILLS ARE CLEANED UP & SHIP PREPARED FOR SAILING

WHILE DISCHARGING:
(15) THE INERT GAS SYSTEM MUST BE ABLE TO COPE UP WITH LARGE DEMAND, OTHERWISE DISCHARGE MAY HAVE TO BE SLOWED DOWN OR STOPPED
(16) EMERGENCY SHUT DOWN PROCEDURES MUST BE DECIDED & REMOTE OPERATED SWITCHES FOR CARGO PUMP SHUT DOWN TRIED OUT

Q.226. WHAT PRECAUTION YOU WILL TAKE WHILE LOADING & DISCHARGING THE CARGO IN TANKERS?
A.226. PRECAUTION WHILE LOADING & DISCHARGING THE CARGO IN TANKERS:
(1) SMOKING IS TO BE PERMITTED ONLY AT TIMES & IN PLACE DESIGNATED BY THE MASTER
(2) NAKED LIGHTS SHOULD NOT BE PERMITTED ON THE TANK DECK
(3) ALL FLASHLIGHTS & OTHER PORTABLE EQUIPMENT SHOULD BE APPROVED BY A COMPETENT AUTHORITY FOR SAFE USE IN A FLAMMABLE ATMOSPHERE
(4) NOTICES AGAINST SMOKING & THE USE OF NAKED LIGHTS SHOULD BE PROMINENTLY DISPLAYED
(5) FIXED ELECTRICAL EQUIPMENT MUST BE PROPERLY MAINTAINED SO THAT IT OR ITS WIRING DOES NOT BECOME A SOURCE OF IGNITION
(6) UHF/VHF TRANSCEIVER SHOULD BE INTRINSICALLY SAFE
(7) WIRELESS TRANSMISSION OF MEDIUM OR HIGH FREQUENCY CAN INDUCE AN ELECTRICAL POTENTIAL IN DERRICKS,MASTS,STAYS,METAL POSTS,ETC. SO THESE SHOULD BE SEFICIENTLY EARTHED
(8) RADAR, TELEPHONES & CLOSED CIRCUIT TELEVISION SHOULD NOT BE OPERATED IF THE SHIP IS IN A HAZARDOUS ZONE WHERE AN ELECTRICAL POTENTIAL CAN BE INDUCED IN SHORE CONDUCTORS
(9) BEFORE ANY CHIPPING,HAMMERING OR ANY OTHER HOT WORK IS CARRIED OUT OR ANY POWER TOOL IS USED OUTSIDE THE ENGINE ROOM OR ACCOMMODATION, THE OFFICER SHOULD ENSURE THAT A HOT WORK CERTIFICATE IS OBTAINED & THE SPACE REMAINS GAS FREE THROUGHOUT THE WORK PERIOD
(10) BEFORE ENTERING THE PUMPROOM WHENEVER IT MUST BE THOROUGH & EFFICIENT VENTILATION MUST BE CARRIED OUT
(11) ENTRY INTO PUMPROOM IS ONLY PERMITTED WHEN THE EXTRACTOR OR BLOWER FANS ARE RUNNING & EXTRACTING AIR RIGHT FROM THE BOTTOM OF THE PUMPROOM
(12) A ~~BERTHING~~ Breathing APPARATUS SET SHOULD BE RIGGED READY & EASILY ACCESSIBLE
(13) ALL DOORS,PORTHOLES & OTHER OPENINGS INTO THE ACCOMODATION & ENGINE ROOM MUST BE KEPT SHUT
(14) VENTILATION OR AIR CONDITIONING UNITS MUST BE PUT ON RECIRCULATION
(15) ALUMINIUM EQUIPMENT LIKE GANGWAYS,PORTABLE LADDERS,ETC. WHEN DRAGGED ON DECK LEAVES A SMEAR WHICH,IF SUBSEQUENTLY STRUCK,CAN GIVE RISE TO AN INCENDIVE SPARK.ONLY ZINC ANODES ARE PERMITTED IN OIL TANKERS

(16) CLOTH,WOOD & OTHER MATERIALS,WHEN STAINED WITH OIL,ESPECIALLY VEGETABLE OIL,GRADUALLY HEAT UP & CAN IGNITE BY SPONTANEOUS COMBUSTION.SUCH MATERIALS SHOULD NOT BE STORED NEAR OIL,PAINT OR CHEMICALS OR BE LYING AROUND.
(17) FIRE FIGHTING EQUIPMENT MUST BE KEPT IN CONSTANT READINESS
(18) PORTABLE FIRE EXTINGUISHERS MUST BE KEPT STANDBY AT THE MANIFOLD
(19) FUNNEL UPTAKES,INERT GAS UPTAKES & BOILER TUBES MUST ONLY BE BLOWN BEFORE ARRIVAL AT OR AFTER DEPARTURE FROM PORT
(20) SPARK ARRESTORS MUST BE IN GOOD CONDITION,OIL SPILLS CLEANED & A HIGH STANDARD OF PERSONAL SAFETY & HYGIENE MAINTAINED
(21) IN THE GALLEY, ONLY STOVES WITH AN INTERNAL HEATING ELEMENT SHOULD BE USED & THESE TOO MUST BE SHUT DOWN IF STERN LOADING IS IN PROGRESS
(22) EMERGENCY TOWING WIRES MUST BE MADE FAST TO THE OFFSHORE BOLLARDS WITH SUFFICIENT SLACK & SUSPENDED ABOUT A METRE ABOVE THE WATER.
(23) MAIN ENGINES MUST BE AVAILABLE AT SHORT NOTICE
(24) INTERNATIONAL CODE OF SIGNAL 'B' FLAG BY DAY & ONE ALL ROUND RED LIGHT BY NIGHT IS TO BE CONTINUOUSLY DISPLAYED
(25) SCUPPERS & OVERBOARD DISCHARGES SHOULD BE PLUGGED
(26) OIL CONTAINING & DISPERSING EQUIPMENT KEPT READY & ALL OTHER POLLUTION PREVENTION MEASURES TAKEN

Q.227. CRUDE OIL WASHING (COW)
A.227. WASHING THE TANKS WITH CRUDE OIL HAS BEEN FOUND TO BE ADVANTAGEOUS IN SEVERAL WAYS.CRUDE OIL STIRS,AGITATES & DISPERSES SLUDGE & SEDIMENT,HOLDING IT IN SUSPENTION & CARRYING IT OUT DURING DISCHARGE.SLUDGE DEPOSITS REDUCE EFFICIENT DRAINAGE RESULTING IN PROLONGED STRIPPING OPERATIONS.IT ALSO LOWERS THE SHIP'S CARRYING CAPACITY CAUSIING LOSS IN EARNING,PROLONGS WATER WASHING,DIRTIES CLEAN BALLAST & CAUSE POCKETS OF CH GAS TO FORM,THUS IMPEDING GAS FREEING TANKS.COW SAVES TIME & EXPENSES IN TANK CLEANING & ALSO IMPROVES THE OUT TURN OF CARGO.POLLUTION RISKS ARE REDUCED,SO IS CORROSION OF PIPES & PLATING & CONTAMINATION OF CARGO BY SEA WATER.
COW IS CARRIED OUT USING FIXED MACHINES WITH ONE OR TWO NOZZLES.THE NOZZLES CAN ROTATE IN THE VERTICAL & HORIZONTAL PLANE & THE MACHINE CAN BE PROGRAMMED TO WASH SECTIONS OF THE TANKS AS THE CARGO IS DISCHARGED.
TANKS MUST BE ALWAYS BE INERTED DURING COW. WATER WASHING IS ALSO TO BE CARRIED OUT IF CARRYING A CLEANER OIL ON THE NEXT VOYAGE OR BALLAST OR FOR MAN ENTRY

Q.228. HOW WILL YOU PREPARE A TANK FOR NEXT PARCEL?
A.228. PREPRATION OF TANK FOR NEXT PARCEL:
PRE-CLEANING: DURING PRE-CLEANING, THE BUTTER WORTH MACHINES SHOULD BE MOVES FREQUENTLY, VERTICALLY AS WELL AS HORIZONTALLY AROUND THE TANKS IN ORDER TO COVER THE ENTIRE SURFACE

CLEANING: CLEANING IS CARRIED OUT WITH THE HELP OF WATER OR WATER & DETERGENT. IN MOST CASES A DETERGENT LIKE TEEPOL WITH 0.05% CONCENTRATION IS THE RECOMMANDATION. BUTTER WORTH MACHINES WITH COLD OR WARM WATER SHOULD BE USED FOR THESE, BUT NOT TOO HOT WATER TO BE USED, OTHERWISE APPLIED SOLVENT WILL EVAPORATE. THE MACHINES MUST BE OPERATED FROM THE DECK & MUST BE LOWERED DOWN INTO THE TANK AT RECURRING INTERVAL, IN ORDER TO OBTAINED AN EFFECTIVE CLEANING THROUGH OUT THE TANK.
FROM THIS TANK THE SOLUTION HAS TO BE PUMPED BACK IN TO THE STORAGE TANK OR IN THE SLOP TANK BY MEANS OF THE CARGO PUMP.THROUGH OUT THE CLEANING OPERATION THE TANK BOTTOM HAS TO BE KEPT AS DRY AS POSSIBLE BY CONSTANT PUMPING,
THE CLEANING SOLUTION CAN BE USED TWO OR THREE TIMES IF LITE PETRO-CHEMICAL PRODUCTS ARE TO BE REMOVED. HOWEVER, PRECAUTION TO BE TAKEN IN ORDER TO PREVENT BUILD UP OF STATIC ELECTRIC CHARGES. WHEN PLAIN WATER IS USED AS A CLEANING AGENT, THE CLEANING OPERATION IS BASED ON SOLUBILITY OF PRODUCT IN THE WATER, IN THIS CASE IT IS NOT RECOMMENDED TO USE RECIRCULATION, BECAUSE THE WATER MAY BE SATURATED WITH THE PRODUCTS

RINSING: DIRECTLY AFTER THE CLEANING OPERATION, THE TANK SHOULD BE RINSE WITH HOT OR COLD WATER BY USING BUTTER WORTH MACHINES. IT IS MOST IMPORTANT THAT THE CLEANING SOLUTION SHOULD NOT BE ALLOWED TO DRY AS THESE WILL HINDER,THE RINSING SHOULD NORMALLY CONTINUE FOR ABOUT 2 HOURS OR UNTIL NO RESIDUE CAN BE FOUND IN THE TANK

FLUSHING: THE TANK IS THOROUGHLY WASHED WITH FRESH WATER. THE WATER IS PUMPED FROM THE STORAGE TANK THROUGH A 2 INCH FLEXIBLE HOSE WITH NOZZLE. THE WATER IS SPRAY ON TANKTOP, BULKHEAD & TANK BOTTOM

DRAINING: TANK LINE & PUMP ARE DRAIN CAREFULLY. ALL PLUGS SHOULD BE REMOVED. BLOWING WITH COMPRESSED AIR MAY BE VERY HELPFUL. AN EJECTOR MAY BE USE TO REMOVE ANY QUANTITY OF WATER ON BOTTOM OF THE TANK.

GAS FREEING:

DRYING: AFTER EVACULATION OF THE TANK ATMOSPHERE, SHIPS CREW ARE SENT DOWN IN THE CARGO TANK TO MOPPING & DRYING THE CARGO TANK

WALL WASH: AFTER THE TANK IS DRY & IF THERE IS LOADING OF SENSATIVE CARGO, THEN THE SURVEYOR ENTER IN THE CARGO TANK & POURS A SOLUTION OF METHANOL ON A BULKHEAD & COLLECT THE SAME SAMPLE & SENTS TO THE LAB & IT IS ANNALYSED FOR PREVIOUS CARGO RESIDUE & SALT. IF THE RESULT FOUND IS OK THAN THE TANK IS READY FOR NEXT PARCEL

Q.229. AS PER GRAIN REGULATION, WHAT ARE THE VARIOUS METHODS OF LASHING & SECURING A GRAIN IN A PRTLY & INFILLED COMPARTMENT OF A GENERAL CARGO VESSEL?

A.229. SECURING CAN BE CARRIED OUT BY THE FOLLOWING METHIDS:

IN FILLED COMPARTMENT:
(1) LONGITUDINAL DIVISIONS
(2) SAUCERING
(3) BUNDLING

IN PARTLY FILLED COMPARTMENT:
(1) LONGITUDINAL DIVISIONS
(2) OVER STOWING
(3) STRAPPING OR LASHING
(4) SECURING WITH WIRE

Q.230. WHAT IS LONGITUDINAL DIVISIONS?

A.230. IT IS A METHOD OF LASHING GRAIN, TO REDUCE THE ADVERSE HEELING EFFECT OF A GRAIN SHIFT.
(1) THE DIVISION MUST BE GRAIN TIGHT
(2) THE CONSTRUCTION MUST MEETS THE REQUIREMENTS OF A11,A12 & A13 OF INTERNATIONAL GRAIN CODE
(3) IN TWEEN DECK THE DIVISIONS EXTENDS FROM DECK TO DECK & IN OTHER CARGO SPACE THE DIVISION EXTENDS DOWNWARDS FROM THE UNDERSIDE OF THE DECK OR HATCH COVERS AS DESCRIBED IN B2 8.2(2), B2 9.2 (3) OR B5.2

B2 8.2(2): THE LONGITUDINAL DIVISION SHALL EXTEND TO AT LEAST 0.6m BELOW THE LOWEST POINT OF A DECK OR HATCH SIDE GIRDER OR THE LOWEST POINT OF A VOID SPACE FORMED BY AN ASSUMED SHIFT OF GARIN, WHICH EVER GIVES THE GREATER DEPTH.

B2 9.2(3) : THE CENTRELINE DIVISION SHALL EXTEND TO AT LEAST 0.6m BELOW THE LOWEST POINT OF A DECK OR HATCH SIDE GIRDER OR THE LOWEST POINT OF A VOID SPACE FORMED BY AN ASSUMED SHIFT OF GRAIN, WHICH EVER GIVES THE GREATER DEPTH

B5.2: IN A PARTLY FILLED COMPARTMENT, A DIVISION IF FITTED SHALL EXTENED FROM ONE EIGHTH OF THE MAXIMUM BREADTH OF THE COMPARTMENT ABOVE THE LEVEL OF THE GARIAN SURFACE & TO THE SAME DISTANCE BELOW THE GARIN SURFACE

Q.231. WHAT IS SAUCER OR SAUCERING & HOW YOU WILL CARRIED OUT?

A.231. IT IS A METHOD OF LASHING GRAIN, TO REDUCE THE ADVERSE HEELING EFFECT OF A GRAIN SHIFT. A SAUCER MAY BE USED INPLACE OF A LONGITUDINAL DIVISION IN WAY OF A HATCH OPENING IN FILLED COMPARTMENT BUT NOT FOR LINSEED OR OTHER SEED HAVING SIMILAR PROPERTIES.THE DEPTH OF THE SAUCER, MEASURED FROM THE BOTTOM OF THE SAUCER TO THE DECKLINE, SHALL BE AS FOLLOWS
(1) FOR SHIPS WITH A MOULDED BREADTH OF UP TO 9.1m,DEPTH OF THE SAUCER IS NOT LESS THAN 1.2m
(2) FOR SHIPS WITH A MOULDED BREADTH OF 18.3m OR MORE,DEPTH OF THE SAUCER IS NOT LESS THAN 1.8m
(3) FOR SHIPS WITH A MOULDED BREADTH BETWEEN 9.1m & 18.3m, THE MINIMUM DEPTH OF THE SAUCER SHALL BE CALCULATED BY INTERPOLATION

THE SAUCER IS LINED WITH SEPARATION CLOTH OR ITS EQUIVALENT. IT IS THAN COMPLETELY FILLED WITH BAGGED GRAIN OR OTHER SUITABLE CARGO UPTO THE UNDERSIDE OF THE HATCH COVER.THE BAGS SHOULD BE STOWED TIGHTLY AGAINST THE ADJOINING STRUCTURE WHICH MAY INCLUDE THE HATCH COAMING & HATCH SIDE GIRDER SHOULD EXTEND FOR ATLEAST HALF THE DEPTH OF THE SAUCER, OTHERWISE THE SAUCER MUST BE SECURED IN POSITION BY STEELWIRE ROPE, CHAIN OR DOUBLE STEEL STRAPPING & SPACED NOT MORE THAN 2.4m APART

Q.232. WHAT IS BUNDLING OF GARIN CARGO?

A.233. AS AN ALTERNATIVE TO FILLING THE SAUCER IN A FILLED TRIMMED COMPARTMENT WITH BAGGED GRAIN OR OTHER SUITABLE CARGO, A BUNDLE OF BULK GARIN MAY BE USED DEPTH OF THE SAUCER MEASURED FROM THE BOTTOM OF THE SAUCER TO THE DECKLINE, SHALL BE AS FOLLOW
(1) FOR SHIPS WITH A MOULDED BREADTH OF UP TO 9.1m DEPTH OF THE SAUCER IS NOT LESS THAN 1.2m
(2) FOR SHIPS WITH A MOULDED BREADTH OF 18.3m OR MORE,DEPTH OF THE SAUCER IS NOT LESS THAN 1.8m

(3) FOR SHIPS WITH A MOULDED BREADTH BETWEEN 9.1m & 18.3m, THE MINIMUM DEPTH OF THE SAUCER SHALL BE CALCULATED BY INTERPOLATION

INSTEAD OF USING SEPARATION CLOTH OR ITS EQUIVALENT, A STRONGER MATERIAL HAS TO BE USED.THERE ARE TWO ALTERNATIVES FOR THE MATERIALS

(1) MATERIAL HAVING A TENSILE STRENGTH OF NOT LESS THAN 2687N (≈270 KGS) PER 5cm STRIP MAY BE USED WITHOUT LASHING
(2) MATERIAL HAVING A TENSILE STRENGTH OF NOT LESS THAN 1344N(≈135KGS) PER 5cm STRIP MAY BE WITH LASHING

IN BOTH CASES, THE MATERIAL SHOULD BE PROVIDED WITH MEANS FOR SECURING AT THE TOP. IF MORE THAN ONE SHEET OF MATERIAL IS USED TO LINE THE SAUCER, THEY SHALL BE JOINED EITHER BY SEWING OR BY A DOUBLE LAP.
IF LASHING IS TO BE CARRIED OUT, THE WIRES FOR LASHING THE BUNDLE & SECURING IT IN POSITION ARE FIRST TO BE LAID DOWN IN THE SAUCER. NEXT DUNNAGE IS PLACED OVER THE WIRES TO PREVENT CHAFING OF THE MATERIAL WHEN THE WIRES ARE DRAWN TIGHT. THE MATERIAL IS NOW LAID OVER THE DUNNAGE & FILLED WITH BULK GRAIN UPTO THE TOP OF THE HATCH OPENING. IT IS THAN DRAWN OVER THE BULK GRAIN & SECURED AT THE TOP AFTER LAPPING

Q.233. EXPLAIN OVER STOWING ARRANGEMENT AS PER GARIN CODE?
A.233. WHERE BAGGED GRAIN OR OTHER SUITABLE CARGO IS UTILIZED FOR THE PURPOSE OF SECURING PARTLY FILLED COMPARTMENTS

(1) THE FREE GARIN SURFACE SHALL BE LEVEL & SHALL BE COVERED WITH A SEPEREARATION CLOTH OR EQUIVALENT OR BY A SUITABLE PLATFORM.SUCH PLATFORM SHALL CONSIST OF BEARERS SPACED NOT MORE THAN 1.2m APART & 25mm BOARDS LAID THERE ON.SPACED NOT MORE THAN 100mm APART.PLATFORM MAY BE CONSTRUCTED OF OTHER MATERIALS PROVIDED THEY ARE DEEMED BY THE ADMINISTRATION TO BE EQUIVALENT.
(2) THE PLATFORM OR SEPARATION CLOTH SHALL BE TOPPED OFF WITH BAGGED GARIN TIGHTLY STOWED & EXTENDING TO A HEIGHT OF NOT LESS THAN ONE SIXTEENTH OF THE MAXIMUM BREADTH OF THE FREE GRAIN SURFACE OR 1.2m, WHICHEVER IS THE GREATER
(3) THE BAGGED GRAIN SHALL BE CARRIED IN SOUND BAGS WHICH SHALL BE WELL FILLED & SECURELY CLOSED
(4) INSTEAD OF BAGGED GRAIN, OTHER SUITABLE CARGO TIGHTLY STOWED & EXERTING AT LEAST THE SAME PRESSURE AS BAGGED GRAIN STOWED MAY BE USED

Q.234. HOW WILL YOU DO THE STRAPPING OR LASHING AS PER GARIN CODE?
A.234. FOR THE PURPOSE OF REDUCING GRAIN HEELING MOMENTS IN PARTLY FILLED COMPARTMENTS, STRAPPING OR LASHING IS UTILIZED

(1) PRIOR TO THE COMPLETION OF LOADING THE LASHING SHALL BE POSITIVELY ATTACHED TO THE FRAMING AT A POINT APPROXIMATELY 450mm BELOW THE ANTICIPATED FINAL GRAIN SURFACE BY MEANS OF EITHER A 25mm SHACKLE OR BEAM CLAMP OF EQUIVALENT STRENGTH
(2) AFTER COMPLETION OF LOADING THE GRAIN SHALL BE TRIMMED & LEVELLED TO THE EXTENT THAT IT IS VERY SLIGHTLY CROWNED & COVERED WITH BURLAP SEPARATION CLOTHS, TARPAULINS OR THE EQUIVALENT. THE SEPARATION CLOTHS & OR TARPAULINS SHALL OVERLAP BY AT LEAST 1.8m
(3) TWO SOLID FLOORS OF DUNNAGE (25mm×150mm TO 300mm) SHALL BE LAID ONE ON TOP OF THE OTHER & NAILED TOGETHER. THE BOTTOM LAYER IS ALWAYS TO BE LAID ATHWARTSHIPS & THE TOP LAYER LONGITUDINALLY (F&A DIRECTION) BACAUSE THE LASHIING RUN ATHWARTHSHIPS.ALTERNATIVELY, ONE SOLID FLOOR OF 50mm LUMBER NAILED OVER 50mm×150mm BEARERS SPACED 2.4m WIDE & EXTENDING THE FULL BREADTH OF THE COMPARTMENT MAY BE USED. OTHER ARRANGEMENTS & MATERIALS DEEMED EQUIVALENT BY THE ADMINISTRATION MAY ALSO BE ACCEPTED
(4) STEEL WIRE ROPE (19mm DIA·OR EQUIVALENT), DOUBLE STEEL STRAPPING (50mm×1.3mm & HAVING A BREAKING LOAD OF ATLEAST 49KN), OR CHAIN OF EQUIVALENT STRENGTH, EACH OF WHICH SHALL BE SET TIGHTLY BY MEANS OF A 32mm TURNBUCKLE, MAY BE USED FOR LASHING. A WINCH TIGHTNER,USED IN CONJUNCTION WITH A LOCKING ARM, MAY BE SUBSTITUTED FOR THE 32mm TURNBUCKLE WHEN STEEL STRAPPING IS USED, PROVIDED SUITABLE WRENCHES ARE AVAILABLE FOR SETTING UP AS NECESSARY.WHEN STEEL STRAPPING IS USED, NOT LESS THAN THREE CRIMP SEALS SHALL BE USED FOR SECURING THE ENDS.WHEN WIRE IS USED, NOT LESS THAN FOUR CLIPS SHALL BE USED FOR FOMING EYES IN THE LASHINGS
(5) THE LASHING SHALL BE SPACED NOT MORE THAN 2.4m APART & EACH SHALL BE SUPPORTED BY A BEARER NAILED OVER THE TOP OF THE FORE & AFT FLOOR.THIS BEARER SHALL CONSIST OF LUMBER OF NOT LESS THAN 25mm×150mm OR ITS EQUIVALENT & SHALL EXTEND THE FULL BREADTH OF THE COMPARTMENT
(6) DURING THE VOYAGE THE STRAPPING SHALL BE REGULARLY INSPECTED & SET UP WHERE NECESSARY

Q.235. HOW WILL YOU DO THE SECURING WITH WIRE MESH AS PER GRAIN CODE?
A.235. FOR THE PURPOSE OF REDUCING GRAIN HEELING MOMENTS IN PARTLY FILLED COMPARTMENTS, STRAPPING OR LASHING IS UTILIZED EXCEPT THAT INSTEAD OF WOOD, WIRE MESH IS USED

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(1) PRIOR TO THE COMPLETION OF THE LOADING, EACH LASHING SHALL BE POSITIVELY ATTACHED TO THE FRAMING AT A POINT APPOXIMATELY 450mm BELOW THE ANTICIPTED FINAL GRAIN SURFACE BY MAENS OF EITHER A 25mm SHACKLE OR BEAM CLAMP OR EQUIVALENT STRENGTH
(2) THE GRAIN SHALL BE TRIMMED & LEVELLED TO THE EXTENT THAT IT IS VERY SLIGHTLY CROWNED ALONG THE FORE & AFT CENTRELINE OF THE COMPARTMENT.
(3) THE ENTIRE SURFACE OF THE GRAIN SHALL BE COVERED WITH BURLAP SEPARATION CLOTHS, TARPAULINS, OR THE EQUIVALENT. THE COVERING MATERIAL SHALL HAVE A TENSILE STRENGTH OF NOT LESS THAN 1344N PER 5cm STRIP
(4) THE WIRE MESH TO BE USED IS OF THE TYPE USED IN REINFORCED CONCRETE CONSTRUCTION,MADE UP OF 3mm DIAMETER STEEL WIRE HAVING A BREAKING STRENGTH OF NOT LESS THAN 52KN/cm² & WELDED IN SQARES OF 150mm×150mm. WIRE MESH HAVING MILL SCALE MAY BE USED BUT NOT IF LOOSE, FLAKING, RUST IS PRESENT
(5) WIRE MESH COMES IN LONG ROLLS HAVING A BREADTH OF 1.5-2.0m .THE MESH SHOULD BE LAID OVER THE BURLAP OR SEPARATION CLOTH IN TWO LAYER, THE BOTTOM ONE ATHWARTSHIP
(6) THE HOLD DOWN LASHING SHALL CONSIST OF STEEL WIRE ROPE(19mm DIA OR EQUIVALENT), DOUBLE STEEL STRAPPING (50mm×1.3mm & HAVINGØ A BREAKING LOAD OF ATLEAST 49KN) OR CHAIN OF EQUIVALENT STRENGTH, EACH OF WHICH SHALL BE SET TIGHT BY MEANS OF A 32mm TURNBUCKLE.WHEN STEEL STRAPPING IS USED, NOT LESS THAN THREE CRIMP SEALS SHALL BE USED FOR SECURING THE ENDS.WHEN WIRE ROPE IS USED, NOT LESS THAN FOUR CLIPS SHALL BE USED FOR FORMING EYES IN THE LASHINGS
(7) THE BOUNDARIES OF THE WIRE MESH, AT THE PORT & STBD SIDE OF THE COMPARTMENT, SHALL BE RETAINED BY WOOD PLANKS 150mm×500mm
(8) DURING THE VOYAGE THE HOLD-DOWN LASHINGS SHALL BE REGULATLY INSPECTED ANDØ SET UP WHERE NECESSARY

Q.236. WHAT IS THE MINIMUM STABILITY REQUIREMENT FOR LOADING GRAIN?
A.236. THE INTACT STABILITY CHARACTERISTICS OF ANY SHIP CARRYING BULK GRAIN SHALL BE SHOWN TO MEET THROUGHOUT THE VOYAGE
(1) THE ANGLE OF HEEL DUE TO THE SHIFT OF GARIN SHALL NOT BE GREATER THAN 12° OR IN THE CASE OF SHIPS CONTRUCTED ON OR AFTER 1ST JANUARY 1994 THE ANGLE AT WHICH THE DECK EDGE IS IMMERSED, WHICHEVER IS LESSER
(2) THE NET OR RESIDUAL AREA BETWEEN THE HEELING ARM CURVE & THE RIGHTING ARM CURVE UP TO THE ANGLE OF HEEL OF MAXIMUM DIFFERENCE BETWEEN THE ORDINATES OF THE TWO CURVES,OR 40° OR THE ANGLE OF FLOODING, WHICHEVER IS LEAST, SHALL IN ALL CONDITIONS OF LOADING BE NOT LESS THAN 0.075 METER RADIANS
(3) THE INITIAL MEATACENTRIC HEIGHT, AFTER CORRECTION FOR THE FREE SURFACE EFFECTS OF LIQUIDS IN TANKS, SHALL BE NOT LESS THAN 0.30 m
(4) BEFORE LOADING BULK GRAIN THE MASTER SHALL, IF SO REQUIRED BY THE CONTRACTING GOVERNMENT OF THE COUNTRY OF THE PORT OF LOADING, DEMONSTRATE THE ABILITY OF THE SHIP AT ALL STAGES OF ANY VOYAGE TO COMPLY WITH THE STABILITY CRITERIA REQUIRED BY INTERNATIONAL CODE OF THE SAFE CARRIAGE OF GRAIN IN BULK
(5) AFTER LOADING,THE MASTER SHALL ENSURE THAT THE SHIP IS UPRIGHT BEFORE PROCEEDING TO SEA

Q.237. WHAT IS THE STABILITY REQUIREMENTS FOR SHIPS WITHOUT DOCUMENTS OF AUTHORIZATION CARRYING PARTIAL CARGOES OF BULK GRAIN?
A.237. THE STABILITY REQUIREMENTS FOR SHIPS WITHOUT DOCUMENTS OF AUTHORIZATION CARRYING PARTIAL CARGOES OF BULK GRAIN:
(1) THE MASTER DEMONSTRATE TO THE SATISFACTION OF THE ADMINISTRATION OR THE CONTRACTING GOVERNMENT OF THE PORT OF LOADING ON BEHALF OF THE ADMINISTRATION THAT THE SHIP IN ITS PROPOSED LOADED CONDITION WILL COMPLY WITH THE REQUIREMENTS OF THIS SECTION
(2) THE TOTAL WEIGHT OF THE BULK GRAIN SHALL NOT EXCEED ONE THIRD OF THE DEADWEIGHT OF THE SHIP
(3) ALL GRAIN SURFACES IN FILLED COMPARTMENT MUST BE RESTRAINED BY A CENTERLINE DIVISION EXTENDING FOR THE FULL LENGTH OF THE COMPARTMENT FROM THE UNDERSIDE OF THE DECK OR HATCH COVERS TO A DEPTH BELOW THE DECK LINE EQUAL TO ONE EIGHTH OF THE MAXIMUM BREADTH OR 2.4m WHICHEVER IS GREATER
(4) ALL HATCHES TO FILLED COMPARTMENTS,TRIMMED SHALL BE CLOSED & COVERS SECURED IN PLACE
(5) ALL FREE GRAIN SURFACES IN PARTLY FILLED CARGO SPACE SHALL BE TRIMMED LEVEL & SECURED BY OVERSTOWING, STRAPPING OR LASHING OR BY WIRE MESH
(6) THE GMR THROUHOUT THE VOYAGE SHOULD NOT BE LESS THAN 0.3 OR THAT OBTAINED BY THE FORMULA, WHICHEVER IS GREATER.

$$GMR=\frac{L\times B\times VD\,(0.25\,B-0.645\sqrt{VD\times B})}{SF\times DISPLACEMENT\times 0.0875}$$

Q.238. WHAT ARE THE CONTENTS OF GARIN LOADING BOOKLET?

A.238. CONTENTS OF GRAIN LOADING BOOKLET:

(1) CURVES OR TABLES OF VOLUMES, VERTICAL CENTRES OF VOLUMES & ASSUMED VOLUMETRIC HEELING MOMENTS FOR EVERY COMPARTMENT, FILLED OR PARTLY FILLED, INCLUDING THE EFFECT OF TEMPORARY FITTINGS

(2) CURVES OR TABLES OF MAXIMUM PERMISSIBLE HEELING MOMENTS i.e ALLOWABLE HEELING MOMENTS FOR VARYING DISPLACEMENTS & VARYING KGS OF THE SHIPS SO AS TO COMPARE TOTAL HEELING MOMENTS WITH ALLOWABLE HEELING MOMENTS

(3) DETAILS OF THE SCANTLINGS OF TEMPORARY FITTINGS PROVIDED TO MEET THE STABILITY REQUIREMENTS

(4) LOADING INSTRUCTIONS IN THE FORM OF NOTES SUMMARISING THE REQUIREMENTS OF THE CODE

(5) A WORKED EXAMPLE FOR THE GUIDANCE OF THE MASTER

(6) TYPICAL LOADED ARRIVAL & DEPARTURE CONDTIONS & INTERMEDIATE WORST SERVICE CONDITIONS USING STOWAGE FACTORS 1.25,1.50 & 1.75 m^3/tonne.

(7) SHIP'S PARTICULARS

(8) LIGHT SHIP WEIGHT & KG

(9) TABLES OF LIQUID FREE SURFACE CORRECTIONS

(10) CAPACITIES & CENTRES OF GARVITY OF ALL COMPARTMENTS

(11) CURVES OR TABLES OF ANGLE FLOODING WHERE LESS THAN 40°, AT ALL PERMISSIBLE DISPLACEMENTS

(12) HYDROSTATIC PROPERTIES FOR THE RANGE OF OPERATING DRAFTS

(13) CROSS CURVES OF STABILITY WHICH ARE SUFFICIENT TO PLOT THE GZ CURVE & WHICH INCLUDE CURVES AT 12° & 40°

Q.240. EXPLAIN THE TERM WITH RESPECT TO GRAIN CODE?

A.240. A FILLED COMPARTMENT TRIMMED: IS ONE IN WHICH THE GRAIN, AFTER LOADING, IS TRIMMED SO AS TO FILL SPACES UNDER THE DECKS & HATCH COVERS TO THE MAXIMUM EXTENT POSSIBLE, SO THAT THE GRAIN IS AT IT'S HIGHEST POSSIBLE LEVEL

A FILLED COMPARTMENT UNTRIMMED: IS ONE WHICH IS FILLED TO THE MAXIMUM EXTENT POSSIBLE IN WAY OF THE HATCH OPENING, BUT OUTSIDE THE PERIPHERY OF THE HATCH OPENING THE GRAIN WILL BE AT ITS NATURAL ANGLE OF REPOSE

A PARTLY FILLED COMPARTMENT: IS IN WHICH GRAIN IS ONLY LEVEL IS NOT FILLED WHETHER TRIMMED OR UNTRIMMED.
THE HEELING MOMENTS FOR PARTLY FILLED COMPARTMENTS VARY ACCORDING TO DEPTH OF CARGO IN THE HOLD & ARE OBTAINED FROM THE HEELING MOMENT CURVES WHICH ARE GIVEN FOR EACH HOLD

FUNCTION: 3

CONTROLLING SHIP OPERATION

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FUNCTION 3
(CONTROLLING SHIP OPERATION)

1. COMPLIANCE WITH POLLUTION PREVENTION REQUIREMENTS. KNOWLEDGE OF PRECAUTIONS TO PREVENT AIR & SEA POLLUTION; KNOWLEDGE OF POLLUTION PREVENTION RULES & REGULATIONS, ANTI POLLUTION PROCEDURE & ALL ASSOCIATED EQUIPMENT.
2. MAINTAIN SEA-WORTHINESS & APPLICATION OF STABILITY, TRIM & STRESS TABLES, DIAGRAMS & STRESS-CALCULATING EQUIPMENT, UNDERSTANDING OF BASIC ACTIONS TO TAKEN IN CASE OF PARTIAL LOSS OF INTACT BUOYANCY, UNDERSTANDING OF FUNDAMENTAL PRINCIPLE OF WATERTIGHT INTEGRITY, KNOWLEDGE OF PRINCIPAL STRUCTURAL MEMBERS OF A SHIP & PROPER NAMES FOR THE VARIOUS PARTS.
3. PREVENT, CONTOROL & FIGHT FIRES ON BOARD. KNOWLEDGE OF FIRE PREVENTION, ABILITY TO ORGANISE FIRE DRILLS, KNOWLEDGE OF FIRE FIGHTING SYSTEM & UNDERSTANDING OF ACTIONS TO BE TAKEN IN THE EVENT OF FIRE, INCLUDING FIRES INVOLVING OIL SYSTEMS
4. OPERATE LIFE-SAVING APPLIANCES. ABILITY TO ORGANIZE ABANDON SHIP DRILL & KNOWLEDGE OF OPERATION OF SURVIVAL CRAFTS & THEIR EQUIPMENT INCLUDING RADIO LIFE SAVING APPLIANCES & TPA'S, IMMERSION SUITS ETC.
5. APPLY MEDICAL FIRST AID ON BOARD. PRACTICAL APPLICATION OF MEDICAL GUIDES & ADVICE BY RADIO INCLUDING ABILITY TO TAKE EFFECTIVE LIFE SAVING ACTION IN CASE OF ON BOARD EMERGENCIES.
6. MONITOR COMPLIANCE WITH LEGISLATIVE REQUIREMENTS. BASIC WORKING KNOWLEDGE OF THE RELAVENT IMO CONVENTIONS CONCERNING SAFETY OF LIFE AT SEA & PROTECTION OF THE MARINE ENVIRONMENT.

Q.001. WHAT IS DENSITY?
A.001. DENSITY OF A SUBSTANCE IS ITS MASS PER UNIT VOLUME

Q.002. WHAT IS RELATIVE DENSITY?
A.002. RELATIVE DENSITY OF A SUBSTANCE IS THE NUMBER OF TIMES THE SUBSTANCE IS HEAVIER THAN FRESH WATER

Q.003. WHAT IS PRESSURE?
A.003. PRESSURE IS THE LOAD PER UNIT AREA $\frac{L}{A}$

Q.004. WHAT IS THRUST?
A.004. THRUST IS THE TOTAL PRESSURE EXERTED ON A GIVEN SURFACE

Q.005. WHAT IS THE PRINCIPLE OF FLOTATION?
A.005. WHEN A BODY IS FLOATING IN A LIQUID, THE WEIGHT OF LIQUID DISPLACED EQUAL TO THE WEIGHT OF THE BODY

Q.006. DEFINE THE TERMS?
A.006. DISPLACEMENT: IS COMMONLY USED TO DENOTE THE MASS OF THE SHIP IN TONES

LIGHT DISPLACEMENT: IS THE MASS OF THE EMPTY SHIP, WITHOUT ANY CARGO, FUEL, LUBRICATING OIL, BALLAST WATER, FRESH WATER IN TANKS, CONSUMABLE STORES, & PASSENGERS & CREW & THEIR EFFECTS

LOAD DISPLACEMENT: IS THE MASS OF THE SHIP, WHEN SHE IS FLOATING IN SALT WATER WITH HER SUMMER LOADLINE AT THE WATER SURFACE

PRESENT DISPLACEMENT: IS THE MASS OF THE SHIP AT PRESENT. IT IS THE SUM OF THE LIGHT DISPLACEMENT OF THE SHIP & EVERYTHING ON BOARD AT PRESENT

DEADWEIGHT: OF A SHIP IS THE TOTAL MASS OF CARGO, FUEL, FRESH WATER, ETC., THAT A SHIP CAN CARRY, WHEN SHE IS FLOATING IN SALT WATER WITH HER SUMMER LOADLINE AT THE WATER SURFACE

DEADWEIGHT ABOARD: IS THE MASS OF CARGO, FUEL, BALLAST, FRESH WATER, ETC., ON BOARD AT PRESENT

DEADWEIGHT AVAILABLE: IS THE TOTAL MASS OF CARGO, FUEL, FRESH WATER, ETC., THAT CAN BE PUT ON THE SHIP AT PRESENT TO BRING HER SUMMER LOADLINE TO THE WATER SURFACE IN SALT WATER

WATERPLANE COEFFICIENT: IS THE RATIO OF THE AREA OF THE WATER PLANE TO THE AREA OF A RECTANGLE HAVING THE SAME LENGTH & MAXIMUM BREADTH

BLOCK COEFFICIENT: IS THE RATIO OF THE UNDERWATER VOLUME OF THE SHIP AT THAT DRAFT TO A RECTANGULAR BOX HAVING THE SAME EXTREME DIMENSIONS

Q.007. WHAT IS RESERVE BUOYANCY?
A.007. RESERVE BUOYANCY IS THE VOLUME OF THE ENCLOSED SPACES ABOVE THE WATERLINE

Q.008. WHAT IS TPC?
A.008. TONNES PER CENTIMETER IS THE NUMBER OF TONNES REQUIRED TO CAUSE THE SHIP TO SINK OR RISE BY ONE CENTIMETER

Q.009. WHAT IS THE CENTRE OF GRAVITY?
A.009. THE ACTUAL POINT ON ANY MASS (BOX, CONTAINER, SHIP) THROUGH WHICH THE FORCE OF GRAVITY ACTS DOWN WORDS. THE FORCE OF GRAVITY IS EQUAL TO THE WEIGHT OF THE MASS (SHIP)

Q.010. WHAT IS MCTC?
A.010. MOMENT TO CHANGE TRIM BY 1CM, THE MOMENTS REQUIRED TO CHANGE THE TOTAL TRIM OF THE VESSEL BY ONE CENTIMETER. MOMENT INVOLVES THE WEIGHT & THE DISTANCE

Q.011. WHAT IS CENTRE OF BUOYANCY?
A.011. CENTRE OF BUOYANCY IS THE GEOMETRIC CENTRE OF THE UNDERWATER VOLUME THROUGH WHICH THE
FORCES ACTS VERTICALLY UPWARDS. THE FORCE OF BUOYANCY IS EQUAL TO THE WEIGHT OF THE SHIP

Q.012. WHAT IS LIST?
A.012. LIST IS A TRANSVERSE INCLINATION CAUSED BY UNEQUAL DISTRIBUTION OF WEIGHTS ON EITHER SIDE OF THE CENTRE LINE OF THE SHIP(CENTRE OF GRAVITY IS NOT ON THE CENTERLINE OF VESSEL (LISTED)(CENTRE OF GRAVITY IS ON THE CENTERLINE OF VESSEL (UPRIGHT)

Q.013. WHAT IS AIR DRAFT?
A.013. THE HEIGHT OF THE SIDE OF THE SHIP PROJECTING ABOVE THE WATER TO THE HIGHEST POINT. DISTANCE BETWEEN WATERLINE & HIGHEST POINT

Q.014. WHAT IS FREE BOARD?
A.014. THE HEIGHT OF THE SIDE OF THE SHIP PROJECTING ABOVE THE WATER TO THE DECK LINE. DISTANCE BETWEEN WATERLINE & DECKLINE

Q.015. WHAT IS FREE SURFACE EFFECT?
A.015. FSE CAUSED WHEN A VESSEL HAS TANKS PARTLY FILLED WITH LIQUID, WHEN A VESSEL ROLLS THE LIQUID MOVES TOWARDS THE LOWER SIDE. THERE IS A RISE IN KG. DUE TO THIS BEHAVIORS, THE VESSEL HAS A VIRTUAL (IMAGINARY) LOSS OF GM, WHICH IS CALLED THE FREE SURFACE EFFECT

Q.016. WHAT IS METACENTRIC HEIGHT (GM)?
A.016. IT'S A VERTICAL DISTANCE BETWEEN THE CENTRE OF GRAVITY & THE METACENTRE
→POSITIVE GM WHERE M IS ABOVE G
→NEGATIVE GM WHERE M IS BELOW G
→NEUTRAL GM WHERE G IS SAME AS M

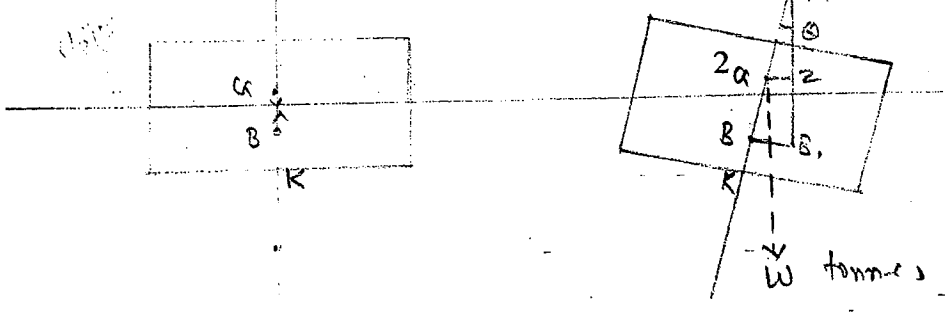
Q.017. WHAT IS RIGHTING LEVER?
A.017. WHEN A VESSEL IS HEELED, THE FORCE OF BUOYANCY ACTING VERTICALLY UPWARDS THROUGH THE NEW COB, IS SEPARATED DOWNWARDS FROM COG BY A HORIZONTAL DISTANCE GZ CALLED THE RIGHTING LEVER
FOR SMALL ANGLES OF HEEL UP TO 15°:- GZ= GM SIN Θ

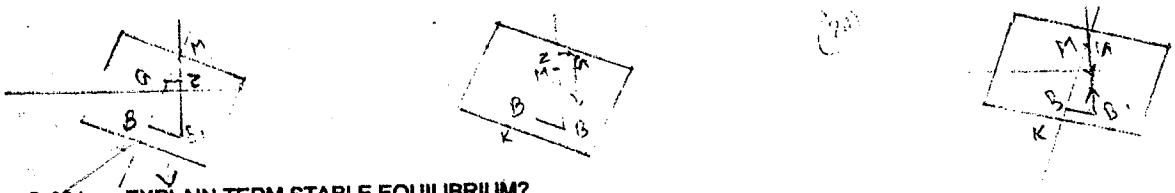
FOR LARGE ANGLE OF HEEL: - GZ= SIN Θ (GM+½BM TAN² Θ)

Q.018. WHAT IS RIGHTING MOMENT 'RM'?
A.018. THE FORCE REQUIRED TO RETURN THE HEELED VESSEL TO THE UPRIGHT POSITION IS TERMED AS THE RIGHTING MOMENT OR MOMENT OF STATICAL STABILITY

Q.019. WHAT IS HEEL?
A.019. IT IS THE TRANSVERSE INCLINATION CAUSED BY EXTERNAL FORCES SUCH AS WIND, WAVES, MOORINGS, ETC. SINCE NO SHIFT OF WEIGHT HAS TAKEN PLACE, THE CENTRE OF GRAVITY REMAINS ON THE CENTRE LINE

Q.020. EXPLAIN TRANSVERSE SHIFT OF 'B'?
A.020. IN STATIC EQUILIBRIUM COG & COB ARE IN SAME VERTICAL LINE, EQUAL & OPPOSITE & HENCE CANCEL EACH OTHER. WHEN HEELED COB SHIFTS TO GEOMETRIC CENTRE OF UNDERWATER VOLUME
NOTE: - 'G' IS UNCHANGED





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Q.021. EXPLAIN TERM STABLE EQUILIBRIUM?
A.021. WHEN A VESSEL IS HEELED, IF SHE TENDS TO RETURN TO HER ORIGINAL POSITION. GM IS POSITIVE. THE RM TENDS TO RETURN THE VESSEL TO HER ORIGINAL CONDITION

Q.022. EXPLAIN TERM UNSTABLE EQUILIBRIUM?
A.022. WHEN A VESSEL IS HEELED & CONTINUES HEELING FURTHER, GM IS NEGATIVE. THE RM TRIES TO HEEL THE FURTHER, THE MOMENT IS CALLED NEGATIVE MOMENT OR CAPSIZING MOMENT

Q.023. EXPLAIN TERM NEUTRAL EQUILIBRIUM?
A.023. WHEN A VESSEL IS HEELED, & HAS NO TENDENCY TO RETURN TO HER ORIGINAL CONDITION OR TO CONTINUE HEELING. GM IS ZERO, NO RIGHTING LEVER

Q.024. WHAT IS ANGLE OF LOLL?
A.024. A VESSEL WHICH HAS NEGATIVE GM INITIALLY HEELS OVER MORE & MORE UNTIL KM IS EQUAL TO KG. THE VESSEL IS NOW IN NEUTRAL EQUILIBRIUM & THE ANGLE AT WHICH THIS HAPPENS IS CALLED ANGLE OF LOLL

Q.025. WHAT IS PROGRESSIVE FLOODING? WHAT IS CORRECTIVE ACTION?
A.025. PROGRESSIVE FLOODING:-ANY PERMANENT OPENING GOES UNDERWATER FROM WHICH FLOODING TAKES PLACE,CORRECTIVE ACTION:- (1) FILL LOWER SIDE FIRST WITH TANK OF SMALLEST MOMENT OF INERTIA, THEN THE HIGHER SIDE TANK OF THE SAME NUMBER (2) DISCHARGE FROM OUTER SIDE OF THE HIGHER SIDE FIRST, THEN MOVE DOWN THE SAME ROW TO THE LOWER SIDE
TO CALCULATE ANGLE OF LOLL:-
TANθ=$\sqrt{2GM/BM}$

Q.026 WHAT IS A DIFFERENCE BETWEEN THE STIFF & TENDER VESSEL?
A.026.

STIFF VESSEL	TENDER VESSEL
LARGE GM	SMALL GM
ANGLE & PERIOD OF ROLL SMALL	ANGLE & PERIOD OF ROLL LARGE
ROLLING VIOLENT	ROLLING SMOOTH
ROLLING IRREGULAR	ROLLING REGULAR
UNCOMFORTABLE & JERKY	LESS UNCOMFORTABLE & JERKY
SEVERE STRESS ON HULL	LESS SEVERE STRESS ON HULL
GENERAL CARGO LIKELY TO SHIFT	GENERAL CARGO LESS LIKELY TO SHIFT
BULK CARGO LESS LIKELY TO SHIFT	BULK CARGO MORE LIKELY TO SHIFT
NO LIKELIHOOD BECOMING UNSTABLE DURING VOYAGE	LIKELIHOOD OF BECOMING UNSTABLE DURING VOYAGE
GREATER ABILITY TO WITHSTAND LOSS OF GM	LESS ABILITY TO WITHSTAND LOSS OF GM
GREATER ABILITY TO WITHSTAND TRANSVERSE SHIFT OF CARGO(LIST SMALL)	LESS ABILITY TO WITHSTAND TRANSVERSE SHIFT OF CARGO(LIST LARGE)
EXAMPLE-BULK IRON ORE	EXAMPLE-BULK GRAIN

Q.027. WHILE HEELING THE VESSEL'S COG WILL CHANGE OR REMAIN SAME?
A.027. THE POSITION OF THE COG OF THE SHIP REMAINS UNAFFECTED BY HEEL

Q.028. WHAT IS TRANSVERSE METACENTRE?
A.028. WHEN VESSEL IS HEELED THE FORCE OF BUOYANCY ACTING VERTICALLY UPWARDS THROUGH THE NEW 'COB' CUTS THE CENTRELINE AT A POINT CALLED THE TRANSVERSE METACENTRE INDICATED BY 'M'. 'KM' IS HEIGHT OF METACENTRE ABOVE THE KEEL. KM IS OBTAINED FROM HYDROSTATIC TABLES OF THE SHIP

Q.029. HOW WILL YOU CALCULATE THE KM?
A.029. KM IS CALCULATED BY ADDING KB & BM

Q.030. WHAT IS POSITIVE GM?
A.030. POSITIVE 'GM' WHERE 'M' IS ABOVE 'G'

Q.031. WHAT IS NEGATIVE GM?
A.031. NEGATIVE 'GM' WHERE 'M' IS BELOW 'G'

Q.032. FSC DEPENDS ON WHAT FACTORS?
A.032. FSC DEPENDS ON THE LENGTH & BREADTH OF THE SLACK TANK

Q.033. WHAT IS CENTRE OF FLOATATION?
A.033. COF IS THE GEOMETRIC CENTRE OF THE WATERPLANE AREA OF THE SHIP & IT IS THE POINT ABOUT WHICH SHE WOULD PIVOT, WHEN HER TRIM IS CHANGED

Q.034. WHAT IS AFT PERPENDICULAR?
A.034. PERPENDICULAR DRAWN TO THE WATER LINE AT THE POINT WHERE THE AFT SIDE OF THE RUDDER POST MEETS THE SUMMER LOAD LINE

Q.035. WHAT IS FWD PERPENDICULAR?
A.035. PERPENDICULAR DRAWN TO THE WATER LINE AT THE POINT WHERE THE FORE SIDE OF THE STEM MEETS THE SUMMER LOAD LINE

Q.036. WHAT IS IMO REQUIREMENTS FOR SHIP'S GM?
A.036. FOR CARGO SHIP GM IS ATLEAST 0.15m
FOR GRAIN CARGO GM IS ATLEAST 0.30m
FOR TIMBER CARGO IS ATLEAST 0.10m ON DEPARTURE & SHOULD HAVE POSITIVE GM AT ANY TIME DURING THE VOYAGE

Q.037. WHAT YOU WILL DO TO MAKE STIFF VESSEL INTO TENDER VESSEL?
A.037. DECREASE THE GM, PUMPOUT THE BALLAST WATER, CARGO IN THE LOWER HOLD TO BE BROUGHT UP ON DECK OR UPPERDECK.
IN A WORST CASE SCENARIO JETTISONING OF CARGO

Q.038. HOW WILL YOU FIND OUT GM OF THE SHIP?
A.038. BY USING STABILITY BOOKLET

Q.039. WHAT INFORMATIONS YOU WILL GET FROM STABILITY BOOKLET?
A.039. (1) GENERAL PARTICULARS
(2) PLAN SHOWING CARGO SPACES, STORE ROOMS & TANKS
(3) SPECIAL NOTES REGARDING THE STABILITY & LOADING OF THE SHIP
(4) METRIC CONVERSIONS
(5) HYDROSTATIC PARTICULARS
(6) HYDROSTATIC CURVES
(7) CAPACITIES & CENTRE OF GRAVITY OF DRY CARGO SPACES
(8) CAPACITIES & CENTRE OF GRAVITY OF STORE ROOMS
(9) CAPACITIES & CENTRE OF GRAVITY OF STORES, CREW & EFFECTS, DISTRIBUTION OF CREW & EFFECTS & WEIGHT K.G & L.C.G OF DECK
(10) CAPACITIES & CENTRE OF GRAVITY OF REFRIGERATED CARGO & DOMESTIC CHAMBERS
(11) CAPACITIES, CENTRE OF GRAVITY & FREE SURFACE MOMENTS OF OIL & WATER TANKS
(12) TANKS IN ENGINE ROOM, CONTENTS, CENTRE OF GRAVITY & MOMENTS
(13) NOTES ON USE OF FREE SURFACE MOMENTS & FSC TABLES
(14) CROSS CURVES OF STABILITY PARTICULARS
(15) CROSS CURVES OF STABILITY (KN CURVE)
(16) EXAMPLE SHOWING USE OF CROSS CURVES (KN)
(17) DEAD WEIGHT SCALE
(18) PLIMSOLL MARK DETAILS
(19) TONNAGE MARK DETAILS
(20) TRIM TABLES
(21) INCLINATION EXPERIMENT REPORT

Q.040. WHAT IS HYDROSTATIC DRAFT?
A.040. THE HYDROSTATIC DRAFT OF A SHIP IS THE DRAFT MEASURED AT THE CENTRE OF FLOTATION (COF)

Q.041. HYDROSTATIC TABLE IN DETAILS?
A.041. THE HYDROSTATIC PARTICULARS OF A SHIP CONSIST OF DISPLACEMENT, DEADWEIGHT, TONNES PER CENTIMETRE(TPC), HEIGHT OF COB ABOVE KEEL (KB), DISTANCE OF COB FROM AFTER PERPENDICULAR(AB) OR FROM MIDSHIPS (HB), HEIGHT OF TRANSVERSE METACENTRE ABOVE KEEL (KM), DISTANCE OF CENTRE OF FLOTATION FROM AFTER PERPENDICULAR (AF) OR FROM MIDSHIPS (HF) & MOMENT TO CHANGE TRIM BY ONE CENTIMETRE (MCTC)

Q.042. WHAT ARE THE CONTENTS OF STABILITY BOOKLETS?
A.042. (1) GENERAL PARTICULARS
(2) PLAN SHOWING CARGO SPACES, STORE ROOMS & TANKS
(3) SPECIAL NOTES REGARDING THE STABILITY & LOADING OF THE SHIP
(4) METRIC CONVERSIONS
(5) HYDROSTATIC PARTICULARS
(6) HYDROSTATIC CURVES
(7) CAPACITIES & CENTRE OF GRAVITY OF DRY CARGO SPACES
(8) CAPACITIES & CENTRE OF GRAVITY OF STORE ROOMS

As a Result, ... to port while going astern :

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(9) CAPACITIES & CENTRE OF GRAVITY OF STORES, CREW & EFFECTS, DISTRIBUTION OF CREW & EFFECTS & WEIGHT K.G & L.C.G OF DECK
(10) CAPACITIES & CENTRE OF GRAVITY OF REFRIGERATED CARGO & DOMESTIC CHAMBERS
(11) CAPACITIES, CENTRE OF GRAVITY & FREE SURFACE MOMENTS OF OIL & WATER TANKS
(12) TANKS IN ENGINE ROOM, CONTENTS, CENTRE OF GRAVITY & MOMENTS
(13) NOTES ON USE OF FREE SURFACE MOMENTS & FSC TABLES
(14) CROSS CURVES OF STABILITY PARTICULARS
(15) CROSS CURVES OF STABILITY (KN CURVE)
(16) EXAMPLE SHOWING USE OF CROSS CURVES (KN)
(17) DEAD WEIGHT SCALE
(18) PLIMSOLL MARK DETAILS
(19) TONNAGE MARK DETAILS
(20) TRIM TABLES
(21) INCLINATION EXPERIMENT REPORT

Q.043. WHAT IS TRANSVERSE THRUST?
A.043. THIS IS ACTUALLY THE SIDEWAYS THRUST OF THE PROPELLER BLADES AS THEY START TO ROT... IT CAN BE SEEN THAT GENERALLY THE UPPER BLADES OF PROPELLER WORKING IN LESSER CO... OF WATER DO NOT PRODUCE THRUST OF SUFFICIENT STRENGTH TO CANCEL OUT THE OPPOSITE & STRONGER T... OF LOWER BLADES

Q.045. WHAT IS TRIM TABLE?
A.045. IT'S A TABLE SHOWING THE CHANGE IN DRAUGHTS IN CENTIMETER WHEN EACH TANK IS FILLED OR LOAD AT VARIOUS POINTS

Q.046. HOW WILL YOU DEFINE NEW SHIP & EXISTING SHIPS AS PER SOLAS?
A.046. NEW SHIPS MEANS A SHIP THE KEEL OF WHICH IS LAID OR WHICH IS AT A SIMILAR STAGE OF CONSTRUCTION ON OR AFTER 25 MAY 1980

EXISTING SHIP MEANS A SHIP WHICH IS NOT A NEW SHIP

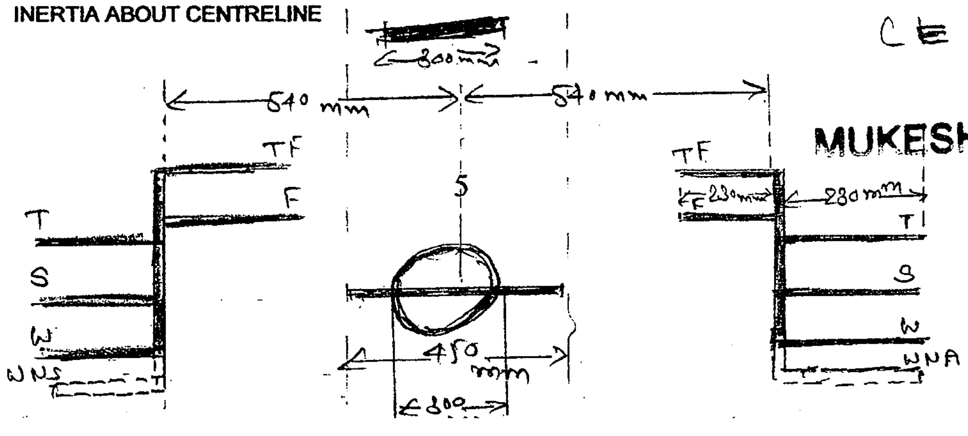
Q.047. 1 NAUTICAL MILE IS HOW MANY METER?
A.047. 1 NAUTICAL MILE IS 1852 METER OR 6080 FEET (10 cables = 1 NM ...)

Q.048. WHAT DO YOU KNOW ABOUT HYDROSTATIC CURVES?
A.048. ALL THE HYDROSTATIC CURVES OF A SHIP MAY BE GIVEN, BY SHIPYARD, ON A SINGLE SHEET OF GRAPH PAPER WHEREIN DRAFT MAY BE INDICATED ON THE 'Y' AXIS & CENTIMETRES ON THE "X" AXIS. FOR EACH CURVE, ONE CENTIMETRE ON THE 'X' AXIS REPRESENTS A DIFFERENT VALUE. SOME SHIPYARDS INCLUDE, ON SAME GRAPH, CURVES OF ADDITIONAL INFORMATION WHICH ARE DEPENDANT ON DRAFT, SUCH AS WETTED SURFACE AREA, MIDSHIP AREA, BLOCK COEFFICIENT, WATER-PLANE AREA COEFFICIENT, ETC.

Q.049. DRAW & EXPLAIN THE LOAD LINES OF SHIPS?
A.049. ALL LINES ARE 25mm THICK, ARE CUT INTO THE SHELL PLATING & ARE PAINTED WHITE OR YELLOW ON ADARK BACKGROUND OR BLACK ON A LIGHT BACKGROUND. THE UPPER EDGE OF EACH LOADLINE INDICATES ITS EXACT LEVEL.THE TOP OF THE DECK LINE INDICATES WHERE THE TOP OF THE FREEBOARD DECK WOULD MEET THE OUTER SIDE OF THE SHELL PLATING. DIRECTLY BELOW THE DECKLINE IS THE PLIMSOL MARK OR LOADLINE DISC & THE VERTICAL DISTANCE BETWEEN THEM IS CALLED THE STATUTORY SUMMER FREEBOARD. THE CENTRE OF THE LOADLINE DISC IS AT THE MIDDLE OF THE UPPER EDGE OF ITS 25mm THICK, PAINTED, DIAMETRIC LINE. THE DECK LINE & THE PLIMSOLL MARK ARE SITUATED EXACTLY AMIDSHIPS. EXACTLY 540mm FORWARD OF THE DISC IS A VERTICAL LINE 25mm THICK WITH HORIZONTAL LINES, MEASURING 230mm×25mm, ON EACH SIDE OF IT. ON ITS FORWARD SIDE THE LINES ARE MARKED 'S','T' & 'W' (ALSO 'WNA' IF APPLICABLE). THE LINES ON THE AFTER SIDE ARE MARKED 'F' & 'TF'. THE UPPER EDGE OF THE LINE MARKED 'S' IS IN LINE WITH THE HORIZONTAL LINE OF THE PLIMSOL MARK. IN SUMMER ZONES, THE SHIP CAN LOAD UP TO THIS LINE IN SALT WATER.THE VERTICAL DISTANCE BETWEEN THE UPPER EDGES OF 'S' & 'T' IS 1/48 OF THE SUMMER DRAFT OF THE VESSEL. THE DATES & LIMITS OF WINTER, SUMMER & TROPICAL ZONES ARE GIVEN IN THE LOADLINE RULES. THE 'WNA' MARK, IF APPLICABLE, IF SITUATEDEXACTLY 50mm BELOW THE 'W' MARK.
THE VERTICAL DISTANCE BETWEEN THE UPPER EDGES OF THELINES MARKED 'S' & 'F', & ALSO BETWEEN 'T' & 'TF', IS THE 'FWA' OF THE SHIP.

Q.050. HOW YOU WILL KEEP YOUR VESSEL STABLE WHILE LOADING TIMBER DECK CARGO?
A.050. IN ORDER TO KEEP VESSEL STABLE
(1) PLAN STOWAGE WITH LARGE GM
(2) SLACK TANKS TO BE MINIMUM
(3) SLACK TANKS TO HAVE MINIMUM MOMENT OF INERTIA ABOUT CENTRELINE
(4) DURING VOYAGE CONSUMPTION FROM SLACK TANKS FIRST
(5) DURING VOYAGE IF DISPLACEMENT ALLOWS FILL BALLAST IN TANKS WITH MINIMUM MOMENT OF INERTIA ABOUT CENTRELINE

CE is always Fw...



MUKESH SOLANKI

Q.051. WHAT IS PANTING & POUNDING STRESSES?
A.051. PANTING:- AS THE VESSEL MOVES THROUGH THE WATER, THE WAVES MOVING PAST THE BOW, CAUSE THE BOW PLATING TO MOVE IN AN IN & OUT FASHION LIKE A PERSON BREATHING HEAVILY

POUNDING: - WHEN A VESSEL IS PITCHING HEAVILY, THESE WILL BE TIMES WHEN THE FORWARD PORTION OF THE BOTTOM PLATING MAY COMES OUT OF THE WATER & SLAM BACK INTO THE WATER. TREMENDOUS STRESSESS IS THROWN ON THIS AREA OF THE SHIP. EXTRA STRENGTHENING MUST BE INSERTED IN THIS REGION.

Q.052. WHAT IS CAMBER?
A.052. CURVATURE OF THE DECKS IN THE TRANSVERSE DIRECTION, WHICH IS TOWARDS THE SIDES. IT IS SOMETIMES CALLED 'ROUND OF BEAM'

Q.053. HOW WILL YOU DEFINE THE FRAME & BEAM?
A.053. FRAME: - ON SIDE PLATING, RUNNING VERTICALLY (UP & DOWN)
BEAM: - UNDER DECKS, RUNS TRANSVERSELY

Q.054. WHAT ARE STRAKES?
A.054. THE SHELL PLATING CONSISTS OF THE SIDE & BOTTOM PLATING.THIS PART OF THE SHIP'S STRUCTURE IS ARRANGED IN FORE & AFT LINES OF PLATING CALLED STRAKES. STRAKES VARY IN SIZE

Q.055. WHAT IS GARBOARD STRAKE & ITS USE?
A.055. THE STRAKES ON EACH SIDE OF THE KEEL IS CALLED THE GARBOARD STRAKE
ITS USE:- given shape to resist & prevents ingress of water from outside

Q.056. WHAT IS TRANSOM FLOOR?
A.056. FLOOR FITTED ABAFT OF & HIGHER THAN THE STERN FRAME TO SUPPORT THE PART OF THE STERN WHICH OVERHANGS THE RUDDER & PROPELLER. AT THE HAED OF THE RUDDER OF THE RUDDER POST AN EXTRA STRONG FLOOR IS FITTED CALLED TRANSOM FLOOR. THIS FLOOR DESIGNED TO SUPPORT THE OVERHANGING MASS & FRAME WORK OF THE STERN
OR
THIS IS THE FLOOR AT THE HEAD OF THE RUDDER POST WHICH SUPPORTS THE FRAMEWORK OF THE STERN. IT MUST HAVE THE SAME DEPTH AS THE FLOORS IN THE CELLULAR DOUBLE BOTTOM

Q.057. WHAT IS KEEL PLATE & STEALER PLATE & COFFIN PLATE?
A.057. KEEL PLATE: - BOTTOM MOST PLATE OF THE SHIP, ARE GENERALLY THICKER THAN THE REST OF THE PLATING

STEALER PLATE: - THE FIRST PLATE OF THE NEWLY FORMED STRAKE IS CALLED A STEALER PLATE

COFFIN PLATE: - THE AFTERMOST PLATE OF THE KEEL, DISH SHAPED (COFFIN) TO FIT THE STERN FRAME IS CALLED COFFIN PLATE

Q.058. HOW WILL YOU IDENTIFY THE PLATES AS PER SHELL EXPANSION PLAN?
A.058. STRAKES OF SHELL PLATING ARE DISTINGUISHED BY LETTERS FROM THE KEEL OUTWARDS, THE GARBOARD STRAKE BEING STRAKE 'A'. THE PLATES IN EACH STRAKE ARE USUALLY NUMBERED FROM AFT TO FORWARD.
FOR EXAMPLE: - PLATE D5 WOULD BE THE FIFTH PLATE FROM AFT IN THE FOURTH STRAKE FROM KEEL.
STRAKES OF DECK PLATING ARE LETTERED FROM THE CENTRE LINE, OUTBOARD; WHILST DECK PLATES ARE NUMBERED FROM AFT TO FORWARD

Q.059. WHERE IS THE COLLISION BULKHEADS LOCATED?
A.059. THE FORWARD MOST TRANSVERSE WATERTIGHT BULKHEAD IS CALLED COLLISION BULKHEAD. IT IS USUALLY FITTED BETWEEN 0.05 & 0.075 OF THE LENGTH OF THE VESSEL FROM FORWARD END

Q.060. WHAT IS SHELL EXPANSION PLAN?
A.060. THESE ARE PLANS WHICH SHOW ALL THE PLATES IN THE HULL, DRAWN TO SCALE. THEY ALSO SHOW MANY OTHER DETAILS, INCLUDING FRAMES, FLOORS, DECK EDGES, STRINGERS, ETC. THE PARTIAL PLANS SHOWN IN THE PLATE, OPPOSITE, ARE SIMPLIFIED & ARE MERELY INTENDED TO ILLUSTRATE THE FITTING OF SHELL & DECK PLATING

Q.061. WHAT IS BILGE KEEL?
A.061. A FLAT BAR WELDED ON FIRMLY TO THE HULL PLATING. AN OFFSET BULB PLATE WILL THEN BE WELDED ONTO THE FLAT BAR. use to damping role &
A BILGE KEEL IS SIMPLE & INEXPENSIVE IN CONSTRUCTION, LIGHT WEIGHT, CONTRIBUTES TO LONGITUDINAL STRENGTH, DOES NOT REDUCE BALLAST CAPACITY OR CARGO SPACE.
IT EXTENDS FOR ABOUT ONE HALF OF THE LENGTH OF THE SHIP FROM AMIDSHIPS & IS TAPERED OFF AT THE ENDS SO AS TO ENSURE NO CONCENTRATION OF STRESS AT THE ENDS

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Q.062. WHAT IS THE DIFFERENCE BETWEEN BILGE BLOCKS & BILGE KEEL?
A.062. BILGE KEEL IS A FLAT BAR WELDED ON FIRMLY TO THE HULL PLATING, USE TO DAMPNG ROLL (ARE INTENDED TO RESIST ROLLING) & CONTRIBUTES TO LONGITUDINAL STRENGTH
BILGE BLOCK IS USED IN DRYDOCK TO SUPPORT BOTTOM PLATING OF THE SHIP NEAR THE BILGE

Q.063. WHAT IS SF (SHEARING FORCE) & BM (BENDING MOMETS)?
A.063. SHEARING STRESS: - IS THE FORCE TENDING TO MAKE THE COMPONENTS PARTS OF A STRUCTURE SLIDE OVER EACH OTHER
OR
WHICH TRY TO SHEAR MATERIAL ACROSS~~, OR TO MAKE THE COMPONENT PARTS OF A STRUCTURE SLIDE OVER EACH OTHER~~

BENDING MOMETS: - THE MEASURE OF THE TENDENCY OF A BEAM TO BEND ABOUT ANY PARTICULAR SECTION IS CALLED THE 'BENDING MOMENT' AT THAT SECTION

Q.064. WHAT DO YOU MEAN BY WATER TIGHT INTEGRITY?
A.064. THE BULKHEAD DECK OR A DECK ABOVE IT SHALL BE WATER TIGHT. ALL OPENINGS IN THE EXPOSED WEATHER DECK SHALL HAVE COAMINGS OF AMPLE HEIGHT & STRENGTH & SHALL BE PROVIDED WITH EFFICIENT MEANS FOR EXPEDITIOUSLY CLOSING THEM WEATHERTIGHT. FREEING PORTS, OPEN RAILS & SCUPPERS SHALL BE FITTED AS NECESSARY FOR RAPIDLY CLEARING THE WEATHER DECK OF WATER UNDER ALL WEATHER CONDITION

Q.065. HOW WILL YOU PREPARE YOUR VESSEL FOR LOADLINE SURVEY?
A.065. THE LOAD LINE SURVEY IS CARRIED OUT EVERY 5 YEARS & ENDORSEMENTS TO IT ARE EVERY YEAR
PREPARATION FOR LOAD LINE SURVEY: -
(1) LOAD LINE & DECK LINE TO BE CLEARLY MARKED & PAINTED
(2) ALL HATCH COAMINGS SHALL BE SURVEYED SO PREPARATIONS TO BE MADE THEREOF
(3) CHECK ALL RUBBER PACKINGS,DRAINS & CHANNELS FOR THE MACGREGOR TYPE OF HATCH COVER
(4) CHECKS SHALL BE CARRIED OUT FOR WATER TIGHT DOORS, ALL PORT HOLES, SCUPPERS, E/R SKY LIGHTS, FUNNEL DOORS, FLAPS, LIFELINES, FORE PEAK VALVES, BILGE SUCTIONS, TUNNEL ESCAPES, ACCESS TO STEERING FLAT, AIR PIPES AND VENTILATORS
(5) KEEP LOAD LINE REPORT FORM 2 UPTO DATE

Q.066. WHAT ARE THE CONTENTS OF THE SAFETY EQUIPMENTS CERTIFICATE?
A.066. CONTENTS OF CARGO SHIP SAFETY EQUIPMENTS CERTIFICATE (FORM E)
(1) PARTICULARS OF THE SHIP
(2) TYPE OF SHIP
(3) ENDORSEMENT FOR ANNUAL & PERIODICAL SURVEYS
(4) ANNUAL/ PERIODICAL SURVEY IN ACCORDANCE WITH REGULATION 1/14(h)(iii)
(5) ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED & REGULATION 1/14(d) APPLIES
(6) ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION 1/14(e) OR 1/14(f) APPLIES
(7) ENDORSEMENT FOR ANNIVERSARY DATE WHERE REGULATION 1/14 (h) APPLIES

CONTENTS OF RECORDS OF EQUIPMENT FOR THE CARGO SHIP SAFETY EQUIPMENT CERTIFICATE (FORM E):-
(1) PARTICULAR OF SHIP
(2) DETAILS OF LIFE SAVING APPLIANCES:-
TOTAL NUMBER OF PERSON FOR WHICH LSA PROVIDED, TOTAL NUMBEROF LIFE BOATS, NUMBER OF ENCLOSED LIFEBOATS, NUMBER OF L/B WITH SELF CONTAINED AIR SUPPORT SYSTEM, NUMBER OF FIRE PROTECTED L/B, OTHER LIFE BOAT, NUMBER &TYPE, NUMBER OF FREE FALL LIFE BOATS, TOTALLY ENCLOSED, SELF CONTAINED, FIRE PROTECTED, NUMBER OF MOTOR LIFEBOATS, NUMBER OF LIFEBOATS FITTED WITH SEARCHLIGHTS, NUMBER OF RESCUE BOATS, LIFE RAFTS, NUMBER OF LIFE BUOYS, NUMBER OF LIFE JACKETS, IMMERSION SUITS, NUMBER OF THERMAL PROTECTIVE AIDS, RADIO INSTALLATTION USED IN LIFE SAVING APPLIANCES, NUMBER OF RADAR TRANSPONDER, NUMBER OF TWO WAY VHF RADIOTELEPHONE APPARATUS.
(3) DETAILS OF NAVIGATIONAL SYSTEM & EQUIPMENT:-
STANDARD MAGNETIC COMPASS, SPARE MEGNETIC COMPASS, GYRO COMPASS, GYRO COMPASS HEADING REPETER, GYRO COMPASS BEARING REPETER, HEADING & TRACK CONTROL SYSTEM, PELORUS OR TRACK CONTROL SYSTEM, MEANS OF CORRECTING HEADING & BEARING, TRANSMITTING HEADING DEVICE, NAUTICAL CHARTS, ECDIS, BACK UP ARRANGEMENTS FOR ECDIS, NAUTICAL PUBLICATIONS, BACK UP ARRANGEMENTS FOR ELECTRONIC NAUTICAL PUBLICATIONS, RECEIVER FOR A GLOBAL NAVIGATION SATELLITE SYSTEM/ TERRESTIAL RADIONAVIGATION SYSTEM, 9 GHZ RADAR, SECOND RADAR 3 GHZ,

ARPA, AUTOMATIC TRACKING AID, SECONDARY AUTOMATIC TRACKING AID, ELECTRONIC PLOTTING AID, AIS, VDR,SVDR, SPEED & DISTANCE MEASURING DEVICE THROUGH WATER & OVER GROUND, ECHO SOUNDER, RUDDER , PROPELLER, THRUST & OPERATIONAL MODE INDICATOR, RATE OF TURN INDICATOR, SOUND RECEPTION SYSTEM, TELEPHONE & EMERGENCY STEERING POSITION, DAYLIGHT SIGNALLING LAMP, RADAR REFLECTOR, INTERNATIONAL CODE OF SIGNAL. IAMSAR MANUAL VOLUME 3

Q.067. WHAT DO YOU MEAN BY WATER TIGHT & WEATHER TIGHT?
A.067. WATER TIGHT: - MEANS THAT IN ANY SEA CONDITION WATER WILL NOT PENETRATE FROM COMPARTMENT~~/TANK~~ & INTO THE ~~SHIP~~ COMPARTMENT
WEATHER TIGHT: - MEANS THAT IN ANY SEA CONDITIONS WATER WILL NOT PENETRATE INTO THE SHIP

Q.068. WHAT TYPE OF SHIP PROVIDE WITH LOADICATOR?
A.068. CONTAINER VESSEL, TANKER VESSEL, CAT

Q.069. IN WHICH YEAR THE LOAD LINE CONVENTION CAME IN FORCE?
A.069. 1966 THE LOAD LINE CONVENTION CAME IN FORCE & CONVENTION MODIFIED BY THE 1988 LL PROTOCOL

Q.070. WHAT DO YOU KNOW ABOUT WRECK CONVENTION?
A.070. Nairobi convention for Removal of dangerous wreck

Q.071. WHAT IS LCF & LOF?
A.071. LONGITUDINAL CENTRE OF FLOTATION IS THE LONGITUDINAL SEPARTION BETWEEN THE AFTER PERPENDICULAR & THE CENTRE OF FLOTATION

LOF: - LLOYADS OPEN FORM

Q.072. WHAT IS FUND CONVENTION?
A.072. FUND CONVENTION ASLO CALLED INTERNATIONAL CONVENTION FOR THE ESTABLISHMENT OF AN INTERNATIONAL FUND FOR COMPENSATION FOR OIL POLLUTION DAMAGE 1971. THE FUND IS CONSTITUTED BY CONTRIBUTIONS FROM THE RECEIVERS OF CRUDE OIL & HEAVY FUEL OIL. THE OIL IS COUNTED EACH TIME IT LANDS AT A PORT OR TERMINAL IRRESPECTIVE OF WHERE IT CAME FROM, EXCEPT IN SHIP TO SHIP TRANSFER. THE TOTAL AMOUNT UNDER THIS CONVENTION FOR ANY ONE INCIDENT OF OIL POLLUTION IS LIMITED TO 60 MSDRs. THE FUND DOES NOT PAY COMPENSATION IF (1)PROVED THAT A POLLUTION DAMAGE WAS CAUSED BY ACT OF WAR, CIVIL WAR, HOSTILITIES, etc. (2) THE CLAIMANT CANNOT PROVE THAT THE POLLUTION DAMAGE RESULTING FROM AN INCIDENT INVOLVING ONE OR MORE SHIP. (3) DAMAGE RESULTANT FROM THE WILLFUL MISCONDUCT FROM THE CLAIMANT OR FROM HIS NEGLIGENCE. (4) THE SHIP WHICH CAUSED THE DAMAGE DID NOT COMPLY WITH THE PROVISION OF SAFETY, POLLUTION PREVENTION LOADLINE & COLLISION PREVENTION CONVENTION.

Q.073. HOW WILL YOU PREPARE YOUR VESSEL FOR SEQ SURVEY?
A.073. (1) CHECK LIFE BOAT & RESCUE BOAT IN GOOD CONDITION & ALL MARKING ARE CLEARLY VISIBLE
(2) CHECK WINCHES ARE PROPERLY GREESED & IN GOOD CONDITION
(3) CHECK LIFE RAFT LASHING, BASE ARE IN GOOD CONDITION
(4) CHECK ALL LIFEJACKETS ARE IN GOOD CONDITION & ALL MARKING ARE CLEARLY VISIBLE, REPLACE LIGHT OF LJ IF REQUIRED.
(5) CHECK ALL PYROTECHNICS ARE UPTO DATE
(6) CHECK IMMERSION SUITS & TPS'S ARE IN GOOD CONNDTION & KEPT PROPERLY AS DESIGNATED PLACE
(7) CHECK EPIRB, SART, & VHF'S INCLUDING PORTABLE VHF ARE IN GOOD CONDITION & UPTO DATE
(8) All navigation equipment is upto date & working properly

Q.074. WHAT DO YOU MEAN BY SEAWORTHYNESS OF VESSEL? IF A VESSEL WITH A HOLE ON TOP OF BRIDGE, IS A VESSEL SEAWORTHY?
A.074. It is in a fit state as to condition of hull & equipment, boilers & machinery, stowage of ballast & cargo. number & qualifications of crew to encounter the ordinary perils of the voyage Then entered upon & is not overload.

Yes.

Q.075. WHAT IS SECA?
A.075. SO× EMISSION CONTROL AREA MEANS AN AREA WHERE THE ADOPTION OF SPECIAL MANADATORY MEASURES FOR SO× EMISSIONS FROM SHIPS IS REQUIRED TO PREVENT, REDUCE & CONTROL AIR POLLUTION FROM SO× & ITS ATTENDANT ADVERSE IMPACTS ON LAND & SEA AREAS. SO× EMISSION CONTROL AREAS ARE BALTIC SEA AREA, NORTH SEA AREA, ANY OTHER SEA AREA, INCLUDING PORT AREAS, DESIGNATED BY THE ORGANIZATION IN ACCORDANCE WITH CRITERIA & PROCEDURES FOR DESIGNATION OF SO× EMISSION CONTROL AREAS WITH RESPECT TO THE PREVENTION OF AIR POLLUTION FROM SHIPS
GENERAL REQUIREMENTS-THE SULPHUR CONTENT OF ANY FUEL OIL USED ON BOARD SHIPS SHALL NOT EXCEED 4.5% m/m.
WHILE SHIPS ARE WITHIN SO× EMISSION AREAS, THE SULPHUR CONTENTS OF FUEL OIL USED ON BOARD SHIPS IN SO× EMISSION CONTROL AREA DOES NOT EXCCED 1.5% m/M.
AN EXHAUST GAS CLEANING SYSTEM, APPROVED BY THE ADMINISTRATION.
THOSE SHIPS USING SEPARATE FUEL OILS TO COMPLY WITH THIS REGULATION SHALL ALLOW SUFFICIENT TIME FOR THE FUEL OIL SERVICE SYSTEM TO BE FULLY FLUSHED OF ALL FUELS EXCEEDING 1.5%m/m SULPHUR CONTENT PRIOR TO ENTRY INTO A SO× EMISSION AREA.

Q.076. WHAT DO YOU MEAN BY REGULATION?
A.076. REGULATIONS MEANS THE REGULATIONS CONTAINED IN THE ANNEX TO THE PRESENT CONVENTION

Q.078. WHAT DO YOU MEAN BY A SUBDIVISION LOAD LINE & DEEPEST SUBDIVISION LOADLINE?
A.078. SUBDIVISION LOADLINE: - IS A WATERLINE USED IN DETERMINING THE SUBDIVISION OF THE SHIP

DEEPEST SUBDIVISION LOADLINE: - IS THE WATERLINE WHICH CORRESPONDS TO THE GREATEST DRAUGHT PERMITTED BY THE SUBDIVISION REQUIREMENTS WHICH ARE APPLICABLE

Q.079. WHAT IS BULKHAED DECK & MARGIN LINE?
A.079. BULKHEAD DECK: -IS THE UPPERMOST DECK UP TO WHICH THE TRANSVERSE WATERTIGHT BULKHEADS ARE CARRIED

MARGIN LINE: - IS A LINE DRAWN ATLEAST 76mm BELOW THE UPPER SURFACE OF THE BULKHEAD DECK AT SIDE

Q.080. WHAT IS DECK LINE & ITS USES?
A.080. DECK LINE COINCIDES WITH THE UPPER MOST CONTINUOUS DECK, IT ISUSED TO MEASURE THE FREE BOARD

Q.081. WHAT IS THE REQUIREMENTS FOR LIFE BUOY AS PER SOLAS?
A.081.
→ OUTER DIAMETER NOT MORE THAN 800mm & INNER DIAMETER NOT LESS THAN 400mm
→ BE CONSTRUCTED OF INHERENTLY BUOYANT MATERIAL
→ BE CAPABLE OF SUPPORTING NOT LESS THAN 14.5 KG OF IRON IN FRESH WATER FOR A PERIOD OF 2.4 HOURS
→ HAVE A MASS NOT LESS THAN 2.5 KG
→ NOT SUSTAIN BURNING OR CONTINUE MELTING AFTER BEING TOTALLY ENVELOPE IN A FIRE FOR A PERIOD OF 2 SECONDS
→ IF IT IS INTENDED TO OPERATE THE QUICK RELEASE ARRANGEMENT PROVIDED FOR THE SELF ACTIVATED SMOKE SIGNAL & SELF IGNITING LIGHTS, HAVE A MASS SUFFICIENT TO OPERATE THE QUICK RELEASE ARRANGEMENT
→ BE FITTED WITH A GRABLINE NOT LESS THAN 9.5mm IN DIAMETER & NOT LESS THAN FOUR TIMES THE OUTSIDE DIAMETER OF THE BODY OF THE BUOY IN LENGTH, THE GRABLINE SHALL BE SECURED AT FOUR EQUIDISTANCE POINT AROUND THE CIRCUMFERENCE OF THE BUOY TO FORM FOUR EQUAL LOOPS

Q.082. WHAT IS THE REQUIREMENTS FOR LIFE JACKET AS PER SOLAS?
A.082.
→ A LIFE JACKET SHALL NOT SUSTAIN BURNING OR CONTINUE MELTING AFTER BEING TOTALLY ENVELOPED IN A FIRE FOR A PERIOD OF 2 SECONDS
→ BEFORE DEMONSTRATION, 75% OF PERSONS CAN CORRECTLY DON IT WITHIN PERIOD OF 1 MIN WITHOUT ASSISTANCE
→ AFTER DEMONSTRATION, ALL PERSONS CAN CORRECTLY DON IT WITHIN A PERIOD OF 1 MIN WITHOUT ASSISTANCE
→ IT IS COMFORTABLE TO WEAR
→ IT ALLOWS THE WEARER TO JUMP FROM A HEIGHT OF AT LEAST 4.5 METER INTO THE WATER WITHOUT INJURY & WITHOUT DISLODGING OR DAMAGING THE LIFEJACKET
→ IT IS ABLE TO LIFT MOUTH OF AN EXHAUSTED OR UNCONSCIOUS PERSON NOT LESS THAN 120mm CLEAR OF THE WATER WITH THE BODY INCLINED BACKWARDS AT THE ANGLE NOT LESS THAN 20° FROM VERTICAL POSITION
→ TURN THE BODY OF AN UNCONSCIUS PERSON IN THE WATER FROM ANY POSITION TO ONE WHERE THE MOUTH IS CLEAR OF THE WATER IN NOT MORE THAN 5 SECONDS
→ CHILD LIFE JACKET MUST MARK WITH CHILD SYMBOL ADOPTED BY THE ORGANIZATION

→ SHALL HAVE BUOYANCY WHICH IS NOT REDUCED BY MORE THAN 5% AFTER 24HOURS SUBMERSION IN FRESH WATER
→ EACH LIFE JACKET SHALL BE FITTED WITH WHISTLE FIRMLY SECURED BY A CORD
→ A LIFE JACKET WHICH DEPENDS ON INFLATION FOR BUYANCY SHALL HAVE NOT LESS THAN TWO SEPARATE COMPARTMENTS
→ EACH LIFE JACKET LIGHT SHALL HAVE A LUMINOUS INTENSITY OF NOT LESS THAN 0.75cd IN ALL DIRECTION OF THE UPPER HEMISPHERE FOR A PERIOD OF AT LEAST 8 HOURS & MUST BE WHITE COLOUR
→ IF FLASH LIGHT IS FITTED THAN FLASH AT A RATE OF NOT LESS THAN 50 FLASHES & NOT MORE THAN 70 FLASHES PER MINUTES WITH INTENSITY OF ATLEAST 0.75cd

Q.083. WHAT IS THE IMMERSION SUITS REQUIREMENTS AS PER SOLAS?
A.083. → THE IMMERSION SUIT SHALL BE CONSTRUCTED WITH WATERPROOF MATERIALS
→ IT CAN BE DONNED WITHOUT ASSISTANCE WITHIN 2 MINUTE
→ IT WILL NOT SUSTAIN BURNING OR CONTINUE MELTING AFTER BEING TOTALLY ENVELOPE IN A FIRE FOR A PERIOD OF 2 SECONDS
→ IT WILL COVER THE WHOLE BODY WITH THE EXCEPTION OF THE FACE
→ IT IS PROVIDED WITH ARRANGEMENTS TO MINIMIZE OR REDUCE FREE AIR IN THE LEGS OF THE SUIT
→ THERE IS NO UNDUE INGRESS OF WATER INTO THE SUIT WHEN A JUMP FROM A HEIGHT OF NOT LESS THAN 4.5 METER
→ AN IMMERSION SUIT SHALL PERMIT THE PERSON TO CLIMB UP & DOWN A VERTICAL LADDER ATLEAST 5 METER IN LENGTH, PERFORM NORMAL DUITES ASSOCIATED WITH ABANDONMENT
→ IT ALLOWS THE WEARER TO JUMP FROM A HEIGHT OF AT LEAST 4.5 METER INTO THE WATER WITHOUT INJURY & WITHOUT DISLODGING OR DAMAGING THE IMMERSION SUIT
→ SWIM SHORT DISTANCE THROUGH THE WATER & BOARD A SURVIVAL CRAFT
→ AN IMMERSION SUIT WHICH HAS BUOYANCY & IS DESIGNED TO BE WORN WITHOUT A LIFE JACKET SHALL BE FITTED WITH A LIGHT SHALL HAVE A LUMINOUS INTENSITY OF NOT LESS THAN 0.75cd IN ALL DIRECTION OF THE UPPER HEMISPHERE FOR A PERIOD OF AT LEAST 8 HOURS & MUST BE WHITE COLOUR
→ EACH IMMERSION SUIT SHALL BE FITTED WITH WHISTLE FIRMLY SECURED BY A CORD
→ WHEN IT IS WORN FOR APERIOD OF 1 HOUR IN CALM CIRCULATING WATER AT A TEMPERATURE OF 5° C, THE WEARER'S BODY CORE TEMPERATURE DOES NOT FALL MORE THAN 2°C
→ TURN THE BODY OF AN UNCONSCIUS PERSON IN THE WATER FROM ANY POSITION TO ONE WHERE THE MOUTH IS CLEAR OF THE WATER IN NOT MORE THAN 5 SECONDS

Q.084. WHAT IS THE REQUIREMENTS FOR ANTI EXPOSURE SUITS AS PER SOLAS?
A.084. → THE ANTI EXPOSURE SUIT SHALL BE CONSTRUCTED WITH WATERPROOF MATERIAL
→ PROVIDES INHERENT BUOYNCY OF AT LEAST 70 N
→ DONNED WITHOUT ASSISTANCE WITHIN 2 MINUTE
→ IT WILL NOT SUSTAIN BURNING OR CONTINUE MELTING AFTER BEING TOTALLY ENVELOPE IN A FIRE FOR A PERIOD OF 2 SECONDS
→ IS EQUIPPED WITH A POCKET FOR A PORTABLE VHF TELEPHONE
→ HAS A LATERAL FIELD OF VISION OF ATLEAST 120°
→ AN ANTI EXPOSURE SUIT SHALL PERMIT THE PERSON TO CLIMB UP & DOWN A VERTICAL LADDER ATLEAST 5 METER IN LENGTH
→ IT ALLOWS THE WEARER TO JUMP FROM A HEIGHT OF AT LEAST 4.5 METER INTO THE WATER WITHOUT INJURY & WITHOUT DISLODGING OR DAMAGING THE SUIT
→ SWIM SHORT DISTANCE THROUGH THE WATER AT LEAST 25 METER & BOARD A SURVIVAL CRAFT DON LIFE JACKET WITHOUT ASSISTANCE
→ PERFORM ALL DUTIES ASSOCIATED WITH ABANDONMENT, ASSIST OTHERS & OPERATE A RESCUE BOAT
→ IF MADE OFF MATERIAL WHICH HAS NO INHERENT INSULATION, BE MARKED WITH INSTRUCTIONS THAT IT MUST BE WORN IN CONJUCTION WITH WARM CLOTHING
→ WHEN IT IS WORN FOR APERIOD OF 1 HOUR IN CALM CIRCULATING WATER AT A TEMPERATURE OF 5° C, THE WEARER'S BODY CORE TEMPERATURE DOES NOT FALL MORE THAN 1.5°C PER HOUR AFTER THE 0.5 HOURS
→ A PERSON IN AFRESH WATER WEARING AN ANTI EXPOSURE SUIT SHALL BE TURN THE BODY OF AN UNCONSCIUS PERSON IN THE WATER FROM ANY POSITION TO ONE WHERE THE MOUTH IS CLEAR OF THE WATER IN NOT MORE THAN 5 SECONDS
NOTE: - THE SUIT SHALL NO TENDENCY TO THE WEARER FACE-DOWN IN MODERATE SEA CONDITION

Q.085. WHAT IS THE REQUIREMENTS FOR THERMAL PROTECTIVE AIDS AS PER SOLAS?
A.085. → THERMAL PROTECTIVE AID SHALL BE OF WATER PROOF MATERIAL HAVING A THERMAL CONDUCTANCE OF NOT MORE THAN 7800W (M^2K)
→ IT SHALL COVER THE WHOLE BODY OF PERSONS OF ALL SIZES WEARING A LIFEJACKET WITH THE EXCEPTION OF THE FACE
→ BE CAPABLE OF BEING UNPACKED & EASILY DONNED WITHOUT ASSISTANCE IN A SURVIVAL CRAFT OR RESCUE BOAT

→ PERMIT THE WEARER TO REMOVE IT IN THE WATER IN NOT MORE THAN 2 MIN
→ THERMAL PROTECTIVE AID SHALL FUNCTION PROPERLY THROUGHOUT AN AIR TEMPERATURE RANGE -30°C TO +20°C

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Q.086. ROCKET PARACHUTE FLARE REQUIREMENTS?
A.086. → BE CONTAINED IN A WATER RESISTANT CASING
→ HAVE BRIEF INSTRUCTIONS ABOUT HOW TO USE WITH DIAGRAM
→ HAVE INTEGRAL MEANS OF IGNITION
→ WHEN FIRED VERTICALLY REACH AN ALTITUDE OF NOT LESS THAN 300 METER
→ BURN WITH BRIGHT RED COLOUR
→ BURN UNIFORMLY WITH AN AVERAGE LUMINOUS INTENSITY OF NOT LESS THAN 30,000 cd
→ HAVE A BURNING PERIOD OF NOT LESS THAN 40 SECONDS
→ HAVE RATE OF DESCENT OF NOT LESS THAN 5 M/S
→ NOT DAMAGE ITS PARACHUTE OR ATTACHMENTS WHILE BURNING

Q.087. HAND FLARES REQUIREMENTS?
A.087. → BE CONTAINED IN A WATER RESISTANT CASING
→ HAVE BRIEF INSTRUCTIONS ABOUT HOW TO USE WITH DIAGRAM
→ HAVE INTEGRAL MEANS OF IGNITION
→ BURN WITH BRIGHT RED COLOUR
→ BURN UNIFORMLY WITH AN AVERAGE LUMINOUS INTENSITY OF NOT LESS THAN 15, 000 cd
→ HAVE A BURNING PERIOD OF NOT LESS THAN 1 MINUTE
→ CONTINUE TO BURN AFTER HAVING BEEN IMMERSED FOR A PERIOD OF 10 SECONDS UNDER 100mm OF WATER

Q.088. BUOYANT SMOKE SIGNAL REQUIREMENTS?
A.088. → BE CONTAINED IN A WATER RESISTANT CASING
→ HAVE BRIEF INSTRUCTIONS ABOUT HOW TO USE WITH DIAGRAM
→ EMIT SMOKE OF HIGHLY VISIBLE COLOUR AT A UNIFORM RATE FOR A PERIOD OF NOT LESS THAN 3 MINUTE WHEN FLOATING IN CALM WATER
→ NOT EMIT ANY FLAME DURING THE ENTIRE SMOKE EMISSION TIME
→ NOT BE SWAMPED IN A SEAWAY
→ CONTINUE TO EMIT SMOKE WHEN SUBMERGED IN WATER FOR A PERIOD OF 10 SECOND UNDER 100 mm OF WATER

Q.089. GENERAL REQUIREMENTS FOR LIFE RAFTS?
A.089. → CAPABLE OF WITHSTANDING EXPOSURE FOR 30 DAYS AFLOAT IN ALL SEA CONDITIONS
→ WHEN DROPPED INTO THE WATER FROM A HEIGHT OF 18 METER THE LIFE RAFT & EQUIPMENTS WILL OPERATE SATISFACTORY
→ THE FLOATING LIFE RAFT SHALL BE CAPABLE OF WITHSTANDING REPEATED JUMPS ON TO IT FROM A HEIGHT OF ATLEAST 4.5 METER ABOVE ITS FLOOR BOTH WITH & WITHOUT THE CANOPY ERECTED
→ IT ENABLES IT TO BE TOWED AT A SPEED OF 3 KNOTS
→ THE CANOPY SHALL PROVIDE INSULATION AGAINST HEAT & COLD BY MEANS OF EITHER TWO LAYERS OF MATERIALS
→ IT SHALL ADMIT SUFFICIENT AIR FOR THE OCCUPANTS AT ALL TIMES, EVEN WITH THE ENTRANCE CLOSED
→ IT SHALL BE PROVIDE WITH AT LEAST ONE VIEWING PORT
→ IT SHALL BE PROVIDED WITH MEANS FOR COLLECTING RAINWATER
→ IT SHALL BE PROVIDED WITH MEANS TO MOUNT A SURVIVAL CRAFT RADAR TRANSPONDER AT HEIGHT OF ATLEAST 1 METER ABOVE SEA LEVEL
→ IT SHALL HAVE SUFFICIENT HEADROOM FOR SITTING OCCUPANTS UNDER ALL PARTS OF THE CANOPY
→ MINIMUM CARRYING CAPACITY & MASS OF LIFE RAFT
→ THE TOTAL MASS OF THE LIFE RAFT, ITS CONTAINER & ITS EQUIPMENT SHALL NOT BE MORE THAN 185 KG
→ THE LIFE RAFT SHALL BE FITTED WITH AN EFFICIENT PAINTER OF LENGTH EQUAL TO NOT LESS THAN 10 METER + THE DISTANCE FROM THE STOWED POSITION TO THE WATERLINE IN THE LIGHTEST SEAGOING CONDITION OR 15 METERS WHICHEVER IS GREATER
→ A MANUALLY CONTROLLED LAMP SHALL BE FITTED TO THE TOP OF THE LIFE RAFT CANOPY & LIGHT SHALL BE WHITE & IT MUST BE OPERATE AT LEAST 12 HOURS WITH LUMINOUS INTENSITY OF NOT LESS THAN 4.3 cd
→ IF THE FLASH LIGHT IS FITTED IT SHALL FLASH AT A RATE OF NOT LESS THAN 50 FLASHES & NOT MORE THAN 70 FLASHES PER MINUTE FOR THE 12 HOURS
→ A MANUALLY CONTROLLED LAMP SHALL BE FITTED INSIDE THE LIFE RAFT CAPABLE OF CONTINUOUS OPERATION FOR PERIOD OF AT LEAST 12 HOURS
→ WHEN THE LIFE RAFT IS LOADED WITH FULL COMPLEMENT OF PERSONS & EQUIPMENT IS CAPABLE OF WITHSTANDING A LATERAL IMPACT AGAINST THE SHIP SIDE AT AN IMPACT VELOCITY OF NOT LESS THAN 3.5 m/s & ALSO DROP INTO THE WATER FROM A HEIGHT OF NOT LESS THAN 3 METER WITHOUT DAMAGE

Q.090. LIST OF LIFE RAFT EQUIPMENTS?

A.090.
→ ONE BUOYANT RESCUE QUOIT ATTACHED TO NOT LESS THAN 30 METER OF BUOYANT LINE
→ ONE KNIFE
→ ONE BUOYANT BAILER
→ TWO SPONGES
→ TWO SEA ANCHORS
→ TWO BUOYANT PADDLES
→ THREE TIN OPENERS & A PAIR SCISSORS
→ ONE FIRST AID OUTFIT
→ ONE WHISTLE
→ 4 ROCKET PARACHUTE FLARES
→ 6 HAND FLARES
→ 2 BUOYANT SMOKE SIGNAL
→ ONE WATER PROOF ELECTRIC TORCH SUITABLE FOR MORSE SIGNALLING
→ RADAR REFLECTOR
→ SIGNALLING MIRROR
→ ONE SET OF FISHING TACKLE
→ FOOD RATION TOTALLING NOT LESS THAN 10,000 KJ FOR EACH PERSON
→ WATER RATION-1.5 LITER OF FRESH WATER FOR EACH PERSON
→ ONE RUST PROOF GRADUATED DRINKING VESSEL
→ ANTI SEA SICKNESS MEDICINE SUFFICIENT FOR ATLEAST 48 HOURS & ONE SEASICKNESS BAG FOR EACH PERSON
→ INSTRUCTION ON HOW TO SURVIVE
→ INSTRUCTION ON IMMEDIATE ACTION
→ TPA, SUFFICIENT FOR 10% OF THE NUMBER OF PERSONS OR TWO WHICHEVER IS GREATER
→ MARKING SHALL BE "SOLAS 'A' PACK"

Q.091. LIST OF LIFE BOAT EQUIPMENTS?

A.091.
→ BUOYANT OARS TO MAKE HEADWAY IN CALM SEAS
→ TWO BOAT HOOKS
→ A BUOYANT BAILER & TWO BUCKETS
→ A SURVIVAL MANUAL
→ AN OPERATIONAL COMPASS
→ SEA ANCHOR
→ TWO EFFICIENT PAINTER OF A LENGTH EQUAL TO NOT LESS THAN TWICE THE DISTANCE FROM THE STOWAGE POSITION OF THE LIFE BOAT TO THE WATER LINE IN THE LIGHTEST SEAGOING CONDITION OR 15 METERS, WHICHEVER IS GREATER
→ TWO HATCHETS, ONE AT EACH OF THE LIFE BOAT
→ WATER RATION TOTAL 3 LITER OF FRESH WATER FOR EACH PERSON
→ FOOD RATION TOTALLING NOT LESS THAN 10,000 KJ FOR EACH PERSON
→ A RUST PROOF DIPPER WITH LANYARD
→ ONE RUST PROOF GRADUATED DRINKING VESSEL
→ 4 ROCKET PARACHUTE FLARES
→ 6 HAND FLARES
→ 2 BUOYANT SMOKE SIGNAL
→ ONE WATER PROOF ELECTRIC TORCH SUITABLE FOR MORSE SIGNALLING
→ SIGNALLING MIRROR
→ ONE COPY OF THE LIFE SAVING SIGNAL ON A WATER PROOF CARD OR IN A WATER PROOF CONTAINER
→ ONE WHISTLE OR EQUIVALENT SOUND SIGNAL
→ ONE BUOYANT RESCUE QUOIT ATTACHED TO NOT LESS THAN 30 METER OF BUOYANT LINE
→ ONE FIRST AID OUTFIT
→ A JACK KNIFE
→ IF THE LIFE BOAT IS NOT AUTOMATICALLY SELF BAILING, A MANUAL PUMP SUITABLE FOR EFFECTIVE BAILING
→ SUFFICIENT TOOLS FOR MINOR ADJUSTMENTS TO THE ENGINE & ITS ACCESSORIES
→ PORTABLE FIRE EXTINGUISHING EQUIPMENT, SUITABLE FOR EXTINGUISHING OIL FIRES
→ A SEARCH LIGHT WITH A HORIZONTAL & VERTICAL SECTOR OF AT LEAST 6° & MEASURED LUMINOUS INTENSITY OF 2500 cd WHICH CAN WORK CONTINUOUSLY FOR NOT LESS THAN 3 HOURS
→ EFFICIENT RADAR REFLECTOR
→ TPA, SUFFICIENT FOR 10% OF THE NUMBER OF PERSONS OR TWO WHICHEVER IS GREATER

Q.092. WHAT IS THE SOLAS REQUIREMENTS FOR WEEKLY & MONTHLY INSPECTION OF LIFE BOATS?
A.092. WEEKLY INSPECTIONS: -

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(1) SURVIVAL CRAFT, RESCUE BOAT & LAUNCHING APPLIANCES SHALL BE VISUALLY INSPECTED TO ENSURE THAT THEY ARE READY FOR USE
(2) ALL ENGINE IN LIFEBOATS & RESCUE BOATS SHALL BE RUN FOR A TOTAL PERIOD OF NOT LESS THAN 3 MINUTE PROVIDED THE AMBIENT TEMPERATURE IS ABOVE THE MINIMUM TEMPERATURE REQUIRED FOR STARTING & RUNNING THE ENGINE
(3) GEAR BOX TRAIN ARE ENGAGING SATISFACTORILY
(4) IF OUT BOARD MOTOR IS FITTED TO A RESCUE BOAT WOULD ALLOW IT TO BE RUN OTHER THAN ITS PROPELLER SUBMERGED FOR 3 MINUTES
(5) GENERAL EMERGENCY ALARM SHALL BE TESTED

MONTHLY INSPECTION: -
(1) INSPECTION OF THE LIFE SAVING APPLIANCES, INCLUDING LIFE BOAT EQUIPMENTS
(2) REPORT OF THE INSPECTION SHALL BE ENTERED IN THE LOG BOOK (change F/W every month)

EVERY INFLATABLE LIFERAFT, INFLATABLE LIFE JACKET & MARINE EVACUATION SYSTEM SHALL BE SERVICED AT INTERVALS NOT EXCEEDING 12 MONTHS

Q.093. WHAT ARE THE REQUIREMENTS FOR BOAT & FIRE DRILL ON CARGO SHIP AS PER SOLAS?
A.093. ATLEAST ONE ABANDON SHIP DRILL & ONE FIRE DRILL EVERY MONTH & IF MORE THAN 25% OF CREW CHANGED THAN WITHIN 24 HOURS OF THE SHIP LEAVING PORT

Q.094. WHAT IS THE REQUIREMENTS FOR CAPACITY OF LIFEBOATS?
A.094. ONE OR MORE TOTALLY ENCLOSED LIFEBOATS COMPLYING WITH THE REQUIREMENTS OF THE CODE OF SUCH AGGREGATE CAPACITY ON EACH SIDE OF THE SHIP AS WILL ACCOMMODATE THE TOTAL NUMBER OF PERSONS ON BOARD

Q.095. WHAT IS THE REQUIREMENTS FOR NUMBER OF LIFE BUOYS?
A.095.

LENGTH OF SHIP IN METERS	MINIMUM NUMBER OF LIFE BUOYS
UNDER 100	8
100 & UNDER 150	10
150 & UNDER 200	12
200 & ABOVE	14

(1) SO DISTRIBUTED AS TO BE READILY AVAILABLE ON BOTH SIDES OF THE SHIP
(2) ATLEAST ONE SHALL BE VICINITY OF THE STERN
(3) AT LEAST ONE LIFEBUOY ON EACH SIDE OF THE SHIP SHALL BE FITTED WITH A BUOYANT LIFELINE, LENGTH NOT LESS THAN TWICE THE HEIGHT AT WHICH IT IS STOWED ABOVE THE WATER LINE IN THE LIGHTEST SEAGOING CONDITION
(4) NOT LESS THAN ONE HALF OF THE TOTAL NUMBER OF LIFEBUOYS SHALL BE PROVIDED WITH LIFEBUOY SELF IGNITING LIGHTS
(5) NOT LESS THAN TWO OF THESE SHALL ALSO BE PROVIDED WITH LIFEBUOY SELF ACTIVATING SMOKE SIGNAL
(6) EACH LIFE BUOY SHALL BE MARKED IN BLOCK CAPITALS OF THE ROMAN ALPHABET WITH THE NAME & PORT OF REGISTRY OF THE SHIP

Q.096. HOW WILL YOU LOWER THE LIFE BOAT?
A.096. (1) ENSURE ALL CLEAR BELOW
(2) UNSHIP SAFETY PINS
(3) LET'S GO GRIPES FORWARD & AFT
(4) USING REMOTE LOWER UPTO EMBARKATION DECK OR MANUALLY BY RELAESE BREAK
(5) MAKE FAST BOWSING IN TACKLES, THE BOWSING IN TACKLES ARE THEN HAULED IN & THE BOAT MADE FAST TO THE EMBARKATION DECK
(6) LET GO TRICING PENDANT
(7) EMBARK CREW
(8) LET GO BOWSING IN TACKLES
(9) LOWER AWAY
(10) UNHOOKED BOAT HOOK
(11) CLEAR AWAY

Q.097. WHERE IS THE KNIFE LOCATED IN LIFE RAFT? WHY?
A.097. KNIFE IS STOWED IN A POCKET ON THE EXTERIOR OF THE CANOPY NEAR THE POINT AT WHICH THE PAINTER IS ATTACHED TO THE LIFERAFT.
TO CUT THE PAINTER

Q.098. WHAT ALL SHIPS SHOULD CARRY ENCLOSED LIFE BOAT?
A.098. ALL CARGO SHIP SHALL CARRY TOTALLY INCLOSED LIFEBOATS

Q.100. WHAT CHECKS YOU WILL CARRY OUT IN LIFE JACKETS?
A.100. (1) CHECK LIFE JACKET IN GOOD CONDITION
(2) CHECK MARKING ON LIFE JACKET IS VISIBLE ie. SHIP'S NAME & PORT OF REGISTRY
(3) CHECK LASHING STRIPS ARE IN GOOD CONDITION
(4) CHECK WHISTLE IS PROPERLY TIED & WORKING PROPERLY & IT'S APPROVED TYPE
(5) CHECK LIFE JACKET LIGHT IS WORKING PROPERLY & EXPIRY DATE OF BATTERY

Q.101. HOW WILL YOU CHECK LIFE JACKET LIGHT WHICH LIGHT UP ONLY IN SEAWATER?
A.101. THERE IS TWO POINT IN BOTTOM OF LIGHT, ~~I WILL~~ CONNECT THAT POINT BY MEANS OF WIRE & LIGHT WILL START BURNING

Q.102. CAN YOU CLIMB UP WEARING TPA?
A.102. NO

Q.103. WHAT IS THE REGULATION FOR RESCUE BOAT?
A.103. (1) RESCUE BOAT BE NOT LESS THAN 3.8m & NOT MORE THAN 8.5m IN LENGTH
(2) BE CAPABLE OF CARRYING AT LEAST 5 SEATED PERSON & PERSON LYING ON A STRETCHER
(3) UNLESS THE RESCUE BOATS WHICH HAS ADEQUATE SHEER, IT SHALL BE PROVIDED WITH A BOW COVER EXTENDING FOR NOT LESS THAN 15% OF ITS LENGTH
(4) RESCUE BOAT SHALL BE CAPABLE OF MANOEUVRING AT A SPEED OF AT LEAST 6 KNOTS & MAINTAINING THAT SPEED FOR A PERIOD OF AT LEAST 4 HOURS
(5) RESCUE BOAT HAVE SUFFICIENT MOBILITY & MANOEUVRABILITY IN A SEAWAY TO ENABLE PERSONS TO BE RETRIVED FROM THE WATER, MARSHAL LIFE RAFTS & TOW LARGEST LIFE RAFT CARRIED ON THE SHIP WHEN LOADED WITH ITS FULL COMPLEMENT OF PERSON & EQUIPMENT OR ITS EQUIVALENT AT A SPEED OF AT LEAST 2 KNOTS
(6) FUEL SYSTEM IN RESCUE BOATS SHALL BE PROTECTED AGAINST FIRE & EXPLOSION
(7) ARRANGEMENT FOR TOWING SHALL BE PERMANENTLY FITTED IN RESCUE BOAT
(8) RESCUE BOAT SHALL BE PROVIDED WITH EFFECTIVE MEANS OF BAILING OR BE AUTOMATICALLY SELF BAILING
(9) RESCUE BOAT SHALL BE FITTED WITH WEATHER TIGHT STOWAGE FOR SMALL ITEMS OF EQUIPMENT

Q.104. WHAT IS THE DIFFERENCE BETWEEN IMMERSION SUIT & TPA?
A.104.

TPA	IMMERSION SUIT
IT'S A PLASTIC BAG	IT'S A THERMAL PROTECTIVE SUIT
WEAER CAN NOT SWIM	WEAR CAN SWIM SHORT DISTANCE
TPA ARE WITHOUT LIFE JACKET	SOME IMMERSION SUIT ARE WITH LIFE JACKET & SOME WITHOUT LIFEJACKET
ITI NOT PERMIT TO CLIMB UP & DOWN	PERMITS THE PERSON TO CLIMB UP & DOWN A VERTICAL LADDER ATLEAST 5 M IN LENGTH

Q.105. PILOT LADDER SPECIFICATION?
A.105. PILOT LADDER STEPS MUST PROVIDED A SLIP RESISTANCE FOOT HOLD OF NOT LESS THAN 400mm×115mm×25mm.


STEPS MUST BE HORIZONATAL & EQUALLY SPACED OF INTERVAL OF 310mm .
SIDE ROPE SHOULD BE MINIMUM 18mm IN DIAMETER, SHALL BE EQUALLY SPACED .
THEY SHALL BE NO SHACKLE OR KNOTS OR SPLICE BETWEEN THE RUNGS.
PILOT LADDER MUST BE FITTED WITH SPREADER IS NOT LESS THAN 1.8m LONG.THE LOWEST SPREADER MUST BE ON THE FIFTH STEPS OF THE BOTTOM & AN INTERVAL BETWEEN SPREADER SHALL NOT EXCEED A STEPS,MAXIMUM 6 STEPS BETWEEN TWO SPREADER IS ALLOWED.
TWO HANDHOLD STANCHIONS TO BE PROVIDED BETWEEN 700mm & 800mm APART,STANCHIONS SHOULD BE ATLEAST 40mm IN DIAMETER & EXTEND NO LESS THAN 1.20m ABOVE TOP OF BULWARK.
WHEN FREEBOARD OF SHIP MORE THAN 9 METER, ACCOMODATION LADDER MUST BE PROVIDED ON EACH SIDE OF SHIP.
PILOT LADDER SHALL EXTENDS ATLEAST 2m ABOVE ACCOMODATION LADDER'S BOTTOM PLATFORM

Q.106. HOW WILL YOU PREPARE MUSTER LIST FOR NEW YARD DELIVERY SHIP?
A.106. THE MUSTER LIST SHALL SPECIFY DETAILS OF THE GENERAL EMERGENCY ALARM & PUBLIC ADDRESS SYSTEM & ALSO ACTION TO BE TAKEN BY CREW & PASSENGERS WHEN THIS ALARM IS SOUNDED. THE MUSTER LIST SHALL ALSO SPECIFY WHO WTHE ORDER TO ABONDON SHIP WILL BE GIVEN.
THE MUSTER LIST SHALL SHOW THE DUTIES ASSIGNED TO THE DIFFERENT MEMBERS OF THE CREW INCLUDING: -
(1) CLOSING OF THE WATERTIGHT DOORS, FIRE DOORS, VALVES, SCUPPERS, SIDESCUTTLES, SKYLIGHTS, PORTHOLES & OTHER SIMILAR OPENINGS IN THE SHIP.
(2) EQUIPPING OF THE SURVIVAL CRAFT & OTHER LIFE SAVING APPLIANCES
(3) PREPARATION & LAUNCHING OF SURVIVAL CRAFT
(4) GENERAL PREPARATION OF OTHER LIFE SAVING APPLIANCES
(5) MUSTER OF PASSENGERS

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(6) USE OF COMMUNICATION EQUIPMENT
(7) MANNING OF FIRE PARTIES ASSIGNED TO DEAL WITH FIRES
(8) SPECIAL DUTIES ASSIGNED IN RESPECT TO THE USE OF FIRE FIGHTING EQUIPMENT & INSTALLTION

THE MUSTER LIST SHALL SPECIFY WHICH OFFICERS ARE ASSIGNED TO ENSURE THAT LIFE SAVING & FIRE APPLIANCES ARE MAINTAINED IN GOOD CONDITION & ARE READY FOR IMMEDIATE USE.
THE MUSTER LIST SHALL SPECIFY SUBSTITUTES FOR KEY PERSONS WHO MAY BECOME DISABLED, TAKING INTO ACCOUNT THAT DIFFERENT EMERGENCIES MAY CALL FOR DIFFERENT ACTIONS

Q.107. HOW WILL YOU DO THE MAINTENANCE OF LSA EQUIPMENTS?
A.107. WEEKLY INSPECTIONS: -
(1) SURVIVAL CRAFT, RESCUE BOAT & LAUNCHING APPLIANCES SHALL BE VISUALLY INSPECTED TO ENSURE THAT THEY ARE READY FOR USE
(2) ALL ENGINE IN LIFEBOATS & RESCUE BOATS SHALL BE RUN FOR A TOTAL PERIOD OF NOT LESS THAN 3 MINUTE PROVIDED THE AMBIENT TEMPERATURE IS ABOVE THE MINIMUM TEMPERATURE REQUIRED FOR STARTING & RUNNING THE ENGINE
(6) GEAR BOX TRAIN ARE ENGAGING SATISFACTORILY
(7) IF OUT BOARD MOTOR IS FITTED TO A RESCUE BOAT WOULD ALLOW IT TO BE RUN OTHER THAN ITS PROPELLER SUBMERGED FOR 3 MINUTES
(8) GENERAL EMERGENCY ALARM SHALL BE TESTED

MONTHLY INSPECTION: -
(3) INSPECTION OF THE LIFE SAVING APPLIANCES, INCLUDING LIFE BOAT EQUIPMENTS
(4) REPORT OF THE INSPECTION SHALL BE ENTERED IN THE LOG BOOK

EVERY INFLATABLE LIFERAFT, INFLATABLE LIFE JACKET & MARINE EVACUATION SYSTEM SHALL BE SERVICED AT INTERVALS NOT EXCEEDING 12 MONTHS

Q.108. HOW WILL YOU MAKE MUSTER CARD?
A.108. MUSTER CARD SHOULD BE PREPARED AS PER MUSTER LIST. IT CONTENTS NAME OF CREW, HIS DUITES IN EMERGENCY, LIFE BOAT DUITES, FIRE DRILL DUITES, OIL SPILL DRILL DUTIES, GENERAL EMERGENCY ALARM, FIRE ALARM, LOCATION OF EMERGENCY STATIONS

Q.109. WHAT IS THE RANGE OF VISIBILITY OF HAND FLARES DURING NIGHT & DAY?
A.109. 1 ROCKET PARACHUTE – 20 NM
2 HAND FLARES – 10 NM at night & 5 at day
6 BOUYANT SMOKE SIGNAL – 2 TO 3 Nm

Q.110. LIST OF RESCUE BOAT EQUIPMENTS?
A.110. (1) BUOYANT OARS OR PADDLES, THOLE PINS, CRUTCHES OR EQUIVALENT ARRANGEMENT SHALL PROVIDED FOR EACH ORS
(2) A BUOYANT BAILER
(3) A BINNACLE CONTAINING AN EFFICIENT COMPASS
(4) A SEA ANCHOR & TRIPPING LINE
(5) A PAINTER
(6) ONE BUOYANT LINE, NOT LESS THAN 50m IN LENGTH
(7) ONE WATERPROOF ELECTRIC TORCH WITH ONE SPARE SET OF BATTEREIES & ONE SPARE BULB IN A WATER PROOF CONTAINER
(8) ONE WHISTLE OR EQUIVALENT SOUND SIGNAL
(9) A FIRST-AID OUTFIT IN A WATERPROOF CASE CAPABLE OF BEING CLOSED TIGHTLY AFTER USE
(10) TWO BUOYANT RESCUE QUOITS, ATTCHED TO NOT LESS THAN 30m OF BUOYANT LINE
(11) A SEARCH LIGHT WITH A HORIZONTAL ANDØ VERTICAL SECTOR OF AT LEAST 6° & A MEASURED LUMINOUS INTENSITY OF 2,500 cd WHICH CAN WORK CONTINUOUSLY FOR NOT LESS THAN 3 HOUR
(12) AN EFFICIENT RADAR REFLECTOR
(13) THERMAL PROTECTIVE AIDS
(14) PORTABLE FIRE EXTINGUISHMENT EQUIPMENT
(15) A BOAT HOOK
(16) A BUCKET
(17) A KNIFE OR HATCHET
(18) A BUOYANT SAFETY KNIFE
(19) TWO SPONGES
(20) A REPAIR KIT IN A SUITABLE CONTAINER FOR REPAIRING PUNCTURES
(21) A SAFETY BOAT HOOK

Q.111. RESCUE BOAT SPECIFICATION?
A.111. RESCUE BOATS MAY BE RIGID OR INFLATED OR A COMBINATION OF BOTH.
3.8 TO 8.5 METRES LONG & HAVE CAPACITY OF ATLEAST 5 SEATED & ONE LYING PERSON. THE BOW IS COVERED FOR ATLEAST 15% OF ITS LENGTH. IT MAY BE FITTED WITH A PETROL OR DIESEL DRIVEN INBOARD OR OUTBOARD MOTOR, CAPABLE OF GIVING THE BOAT A SPEED OF 6 KONTS FOR ATLEAST 4 HRS OR TOW THE LARGEST LIFERAFT OF THE SHIP AT A SPEED OF ATLEAST 2 KNOTS WHEN FULLY LOADED. ARRANGEMENTS FOR TOWING ARE PERMANENTLY FITTED. A RADAR REFLECTOR & SEARCHLIGHT ARE ALSO FITTED.

AN INFLATED RESCUE BOAT IS STRONG ENOUGH TO BE LOWERED OR HOISTED FULLY LOADED. IT SHOULD BE CAPABLE TO WITHSTAND EXPOSURE WHEN STOWED ON OPEN DECK ON A SHIP AT SEA OR WHEN FLOATING AT SEA FOR 30 DAYS. ITS BUOYANCY IS PROVIDED EITHER BY A SINGLE TUBE HAVING ATLEAST 5 COMPARTMENTS OR BY 2 UNDIVIDED TUBES. IT CAN STILL SUPPORT ITS FULL CAPACITY OF PERSONS EVEN IF IT IS DAMAGED IN 1 COMPARTMENT. NON RETURN VALVES FOR MANUAL INFLATION,A DEFLATION VALVE & A SAFETY RELIEF VALVE ARE PROVIDED. SUITABLE PATCHES ARE PROVIDED FOR SECURING THE PAINTERS FORE & AFT. BECKETED LIFELINES ARE PROVIDED INSIDE & OUTSIDE THE BOAT. INFLATED RESCUE BOATS ARE ALWAYS KEPT INFLATED.

Q.112. HOW HRU WORKS?
A.112. AT THE DEPTH OF 1.5m – 4.0m, WHEN THE SHIP SINK, THE WATER START ENTERING HOLE IN HRU IN BOTTOM WHICH PRESS THE DIAPHRAGM.BY DOING SO THE UPPER POSITION OF HRU IS RELEASED. IN OTHER WORDS THE LASHING OF THE LIFE RAFT IS RELEASED & LIFE RAFT CONTAINER WILL FLOATS

Q.113. WHAT IS WEAK LINK?
A.113. IT'S A WEEKEST LINK IN PAINTER, WHEN SHIP WILL SINK THAT TIME PAINTER WILL AUTOMATICALLY BREAKS UNDER THE STRAIN OF 2.2 ±0.4 KN. WEAK LINK IS USED IN THE FLOAT FREE ARRANGEMENT

Q.114. YOU WANT TO INFLATED ONE LIFERAFT BUT IT IS NOT OPENING, WHAT ACTION YOU WILL TAKE?
A.114. (1) PICK IT UP BACK ONBOARD
(2) CLEAR THE PAINTER
(3) RESEAL THE CONTAINER
(4) THROW RAFT ON THE BOARD
(5) USE ANOTHER ONE

Q.115. WHAT IS HYPOTHERMIA? WHAT CAN YOU DO TO PREVENT IT?
A.115. LOST OF BODY TEMPERATURE IS CALLED HYPOTHERMIA.
TO PREVENT IT WEAR IMMERSION SUIT, CLOSED ALL OPENINGS

Q.116. WHAT IS CARE OF TEMPERATURE OF BODY?
A.116. 37°C OR 98.6°F

Q.117. WHAT PYROTECHNICS ARE CARRIED ON A BRIDGE AS PER SOLAS?
A.117. 12 ROCKET PARACHUTE FLARE

Q.118. WHAT IS THE REGULATION FOR GENERAL EMMERGENCY ALARM?
A.118. THE GENERAL EMERGENCY ALARM SYSTEM SHALL BE CAPABLE OF SOUNDING THE GENERAL EMERGENCY ALARM SIGNAL CONSISTING OF SEVEN OR MORE SHORT BLASTS FOLLOWED BY ONE LONG BLAST ON THE SHIP'S WHISTLE OR SIREN & ADDITIONALLY ON AN ELECTRICLLY OPERATED BELL OR KLAXON OR OTHER EQUIVALENT WARNING SYSTEM, WHICH SHALL BE POWERED FROM THE SHIP'S MAIN SUPPLY & THE EMERGENCY SOURCE OF ELECTRICAL POWER. THE SYSTEM SHALL BE CAPABLE OF OPERATION FROM THE NAVIGATION BRIDGE & EXCEPT FOR THE SHIP'S WHISTLE, ALSO FROM OTHER STRATEGIC POINTS. THE SYSTEM SHALL BE AUDIBLE THROUGHOUT ALL OF THE ACCOMODATION & NORMAL CREW WORKING SPACES. THE ALARM SHALL CONTINUE TO FUNCTION AFTER IT HAS BEEN TRIGGERED UNTIL IT IS MANUALLY TURNED OFF.
THE MINIMUM SOUND PRESSURE LEVELS FOR THE EMERGENCY ALARM TONE IN INTERIOR & EXTERIOR SPACES SHALL BE 80 db & ATLEAST 10 db ABOVE AMBIENT NOISE LEVEL EXISTING DURING NORMAL EQUIPMENT OPERATION WITH THE SHIP UNDER WAY IN MODERATE WEATHER. IN CABINS WITHOUT A LOUDSPEAKER INSTALLATION, AN ELECTRONIC ALARM TRANSDUCER SHALL BE INSTALLED, e.g. A BUZZER OR SIMILAR
THE SOUND PRESSURE LEVELS AT THE SLEEPING POSITION IN CABIN & IN CABIN BATHROOMS SHALL BE ATLEAST 75db & AT LEAST 10 db ABOVE AMBIENT NOISE LEVELS

(1) Bailer. (1) Sponges

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Q.119. HOW WILL YOU KNOW THAT SART IS WORKING OR NOT?
A.119. PRIOR TESTING, ENSURE THAT THERE ARE NO VESSEL IN THE VICINITY
(1) SWITCH SART TO TEST MODE
(2) HOLD SART IN VIEW OF RADAR SCANNER (X BAND RADAR)
(3) CHECK THAT THE VISUAL INDICATOR LIGHTS
(4) CHECK THAT THE BEEPER IS AUDIBLE
(5) OBSERVE RADAR PPI- DISPLAYS CONCENTRIC CIRCLES
(6) CHECK BATTERY EXPIRY DATE

Q.120. WHAT IS THE DIFFERENCE BETWEEN THE LIFEBOAT & LIFE RAFT?
A.120.

LIFE BOAT	LIFE RAFT
IT MADE OF RIGID MATERIAL	IT MADE OF INFLATABLE MATERIAL
IT CONTAIN PROPELLING MACHINERY	IT DOES NOT CONTAIN PROPELLING MACHINERY
IT NOT CONNECTED TO THE HYDROSTATIC UNIT	IT CONNECTED TO THE HYROSTATIC UNIT
LIFE BOAT CONTAINS RUDDER	IT DOES NOT CONTIANS RUDDER
WATER RATION IN LIFE BOAT IS 3 LETER PER PERSON	WATER RATION IN LIFE RAFT IS 1.5 LETER PER PERSON
FIRE EXTINGUISHER & FIRE AXE IS AVAILABLE IN LIFEBOAT EQUIPMENTS	FIRE EXTINGUISHER & FIRE AXE IS NOT AVAILABLE IN LIFEBOAT EQUIPMENTS
have rust proof dipper with lanyard, torch, whistle or equivalent signal, strong, search light, copy of LS signal.	Does not have

Q.121. ~~WHAT IS DISTRESS FLARE & ITS VISIBILITY?~~ WHAT IS DIFFERENCE BETWEEN LIFEBOAT & RESCUE BOAT
A.121. Main differences are the lowering & recovery time is less than L/B.

Q.122. WHAT IS AN ANTI EXPOSURE SUIT?
A.122. ANTI EXPOSURESUIT IS A PROTECTIVE SUIT DESIGNED FOR USE BY RESCUE BOAT CREWS & EVACUATION SYSTEM PARTIES

Q.123. WHAT IS AN IMMERSION SUIT?
A.123. IMMERSION SUIT IS A PROTECTIVE SUITWHICH REDUCES THE BODY HEAT LOSS OF A PERSON WEARING IT IN COLD WATER

Q.124. WHAT IS A TPA?
A.124. THERMAL PROTECTIVE AID IS A BAG OR SUIT MADE OF WATERPROOF MATERIAL WITH LOW THERMAL CONDUCTANCE

Q.125. WHAT IS MOULDED DEPTH?
A.125. THE MOULDED DEPTH IS THE VERTICAL DISTANCE MEASURED FROM THE TOP OF THE KEEL TO THE TOP OF THE FREEBOARD DECK BEAM AT SIDE

Q.126. WHAT ARE THE MARPOL CRITERIA FOR SEGGREGATED BALAST?
A.126. THE SEGREGATED BALLAST SYSTEM SHOULD BE A SYSTEM WHICH IS "COMPLETELY SEPARATED FROM THE CARGO OIL AND FUEL SYSTEMS".
PROVISION MAY BE MADE FOR EMERGENCY DISCHARGE OF THE SEGREGATED BALLAST BY MEANS OF A CONNECTION TO A CARGO PUMP THROUGH A PORTABLE SPOOL PIECE. IN THIS CASE NON-RETURN VALVE SHOULD BE FITTED ON THE SEGREGATED BALLAST CONNECTIONS TO PREVENT THE PASSAGE OF OIL TO THE SEGREGATED BALLAST TANKS. THE PORTABLE SPOOL PIECE SHOULD BE MOUNTED IN A CONSPICUOUS POSITION IN THE PUMPROOM AND A PERMANENT NOTICE RESTRICTING ITS USE SHOULD BE PROMINENTLY DISPLAYED ADJACENT TO IT

Q.127. WHAT IS SEGREGATED BALLAST?
A.127. SEGREGATED BALLAST MEANS THE BALLAST WATER INTRODUCED INTO A TANK WHICH IS COMPLETELY SEPARATED FROM THE CARGO OIL AND OIL FUEL SYSTEM AND WHICH IS PERMANENTLY ALLOCATED TO THE CARRIAGE OF BALLAST OR ~~TO THE CARRIAGE OF BALLAST OR~~ CARGOES OTHER THAN OIL OR NOXIOUS LIQUID SUBSTANCES AS VARIOUSLY DEFINED IN THE ANNEXES OF THE PRESENT CONVENTION

Q.128. DEFINE TERM ENROUTE & RESIDUE?
A.128. ENROUTE MEANS THAT THE SHIP IS UNDER WAY AT SEA ON A COURSE OR COURSES, INCLUDING DEVIATION FROM THE SHORTEST DIRECT ROUTE, WHICH AS FAR AS PRACTICABLE FOR NAVIGATION PURPOSE, WILL CAUSE ANY DISCHARGE TO BE SPREAD OVER AS GREAT AN AREA OF THE SEA AS IS REASONABLE & PRACTICABLE

RESIDUE: - RESIDUE MEANS ANY NOXIOUS LIQUID SUBSTANCE WHICH REMAINS FOR DISPOSAL

Q.129. WHAT YOU UNDERSTAND BY PPM?
A.129. PARTS PER MILLION MEANS PARTS OF OIL PER MILLION PARTS OF WATER BY VOLUME

Q.130. WHAT DO YOU MEAN BY NOXIOUS LIQUID SUBSTANCE?
A.130. NOXIOUS LIQUID SUBSTANCE MEANS ANY SUBSTANCE INDICATED IN THE POLLUTION CATEGORY COLUMN OF CHAPTER 17 OR 18 OF THE INTERNATIONAL BULK CHEMICAL CODE OR PROVISIONALLY ASSESSED UNDER THE PROVISIONS OF REGULATION 6.3 AS FALLING INTO CATEGORY X, Y OR Z.

Q.131. WHAT IS CLEAN BALLAST?
A.131. CLEAN BALLAST MEANS THE BALLAST IN A TANK WHICH, SINCE OIL WAS LAST CARRIED THEREIN, HAS BEEN SO CLEANED THAT EFFLUENT THEREFROM IF IT WERE DISCHARGED FROM A SHIP WHICH IS STATIONARY INTO CLEAN CALM WATER ON A CLEAR DAY WOULD NOT PRODUCE VISIBLE TRACES OF OIL ON THE SURFACE OF THE WATER OR ON ADJOINING SHORELINES OR CAUSE A SLUDGE OR EMULSION TO BE DEPOSITED BENEATH THE SURFACE OF WATER OR UPON ADJOINING SHORELINES.
IF THE BALLAST IS DISCHARGED THROUGH AN OIL DISCHARGE MONITORING & CONTROL SYSTEM APPROVED BY THE ADMINISTRATION, THE OIL CONTENT OF THE EFFLUENT DID NOT EXCEED 15 PARTS PER MILLION SHALL BE DETERMINATIVE THAT THE BALLAST WAS CLEAN

Q.132. WHAT IS THE PURPOSE OF MARPOL?
A.132. PREVENTION OF POLLUTION FROM SHIPS

Q.133. EXPLAIN THE FOLLOWING TERMS AS PER ANNEX 1?
A.133. SPECIAL AREA: - MEANS A SEA AREA WHERE FOR RECOGNIZED TECHNICAL REASONS IN RELATION TO ITS OCEANOGRAPHIC & ECOLOGICAL CONDITION & TO THE PARTICULAR CHARACTER OF ITS TRAFFIC THE ADOPTION OF SPECIAL MANDATORY METHODS FOR THE PREVENTION OF SEA POLLUTION BY OIL IS REQUIRED

INSTANTANEOUS RATE OF DISCHARGE: - OF OIL CONTENT MEANS THE RATE OF DISCHARGE OF OIL IN LITRES PER HOUR AT ANY INSTANT DIVIDED BY THE SPEED OF THE SHIP IN KNOTS AT THE SAME INSTANT

SLOP TANK: - MEANS A TANK SPECIALLY DESIGNATED FOR THE COLLECTION OF TANK DRAINING, TANK WASHING & OTHER OILY MIXTURES

ANNIVERSARY DATE: - MEANS THE DAY & THE MONTH OF EACH YEAR, WHICH WILL CORRESPOND TO THE DATE OF EXPIRY OF THE INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

Q.134. WHY MARPOL CALLED 73/78?
A.134. INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO SO IN SHORT FROM "MARPOL 73/78" its called

Q.135. HOW WILL YOU DISCHARGE FOOD WASTE?
A.135. OUTSIDE SPECIAL AREA : - MORE THAN 12 NM FROM NEAREST LAND & MORE THAN 3NM FROM NEAREST LAND IF COMMINUTED & CAPABLE OF PASSING THROUGH A SCREEN WITH OPENINGS NO GREATER THAN 25mm
INSIDE SPECIAL AREA : - MORE THAN 12 NM FROM NEAREST LAND. ONLY IN WIDER CARIBBEAN REGION MORE THAN 3NM FROM NEAREST LAND IF COMMINUTED & CAPABLE OF PASSING THROUGH A SCREEN WITH OPENINGS NO GREATER THAN 25mm

Q.136. HOW WILL YOU DISCHARGE WOODEN DUNNAGE?
A.136. OUTSIDE SPECIAL AREA : - MORE THAN 25 NM FROM NEAREST LAND
INSIDE SPECIAL AREA : - PROHIBITED

Q.137. WHAT ARE THE ANNEXES OF MARPOL 73/78?
A.137.
ANNEX 1 : REGULATIONS FOR PREVENTION OF POLLUTION BY OIL
ANNEX 2 : REGULATIONS FOR THE CONTROL OF POLLUTION BY NOXIOUS LIQUID SUBSTANCES IN BULK
ANNEX 3 : REGULATIONS FOR THE PREVENTION OF POLLUTION BY HARMFUL SUBSTANCES CARRIED BY SEA IN PACKAGED FORM
ANNEX 4 : REGULATION FOR THE PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS
ANNEX 5 : REGULATION FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS
ANNEX 6 : REGULATION FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

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Q.138. WHAT IS THE DATE OF ENTRY OF EACH ANNEX?
A.138.
ANNEX 1 : 1983
ANNEX 2 : 1987
ANNEX 3 : 1992
ANNEX 4 : 2003
ANNEX 5 : 1988
ANNEX 6 : 2005

Q.139. HOW WILL YOU MAKE OIL SPILL MUSTER CARD?
A.139.

Q.140. WHAT ARE THE CONTENTS OF SOPEP?
A.140. SOPEP MANUAL CONTAIN 4 SECTION
(1) THE PROCEDURE TO BE FOLLOWED TO REPORT OIL POLLUTION INCIDENT
(2) LIST OF CONTACT & ADDRESS TO BE NOTIFY
(3) ACTION TO BE TAKEN IN THE EVENT OF OIL POLLUTION TO REDUCE OR CONTROL THE POLLUTION
(4) THE PROCEDURE & POINT OF CONTACT ON THE SHIP FOR COORDINATING SHIPBOARD ACTION WITH NATIONAL & LOCAL AUTHORITIES IN COMBATING POLLUTION

SOPEP SHALL CONTAIN FOLLOWING PLANS:
(1) GENERAL ARRANGEMENT PLAN
(2) CAPACITY PLAN
(3) MIDSHIP SECTION
(4) SHELL EXPANSION PLAN
(5) PUMPING ARRANGEMENT

Q.141. DISCHARGE CRITERIA FOR MACHINERY SPACE AS PER ANNEX 1?
A.141. ~~(1) THE SHIP SHOULD NOT BE IN A~~ SPECIAL AREA
(2) IT SHOULD BE PROCEEDING ENROUTE
(3) THE OIL CONTENT SHOULD NOT EXCEED 15PPM
(4) THE SHIP SHOULD BE FITTED WITH A 15 PPM OWS WITH BILGE ALARM

Q.142. ENCLOSED SPACE ENTRY CHECK LIST?
A.142. (1) DATE
(2) PERIOD OF VALIDITY (THE PERIOD SHOULD NOT EXCEED 24 HRS)
(3) LOACTION OF WORK AREA
(4) TOTAL NUMBER OF PERSONS ENTERING THE SPACE
(5) THE NAMES OF THE DESIGNATED CREW MEMBERS
(6) INFORMATION REGARDING THE WORK TO BE CARRIED OUT
(7) TIME OF TESTING THE OXYGEN ANALYSERS
(8) TIME OF TESTING THE HYDROCARBON GAS IN THE SPACE
(9) TIME OF TESTING THE TOXIC GAS DETECTOR
(10) WHERE THE TESTS MADE AT SEVERAL LEVELS OR AT DIFFERENT POSITIONS?
(11) TIME OF ENTRY & TIME OF EXIT
(12) IS THE SPACE BEING CONTINUOUSLY VENTILATED?
(13) IS THERE A CONSTANT ATMOSPHERE MONITORING SYSTEM?
(14) IS THE AGREED COMMUNICATION SYSTEM FUNCTIONING?
(15) IF VHF WALKIE-TALKIE RADIOS ARE BEING USED ARE THEY INTRINSICALLY SAFE, HAVE THEY BEEN TESTED
(16) IS THERE A STAND BY MAN AT THE ENTRANCE?
(17) DOES THE STAND BY MAN UNDERSTAAND HIS EMERGENCY PROCEDURE IN THE EVENT OF AN ACCIDENT?
(18) IS THE ENTRANCE CLEAR?
(19) IF APPLICABLE, HAVE DOORS BEEN SECURED?
(20) HAVE WARNING NOTICES BEEN POSTED?
(21) IS THERE ADEQUATE EXPLOSION PROOFILLUMINATION?
(22) HAVE PRECAAUTIONS BEEN TAKEN TO PREVENT ENTRY OF INJURIOUS SUBSTANCES INTO THE SPACE
(23) HAVE POTENTIAL HAZARDS BEEN IDENTIFIED?
(24) HAVE THE BRIDGE & ENGINE ROOM WATCHKEEPERS BEEN INFORMED?
(25) IS PROTECTIVE CLOTHING BEING WORN?
(26) IS ALL THE EQUIPMENT TO BE USED OF AN APPROVED TYPE?
(27) IF REPAIRS ARE TO BE CARIED OUT AN MACHINERY, IS SUCH MACHINERY ISOLATED FROM SOURCES OF POWER OR HEAT?
(28) IS FIRE FIGHTING EQUIPMENT AVAILABLE?
(29) ARE SCBA SET IS AVAILABLE & CAPABLE OF FUNCTIONING PROPERLY?
(30) WILL FIRST MAN IN BE WEARING BREATHING APPARATUS?

EMERGENCYINSTRUCTIONS SHOULD BE PRINTED AT THE BOTTOM IF THE PERMIT & THEPERMIT SHOULD BE SIGNED BY A RESPONSIBLE OFFICER WHEN HE IS SATISFIED THAT ALL THE SAFETY PROCEDURES HAVE BEEN CARRIED OUT

Q.143. WHAT ARE THE VARIOUS CATEGORY OF GARBAGE?
A.143. (1) ALL PLASTIC
(2) DUNNAGE, LINING & FLOATING MATERIALS
(3) PAPER, RAGS, GLASS, METAL, BOTTLES
(4) FOOD WASTE

Q.144. WHAT IS THE DIFFERENCE BETWEEN THE MARPOL 73 & MARPOL 78?
A.144.

Q.145. WHAT IS THE DIFFERENCE BETWEEN THE CONVENTION & CODE?
A.145.

CONVENTION	CODE
ARE MULTILATERAL TREATY DOCUMENTS	
ARE THE CHIEF INSTRUMENTS OF IMO	
ARE IDENTIFIED BY NAME & YEAR OF ADOPTION BY THE ASSEMBLY	
MAY HAVE DETAILLED TECHNICAL PROVISIONS ATTACHED IN ANNEXES	
MAY ALSO HAVE DETAILED TECHNICAL PROVISIONS IN AN ASSOCIATED CODE	
ARE NORMALLY REFERRED TO BY A SINGLE WORD CODE NAME, e.g. COLREG	

Q.146. WHAT DO YOU UNDERSTAND BY PROTOCOL?
A.146. PORTOCOLS ARE IMPORTANT TREATY INSTRUMENTS MADE WHEN MAJOR AMENDMENTS ARE REQUIRED TO BE MADE TO A CONVENTION WHICH, ALTHOUGH ALREADY ADOPTED, HAS NOT YET ENTERED INTO FORCE

Q.147. WHAT DO YOU KNOW ABOUT BUNKER CHECK LIST?
A.147.

Q.148. WHAT IS THE SOLAS REQUIREMENTS FOR SCBA SETS?

A.148. SHIPS SHALL CARRY AT LEAST TWO FIRE FIGHTER'S OUTFITS.
IN TANKERS ADDITIONAL TWO FIRE FIGHTER'S OUTFIT SHALL BE PROVIDED.
TWO SPARE CHARGES SHALL BE PROVIDED FOR EACH REQUIRED BREATHING APPARATUS.
PASSENGER SHIPS CARRYING NOT MORE THAN 36 PASSENGER & CARGO SHIS THAT ARE EQUIPPED WITH SUITABLY LOCATED MEANS FOR FULLY RECHARGING THE AIR CYLINDERS FREE FROM CONTAMINATION NEED CARRY ONLY ONE SPARE CHARGE FOR EACH REQUIRED APPARATUS

BA SET	SPARE BOTTLES	AIR COMPRESSOR	
2 BA SET (MIN)	2 BOTTLES	YES	
4 BA SET (MAX)	4 BOTTLES	YES	
2 BA SET (MIN)	4 BOTTLES	NO	
4 BA SET (MAX)	8 BOTTLES	NO	

Q.149. WHAT IS THE SOLAS REQUIREMENTS FOR FIRE PUMP?

A.149. IN CARGO SHIPS OF 1000 GROSS TONNAGE & UPWARDS ATLAEST 2 INDEPENDENTLY DRIVEN FIRE PUMPS & LESS THAN 1000 GROSS TONNAGE AT LEAST 2 POWER DRIVEN PUMPS, ONE OF WHICH SHALL BE INDEPENDENTLY DRIVEN.
EACH PUMP SHALL IN ANY EVENT BE CAPABLE OF DELIVERING AT LAEST THE TWO REQUIRED JETS OF WATER.
PUMPS SHALL HAVE A CAPACITY OF ATLEAST 25m³/H

Q.150. WHAT IS THE SOLAS REQUIREMENTS FOR TESTING OF SCBA BOTTLES?

A.150.

Q.151. WHAT IS THE SOLAS REQUIREMENTS FOR PRESSURE IN HYDRANT?

A.151. WITH THE TWO PUMPS SIMULTANEOUSLY DELIVERING WATER THROUGH THE NOZZLES OF 12MM/16MM/19MM WITH THE QUANTITY OF WATER AS SUFFICIENT DISCHARGE RATE 140m³/h ,

FOR CARGO SHIPS 6000 GROSS TONNAGE & UPWARDS THE MINIMUM PRESSURES SHALL BE 0.27 N/mm² & FOR CARGO SHIPS LESS THAN 6000 GROSS TONNAGE THE MINIMUM PRESSURE SHALL BE 0.25 N/mm² & THE MAXIMUM PRESSURE AT ANY HYDRANT SHALL NOT EXCEED THAT AT WHICH THE EFFECTIVE CONTROL OF A FIRE HOSE CAN BE DEMONSTRATED

Q.152. WHAT IS THE REQUIREMENTS FOR SPRINKLER SYSTEM AS PER SOLAS?

A.152. (1) THE SYSTEM SHOULD BE AUTOMATIC IN OPERATION
(2) THE SYSTEM SHOULD BE CAPABLE OF BOTH DETECTING THE FIRE & ACTING TO CONTROL THE FIRE WITH A WATER BASED EXTINGISHING MEDIUM
(3) THE SPRINKLER SYSTEM SHOULD BE CAPABLE OF CONTINUOUSLY SUPPLYING THE WATER BASED EXTINGUSHING MEDIUM FOR A MINIMUM OF 30 MINUTE
(4) THE SYSTEM SHOULD BE CAPABLE OF FIRE CONTROL UNDER A WIDE VARIETY OF FIRE LOADING, FUEL ARRANGEMENT, ROOM GEOMETRY & VENTILATION CONDITIONS
(5) THE SYSTEM & ITS COMPONENTS SHOULD BE DESIGNED & INSTALLED IN ACCORDANCE WITH INTERNATIONAL STANDARDS
(6) THE SYSTEM SHOULD BE PROVIDED WITH BOTH MAIN & EMERGENCY SOURCES OF POWER
(7) THE SYSTEM SHOULD BE PROVIDED WITH A REDUNDANT MEANS OF PUMPING
(8) THE SYSTEM SHOULD BE FITTED WITH A PERMANENT SEA INLET & BE CAPABLE OF CONTINUOUS OPERATION USING SEAWATER
(9)THE PIPING SYSTEM SHOULD BE SIZED IN ACCORDANCE WITH A HYDRAULIC CALCULATION TECHNIQUE
(10)THE SYSTEM SHOULD BE OF THE WET PIPE TYPE BUT SMALL EXPOSED SECTIONS MAY BE OF THE DRY PIPE
(11)THE SYSTEM SHOULD BE SUITABLY DESIGNED TO WITHSTAND AMBIENT TEMPERATURE CHANGES, VIBRATION, HUMIDITY, SHOCK, IMPACT, CLOGGING & CORROSION

Q.153. HOW WILL YOU CONNECT THE INTERNATIONAL SHORE CONNECTIONS?

A.153. INTERNATIONAL SHORE CONNECTIONS FLANGE SHALL HAVE A FLAT FACE ON ONE SIDE & ON THE OTHER SIDE IT SHALL BE PERMANENTLY ATTACHED TO A COUPLING THAT WILL FIT THE SHIP'S HYDRANRT & HOSE.
CONNECTION SHALL BE KEPT ABORD THE SHIP TOGETHER WITH A GASKET OF ANY MATERIAL SUITABLE FOR 1 N/mm² SERVICES, TOGETHER WITH FOUR BOLTS OF 16mm DIAMETER & 50mm IN LENGTH, FOUR 16mm NUTS & EIGHT WASHERS.
USING AVAILABLE MATERIALS & ACCESSORIES WE WILL CONNECT TO THE SHORE LINE OR OTHER SHIP/BARGE.

Q.154. WHAT IS THE STANDARD DIAMENSIONS FOR INTERNATIONAL SHORE CONNECTIONS?

A.154.

OUTSIDE DIAMETER	:	178mm
INSIDE DIAMTER	:	64mm
BOLT CIRCLE DIAMETER	:	132mm
SLOT IN FLANGE	:	4 HOLES, 19mm IN DAIMETER SPACED EQUIDISTANTLY
FLANGE THICKNESS	:	14.5mm MINIMUM
BOLTS & NUTS	:	4, EACH OF 16mm DIA & 50mm IN LENGTH

Q.155. HOW WILL YOU DO THE MAINTAINENCE OF FFA EQUIPMENTS?

A.155. MONTHLY TESTING & INSPECTION SHOULD BE CARRIED OUT TO INSURE THAT: -

(1) ALL FIREMAN'S OUTFITS, FIRE EXTINGUISHERS, FIRE HYDRANTS, HOSE & NOZZLES ARE IN PLACE & IN SERVICEABLE CONDITION
(2) ALL ESCAPE ROUTES INCLUDING STAIRWAYS & CORRIDORS ARE FREE OF OBSTRUCTION & PROPERLY MAINTAINED
(3) PUBLIC ADDRESS SYSTEM & SHIP'S ALARMS ARE SERVICEABLE
(4) ALL FIXED FIRE FIGHTING INSTALLTION VALVES ARE SET IN THE CORRECT OPERATIONAL POSITION
(5) DRY PIPE SPRINKLER SYSTEMS ARE PRESSURISE, WHERE APPROPRIATE, & GAUGES INDICATES CORRECTLY
(6) SPRINKLER SYSTEM PRESSURE TANK WATER LEVELS ARE CORRECT AS INDICATED BY GLASS GAUGES
(7) ALL SPRINKLER SYSTEM PUMPS OPERATE AUTOMATICALLY ON PRESSURE LOSS IN THE SYSTEMS
(8) ALL FIRE PUMPS ARE OPERATIONAL
(9) ALL FIXED GAS FIRE EXTINGUISHING INSTALLATIONS ARE FREE FROM LEAKAGE

QUARTERLY TESTING & INSPECTION SHOULD BE CARRIED OUT TO ENSURE THAT: -

(1) ALL FIRE EXTINGUISHERS ARE AT CORRECT PRESSURE & ARE NOT DUE FOR SERVICING
(2) ALL AUTOMATIC ALARMS FOR SPRINKLER SYSTEMS ACTIVATE USING THE SECTION TEST VALVES
(3) THE INTERNATIONAL SHORE CONNECTION IS SERVICEABLE
(4) FIRE FIGHTING EQUIPMENT LOCKERS CONTAIN THEIR FULL INVENTORY & THE EQUIPMENT THEY CONTAIN IS IN SERVICEABLE CONDITION
(5) ALL FIRE DOORS, FIRE DAMPERS & CLOSING DEVICES CAN BE OPERATED LOCALLY

ANNUAL TESTING & INSPECTION SHOULD BE CARRIED OUT TO ENSURE THAT: -

(1) ALL FIRE DOORS & VENTILATION DAMPERS WHERE APPROPRIATE, OPERATE REMOTELY
(2) WHERE PRACTICABLE ALL AQUEOUS FOAM & WATER SPRAY FIXED FIRE FIGHTING INSTALLATIONS OPERATE CORRECTLY
(3) ALL ACCESSIBLE COMPONENTS OF FIXED FIGHTING SYSTEMS, TYPICALLY NOZZLES, ARE FREE FROM DAMAGE OR OBSTRUCTION ON VISUAL INSPECTION
(4) ALL FIRE PUMPS, INCLUDING SPRINKLER SYSTEM PUMPS, DEVELOP CORRECT PRESSURES & FLOW RATES
(5) ALL HYDRANTS OPERATE
(6) ALL ANTIFREEZE SOLUTIONS ARE CORRECTLY MAINTAINED & CROSS CONNECTION BETWEEN FIRE & SPRINKLER SYSTEM OPERATES CORRECTLY
(7) FIXED FIRE DETECTION SYSTEMS OPERATE CORRECTLY, ACCORDING TO MANUFACTURERS TEST INSTRUCTIONS

Q.156. WHAT ARE THE DIFFERENT TYPES OF CLASS OF FIRE & WHICH TYPE OF EXTINGUISHER USED FOR EACH TYPE OF FIRE?

A.156.

CLASS OF FIRE	OTHER NAME	MATERIAL	EXTINGUISHER
CLASS 'A'	SOLID FIRE	CLOTHING, RAGS,WOOD,CANVAS,ROPE,& PAPER	WATER IN THE FORM OF JET OR SPRAY
CLASS 'B'	LIQUID FUEL FIRES	OIL,CHEMICALS	FOAM
CLASS 'C'	GAS FUEL FIRES	COMBUSTIBLE GAS	DRY CHEMICAL POWDER
CLASS 'D'	METAL FIRE	METAL	DRY CHEMICAL POWDER
ELECTRICAL EQUIPMENT FIRE			CARBON DIOXIDE & DCP

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Q.157. TYPE OF FOAM APPLICATORS & THEIR EXPANSION RATIO?

A.157. (1) PORATABLE FOAM APPLICATORS: - A PORTABLE FOAM APPLICATOR UNIT SHALL CONSIST OF A FOAM OF NOZZLE OF AN INDUCTOR TYPE CAPABLE OF BEING CONNECTED TO THE FIRE MAIN BY A FIRE HOSE, TOGETHER WITH A PORTABLE TANK CONTAINING AT LEAST 20 LITER OF FOAM FORMING LIQUID & ONE SPARE TANK OF FOAM MAKING LIQUID. THE NOZZLE SHALL BE CAPABLE OF PRODUCING EFFECTIVE FOAM SUITABLE FOR EXTINGUISHING AN OIL FIRE, AT THE RATE OF AT LEAST 1.5 m^3/min

FIXED FOAM FIRE EXTINGUISHING SYSTEMS: - ANY FIXED HIGH EXPANSION FOAM IN MACHINERY SPACES SHALL BE CAPABLE OF RAPIDLY DISCHARGING THROUGH FIXED DISCHARGE OUTLETS,A QUANTITY OF FOAM SUFFICIENT TO FILL THE GREATEST SPACE TO BE PROTECTED AT A RATE OF ATLEAST 1m IN DEPTH PERMINUTE, THE QUANTITY OF FOAM EQUAL TO FIVE TIMES THE VOLUME OF THE LARGEST SPACE TO BE PROTECTED. THE EXPANSION RATIO OF THE FOAM SHALL NOT EXCEED 1000 TO 1

FIXED DECK FOAM SYSTEM: - THE ARRANGEMNT FOR PROVIDING FOAM SHALL BE CAPABLE OF DELIVERING FOAM TO THE ENTIRE CARGO TANKS DECK AREA AS WELL AS INTO ANY CARGO TANK, THE DECK OF WHICH HAS BEEN RAPTURED.
THE FOAM EXPANSION RATIO SHALL NOT EXCEED 12 TO 1
THE RATE OF SUPPLY OF FOAM SOLUTION SHALL NOT LESS THAN 0.6L /min PER SQUARE METER OF CARGO TANKS DECK AREA, 6L/min PER SQUARE METER OF THE HORIZONTAL SECTIONAL AREA OF THE SINGLE TANK HAVING LARGEST SUCH AREA, 3L/min PER SQUARE METER OF THE AREA PROTECTED BY THE LARGEST MONITOR, SUCH AREA BEING ENTIRELY FORWARD OF THE MONITOR, BUT NOT LESS THAN 1250 L/min

Q.158. WHAT IS THE REQUIREMENTS FOR CO2 SYSTEM?

A.158. (1)THE PIPES FOR CONVEYING SYSTEM SHALL BE PROVIDED WITH CONTROL VALVE SO MARKED AS TO INDICATE CLEARLY THE SPACE TO WHICH THE PIPES ARE LED.
(2)THE PROVISION SHALL BE MADE TO PREVENT INADVERTENT RELEASE OF THE MEDIUM INTO SPACE.
(3)THE PIPES MAY PASS THROUGH ACCOMODATION AREAS PROVIDED THAT THEY ARE OF SUBSTANTIAL THICKNESS & THAT TIGHTNESS IS VERIFIED WITH A PRESSURE TEST AT A HEAD NOT LESS THAN 5 N/mm^2.
(4)MEANS SHALL BE PROVIDED FOR AUTOMATICALLY GIVING AUDIABLE WARNING OF THE RELEASE OF FIRE EXTINGUISHING MEDIUM INTO RO-RO SPACE & OTHER SPACE IN WHICH PERSONNEL NORMALLY WORK
(5)THE ALARM SHALL OPERATE FOR THE LENGTH OF TIME NEEDED TO EVACULATE THE SPACE, BUT IN NO CASE LESS THAN 20s BEFORE THE MEDIUM IS RELEASED
(6)THE CONTROL OF SYSTEM SHALL BE READILY ACCESSIBLE & SIMPLE TO OPERATE & AT EACH LOCATION THERE SHALL BE CLEAR INSTRUCTIONS IS DISPLAYED.
(7) FOR CARGO SPACES THE QUANTITY OF CARBON DIOXIDE AVAILABLE SHALL BE SUFFICIENT TO GIVE A MINIMUM VOLUME OF FREE GAS EQUAL TO 30% OF THE GROSS VOLUME OF THE LARGEST CARGO SPACE TO BE PROTECTED IN THE SHIP
(8) FOR MACHINERY SPACE THE QUANTITY OF CARBON DIOXIDE CARRIED SHALL BE SUFFICIENT TO GIVE A MINIMUM VOLUME OF FREE GAS EQUAL TO 40% OF THE GROSS VOLUME OF THE LARGEST MACHINERY SPACE SO PROTECTED, THE VOLUME TO EXCLUDE THAT PART OF THE CASING ABOVE THE LEVEL AT WHICH THE HORIZONTAL AREA OF THE CASING IS 40% OR LESS OF THE HORIZONTAL AREA OF THE SPACE CONCERNED TAKEN MIDWAY BETWEEN THE TANK TOP & LOWEST PART OF THE CASING OR 35% OF THE GROSS VOLUME OF THE LARGEST MACHINERY SPACE PROTECTED , INCLUDING CASING.
(9)THE PERCENTAGES REDUCED TO 35% & 30% RESPECTIVELY FOR CARGO SHIPS OF LESS THAN 2000 GROSS TONNAGE
THE VOLUME OF FREE CARBON DIOXIDE SHALL BE CALCILATED AT 0.56m^3/kg
FOR MACHINERY SPACES THE FIXED PIPING SYSTEM SHALL BE SUCH THAT 85% OF THE GAS CAN BE DISCHRGED INTO SPACE WITH IN 2 MIN
TWO SEPARATE CONTROL SHALL BE PROVIDED FOR RELEASING CARBON DIOXIDE INTO PROTECTED SPACE & ENSURE THE ACTIVATION OF THE ALARM

Q.159. WHAT ARE THE CHECKS YOU WILL CARRY OUT IN SCBA SETS?

A.159.

(1) VISUAL TEST	: -	SCBA SET IS IN GOOD CONDITION, NO CRACK IN MASK LINE
(2) GAUGE/LAEK TEST	: -	AFTER OPEN THE VALVE GAUGE MUST SHOW STEADY READING, IF READING IS FALLING MEANS THERE IS LEAK IN TUBE
(3) FACE MASK TEST	: -	ALL STRIPS ARE IN GOOD CONDITION, NO CRACK IN FACE MASK
(4)PRE ENTRY TEST	: -	CHECK PRESSURE OF AIR BOTTLES (MAX 207 BAR), CHECK WARNING WHISTLE IS COMEING WHEN AIR WILL REMAIN 20% IN THE BOTTLE.

Q.160. WHEN WILL THE WHISTLE RING OF THE SCBA SET?
A.160. WARNING WHISTLE IS COMEING WHEN AIR WILL REMAIN 20% IN THE BOTTLE.

Q.161. WHICH FIRE EXTINGUISHER YOU WILL USE FOR ELECTRIC FIRE?
A.161. CARBON DIOXIDE TYPE

Q.162. WHAT IS ACCOMODATION SPACE?
A.162. ACCOMODATION SPACEARE THOSE SPACES USED FOR PUBLIC SPACES, CORRIDORS, LAVATORIES, CABINS, OFFICES, HOSPITALS, CINEMAS, GAME & HOBBY ROOMS, BARBAR SHOP, PANTRIES CONTAINING NO COOKING APPLIANCES & SIMILAR SPACES

Q.163. WHAT IS THE FUNCTIONAL REQUIREMENTS FOR FIRE SAFETY?
A.163. (1) DIVISION OF THE SHIP INTO MAIN VERTICAL & HORIZONTAL ZONES BY THERMAL & STRUCTURAL BOUNDARIES
(2) SEPARATION OF ACCOMADATION SPACES FROM THE REMAINDER OF THE SHIP BY THERMAL & STRUCTURAL BOUNDARIES
(3) RESTICTED USE OF COMBUSTIBLE MATERIAL
(4) DETECTION OF ANY FIRE IN THE ZONE OF ORIGIN
(5) CONTAINMENT & EXTINCTION OF ANY FIRE IN THE SPACE OF ORIGIN
(6) PROTECTION OF MEANS OF ESCAPE & ACCESS FOR FIRE FIGHTING
(7) READY AVAILABILITY OF FIRE EXTINGUISHING APPLIANCES
(8) MINIMIZATION OF POSSIBILITY OF IGNITION OF FLAMMABLE CARGO VAPOUR

Q.164. WHAT IS CLASS 'A' & 'B' DIVISIONS?
A.164. 'A' CLASS DIVISIONS ARE THOSE DIVISIONS FORMED BY BULKHEADS & DECKS WHICH COMPLY WITH THE FOLLOWING CRITERIA:
(1) THEY ARE CONSTRUCTED OF STEEL OR OTHER EQUIVALENT MATERIAL
(2) THEY ARE SUITABLY STIFFENED
(3) THEY ARE INSULATED WITH APPROVED NON COMBUSTIBLE MATERIALS SUCH THAT THE AVERAGE TEMPERATURE OF THE UNEXPOSED SIDE WILL NOT RISE MORE THAN 140°C ABOVE THE ORIGINAL TEMPERATURE, NOR WILL THE TEMPERATURE AT ANY POINT, INCLUDING ANY JOINT, RISE MORE THAN 180° ABOVE THE ORIGINAL TEMPERATURE WITHIN THE TIME LISTED BELOW:

CLASS "A-60"	60 MIN
CLASS "A-30"	30 MIN
CLASS "A-15"	15 MIN
CLASS "A-0"	00 MIN

(4) THEY ARE SO CONSTRUCTED AS TO BE CAPABLE OF PREVENTING THE PASSAGE OF SMOKE & FLAME TO THE END OF THE ONE HOUR STANDARD FIRE TEST
(5) IT MEETS THE REQUIREMENTS FOR INTEGRITY & TEMPERATURE RISE

"B" CLASS DIVISIONS ARE THOSE DIVISIONS FORMED BY BULKHEADS, DECKS, CEILINGS OR LININGS WHICH COMPLY WITH THE FOLLOWING CRITERIA:
(1) THEY ARE CONSTRUCTED OF APPROVED NON- COMBUSTIBLE MATERIALS & ALL MATERIALS USED IN THE CONSTRUCTION & ERECTION OF 'B' CLASS DIVISIONS ARE NON COMBUSTIBLE, WITH THE EXCEPTION THAT COMBUSTIBLE VENEERS MAY BE PERMITTED PROVIDED THEY MEET OTHER APPROPRIATE REQUIREMENTS.
(2) THEY HAVE AN INSULATION VALVE SUCH THAT THE AVERAGE TEMPERATURE OF THE UNEXPOSED SIDE WILL NOT RISE MORE THAN 140° ABOVE THE ORIGINAL TEMPERATURE, NOR WILL THE TEMPERATURE AT ANY ONE POINT, INCLUDING ANY JOINT, RISE MORE THAN 225°C ABOVE THE ORIGINAL TEMPERATURE WITH IN THE TIME LISTED BELOW

CLASS "B-15"	15 MIN
CLASS "B-0"	00 MIN

(3) THEY ARE SO CONSTRUCTED AS TO BE CAPABLE OF PREVENTING THE PASSAGE OF FLAME TO THE END OF THE FIRST HALF HOUR OF THE STANDARD FIRE TEST
(4) IT MEETS THE REQUIREMENTS FOR INTEGRITY & TEMPERATURE RISE

Q.165. WHAT IS FLASH POINT AS PER MARPOL?
A.165. FLASH POINT IS THE TEMPERATURE IN DEGREE CELSIUS AT WHICH A PRODUCT WILL GIVE OFF ENOUGH FLAMMABLE VAPOUR TO BE IGNITED, AS DETERMINED BY AN APPROVED FLASHPOINT APPRATUS

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Q.166. VENTILATION SYSTEM IN CARGO PUMP ROOMS AS PER MARPOL?
A.166. CARGO PUMP SHALL BE MECHANICALLY VENTILATED & DISCHARGES FROM THE EXHAUST FANS SHALL BE LED TO A SAFE PLACE ON THE OPEN DECK. THE VENTILATION OF THESE ROOMS SHALL HAVE SUFFICIENT CAPACITY TO MINIMIZE THE POSSIBILITY OF ACCUMULATION OF FLAMMABLE VAPOURS. THE NUMBER OF AIR CHANGES SHALL BE AT LEAST 20 PER HOURS, BASED UPON THE GROSS VOLUME OF THE SPACE. THE AIR DUCTS SHALL BE ARRANGED SO THAT ALL OF THE SPACE IS EFFECTIVELY VENTILATED. THE VENTILATION SHALL BE OF THE SUCTION TYPE USING FANS OF TE NON-SPARKING TYPE.
(PRACTICALLY 30 MIN VENTILATION FOR PUMPROOM)

Q.167. WHAT IS THE SOLAS REQUIREMENTS FOR FIXED FIRE EXTINGUISHER SYSTEMS?
A.167.

Q.168. WHY IN FIXED FIRE FIGHTING N2 IS USED IN DCP NOT CO2?
A.169. GAS CARRIERS ARE PROVIDED WITH A FIXED DRY CHEMICAL POWDER EXTINGUISHING SYSTEM COVERING THE GAS CARRIER DECK AREAS. CO2 IS NOT USED IN GAS CARRIER BECAUSE IT HAVE SOME STATIC ELECTRICITY & IT HAS VERY LESS COOLING EFFECT.

Q.170. WHAT WILL YOU USE IN TYPE OF CLASS "C" FIRE?
A.170. FOR GAS FIRE WE CAN USE DCP EXTINGUISHER

Q.171. WHAT IS CHAIN GANG RELEASE IN CO2 SYSTEM?
A.171. CO2 BOTTLES ARE CONNECTED IN PARALLEL BY PIPELINES LEADING TO THE MANIFOLD/DISTRIBUTORS PANEL, WHICH HAS VALVES FOR DIFFERENT SPACES, SO THAT CO2 CAN BE DISCHARGED TO A PARTICULAR COMPARTMENT ON FIRE. TWO MASTER/ PILOT BOTTLES UNDER PRESSURE UPTO 200 BAR ARE PROVIDED WHICH ARE OPERATED MANUALLY TO DISCHARGED THE MAIN BATTERY OF CO2 CYLINDERS THROUGH PIPELINES & MECHANICAL OPERATING UNIT, WITH THE PRESUURE OF CO2 FROM THE MASTER/PILOT BOTTLES, THE MECHANICAL UNIT IS TRIGGERED THUS PUNCTURING THE RUBBER SEALS OF THE BATTERY OF CO2 BOTTLES. WHEN MAIN CO2 BOTTLES SEALS GET PUNCTURED, THE CO2 REACHES THE MAIN LINES LEADING TO THE CO2 DISTRIBUTOR/ MANIFOLD. FROM THE DISTRIBUTOR/MANIFOLD, THE COMPARTMENT UNDER FIRE WILL BE FED CO2 BY OPENING THE PARTICULAR COMPARTMENT VALVE.

Q.172. WHAT IS THE DIFFERENCE BETWEEN MEDICAL CHEST & MEDICAL SCALE?
A.172. MEDICAL SCALES DETERMINES WHICH MEDICINES U SHOULD HAVE AS PER THE TRADING PATTERN & CARGOES CARRIED AS PER IMDG
MEDICAL CHEST IS WHERE THE MEDICINES ARE STORED

Q.173. HOW WILL YOU SEND RADIO MEDICAL ADVICE?
A.173. USING APPROPRIATE GMDSS EQUIPMENT SEND RADIO MEDICAL ADVICE TO NEAREST COAST STATION. Before taking medical advice, keep relevant data Ready.

Q.174. WHAT IS GIVEN IN INTERCO FOR MEDICAL ADVICE?
A.174. INTERCO – FLOURESCENT COLOURED SPECIAL SECTION FOR GETTING MEDICAL ADVICE VARIOUS SYMBOLS FOR RECEIVING MEDICAL HELP.
EXAMPLE, XYZ MAY STAND FOR FRACTURED LIMBS, ABC MAY STAND FOR DENTAL PROBLEMS, HTC MAY STANDS FOR EYE PROBLEMS & SO ON.

Q.175. WHAT IS CPR & WHEN WILL YOU GIVE IT?
A.175. CARDIO PULMONARY RESUSCITATION.
WHEN HEART WILL STOPED FUNCTIONNG THAN WE CAN RESTORE THE FUNCTION OF HEART BY GIVING THE CPR.
CONDITION :- UNCONSIOUS+NO BREATHING+NO PULSE
ONE PERSON - 2:15 i.e. TWO TIME BREATH & 15 TIMES PRESS THE HEART
TWO PERSON- 1:5 i.e. ONE PERSON GIVE BREATHING 1 TIME & ANOTHER PERSON PRESS HEART AT 5 TIMES

Q.176. WHAT IS THE BASIC PRICIPLE OF FIRST AID?
A.176. IT IS A SKILLED APPLICATION OF ACCEPTED PRINCIPLE GIVE TO THE CASUALTY OR INJURED PERSON ON THE SPOT QUICKLY AVAILABLE MATERIAL

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Siddhant Arora

Q.177. WHAT IS THE REQUIREMENTS FOR ISPS CODE?
A.177. INTERNATIONAL SHIP & PORT FACILITY SECURITY CAME IN FORCE JULY 2004, APPLY TO ALL VESSELS IN INTERNATIONAL VOYAGES, INCLUDING MOBILE DRILL SHIP.
ISPS HAS BECOME PART OF SOLAS ON THE GUIDE LINE OF IMOMUST PREPARE ISPS PLAN FOR SHIP. SUCH PLAN WHICH MADE IN DOCUMENTS i.e. ISPS MANUAL, WHICH MUST BE APPROVED BY AUTHORITY. VALIDITY OF ISPS IS 12 MONTHS.

Q.178. HOW DOES CONVENTION COME IN FORCE?
A.187.

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Q.179. HOW DOES IMO WORK?
A.179. IMO'S WORK IS MOSTLY TECHNICAL & IS CARRIED OUT BY THE COMMITTEES & SUB-COMMITTEES ON WHICH SIT REPRESNTATIVES OF THE GOVERMENTS OF MEMBER STATES

Q.180. HOW MANY MEMBERS OF IMO?
A.180. 40 MEMBER STATES BY THE ASSEMBLY FOR 2 YEAR TERMS BEGINNING AFTER EACH REGULATION SESSION

Q.181. WHAT IS LRIT?
A.181. LONG RANGE INFORMATION TRACKING IS NOW MANADATORY FOR SHIPS & IS NOT A BROADCAST SYSTEM LIKE AIS BUT ONLY SELECTAND DELIGATED AUTHORITIES CAN GET LRIT INFORMATION. LRIT IS MORE USEFUL FOR SAR OPERATIONS.

Q.182. WHAT IS DOC & SMC?
A.182. DOCUMENT OF COMPLIANCE: -
(1) DOC IS ISSUED TO COMPANY AFTER SUCCESSFULLY COMPLETING AUDIT IN THE SHORE ASPECT OF THE SMS.
(2) WILL BE SPECIFIC FOR THE TYPE OF SHIPS REFERRED TO IN THE AUDIT
(3) VALID FOR 5 YEARS
(4) SUBJECT TO ANNUAL VERIFICATION WITHIN 3 MONTHS OF ANNIVERSARY DATE
(5) EVIDENCE THAT THE SYSTEM HAS BEEN IN OPERATION FOR 3 MONTHS MINIMUM IN ADVANCE OR AT LEAST ONE SHIP OF EACH TYPE IN THE COMPANIES FLEET

SAFETY MANAGEMENT CERTIFICATE: -
(1) ISSUED TO INDIVIDUAL SHIPS AFTER AN ON BOARD AUDIT OF THE SMS
(2) VALID FOR 5 YEARS
(3) SUBJECT TO INTERMEDIATE VERIFICATION BETWEEN 2ND OR 3RD ANNIVERSARY & WITH PROVISION FOR MORE AUDITS IF REQUIRED
(4) EVIDENCE THAT SMS HAS BEEN IN OPERATION ON BOARD THE SHIP FOR A MINIMUM OF 3 MONTHS BEFORE THE AUDIT
(5) COMPANY HAS A VALID DOC A COPY OF WHICH SHOULD BE ON BOARD

Q.183. WHAT IS M & MS NOTICES?
A.183. M Notices issued by U.K. Governments & MS notices issued by DG shipping.
Vol I – MS Notices & Vol II – M Notices (HSN, MIN, MGN)

Q.184. WHAT ARE THE DUTIES OF SECURITY OFFICER?
A.184.

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Q.185. WHAT ARE THE DUTIES OF SAFETY OFFICER?
A.185. THE DUTIES OF THE SAFETY OFFICER ARE TO
(1) TRY & ENSURE COMPLIANCE WITH THE CODE OF SAFE WORKING PRACTICE FOR MERCHANT SEAMAN, RELAVANT M & MS NOTICES, STATUTORY REGULATION, EMPLOYERS HEALTH & SAFETY POLICY, ALL OTHER SAFETY INSTRUCTIONS, RULES & GUIDELINES
(2) CARRYOUT HEALTH & SAFETY INSPECTIONS OF WORK AREAS & ACCESSIBLE PARTS OF THE SHIP ATLEAST EVERY 3 MONTHS & MAKE REPRESNTATIONS & RECOMMENDATIONS THROUGH THE MASTER TO THE EMPLOYER ABOUT ANY DEFICIENCIES IN THE SHIP WITH RESPECT TO THE ABOVE RULES & POLICIES
(3) INVESTIGATE ALL NON-FRIVOLOUS COMPLAINTS MADE BY ANYONE REGARDING HEALTH & SAFETY
(4) CARRYOUT INVESTIGATIONS OR INSPECTIONS INTO WORK PRACTICES, HE CAN STOP ANY WORK WHICH HE RESONABLY BELIVES MAY CAUSE AN ACCIDENT & INFORM THE PERSON IN CHARGE OF THE WORK OF. THE MASTER WHO WILL ULTIMATELY DECIDE WHEN WORK CAN BE RESUMED
(5) BE CONSTANTLY ON THE LOOKOUT FOR POTENTIAL HAZARDS & THE MEANS OF PREVENTING ACCIDENTS
(6) MAINTAIN A RECORD BOOK IN THE CASE OF ALL ACCIDENTS & DANGEROUS OCCURRENCES. THE RECORDS ARE TO BE AVAILABLE ON REQUEST TO ANY SAFETY REPRESENTATIVE, SAFETY COMMITTEE, MASTER OR ANY STATUTORY BODY

Q.186. IF VESSEL HAS RH PROPELLER & WHILE ASTERN PROPULSION WHERE THE BOW TENDS TO MOVE?
A.186. WHILE GOING ASTERN BOW CANTS TO STARBOARD & QUARTER TO PORT

Q.187. WHAT IS RIGGING PLAN?
A.187. IT'S A ANTENNA RIGGING PLAN

Q.188. WHAT ALL PLANS ARE THERE IN SHIPS?
A.188. (1) LSA PLAN
(2) FFA PLAN
(3) GARBAGE MANAGEMENT PLAN
(4) ANNTENA RIGGING PLAN
(5) SHORE BASE MAINTENANCE PLAN
(6) CAPACITY PLAN
(7) SHELL EXPANSION PLAN
(8) GENERAL ARRANGEMENT PLAN
(11) SHIPBOARD OIL POLLUTION EMERGENCY PLAN.
(12) STOWAGE PLAN
(13) GENERAL PLAN

Q.189. WHAT IS SHORE BASE MAINTENANCE?
A.189.

Q.190. WHAT ARE THE DOCUMENTS REQUIRED AS PER ISM?
A.190. DOCUMENTS REQUIRED: -
(1) SAFETY MANAGEMENT MANUAL ON EACH SHIP
(2) DOCUMENTS OF COMPLIANCE TO BE ISSUED TO EACH QUALIFYING COMPANY
(3) SAFETY MANAGEMENT CERTIFICATE TO BE ISSUED TO EACH SHIP

Q.191. WHAT ARE THE MANDATORY CERTIFICATES REQUIRED CARRYING ON BOARD?
A.191. FOR ALL SHIPS: -
(1) INTERNATIONAL TONNAGE CERTIFICATE (1969)
(2) INTERNATIONAL LOAD LINE CERTIFICATE
(3) INTERNATIONAL LOAD LINE EXCEMPTION CERTIFICATE
(4) INTACT STABILITY BOOKLET
(5) DAMAGE CONTROL BOOKLET
(6) MINIMUM SAFE MANNING DOCUMENT
(7) CERTIFICATE FOR MASTER, OFFICERS & RATINGS
(8) INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(9) OIL RECORD BOOK
(10) SHIPBOARD OIL POLLUTION EMERGENCY PLAN
(11) GARBAGE MANAGEMENT PLAN

(12) GARBAGE RECORD BOOK
(13) CARGO SECURING MANUAL
(14) DOCUMENT OF COMPLIANCE
(15) SAFETY MANAGEMENT CERTIFICATE

FOR CARGO SHIP: -
(1) INTERNATIONAL TONNAGE CERTIFICATE (1969)
(2) INTERNATIONAL LOAD LINE CERTIFICATE
(3) INTERNATIONAL LOAD LINE EXCEMPTION CERTIFICATE
(4) INTACT STABILITY BOOKLET
(5) DAMAGE CONTROL BOOKLET
(6) MINIMUM SAFE MANNING DOCUMENT
(7) CERTIFICATE FOR MASTER, OFFICERS & RATINGS
(8) INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(9) OIL RECORD BOOK
(10) SHIPBOARD OIL POLLUTION EMERGENCY PLAN
(11) GARBAGE MANAGEMENT PLAN
(12) GARBAGE RECORD BOOK
(13) CARGO SECURING MANUAL
(14) DOCUMENT OF COMPLIANCE
(15) SAFETY MANAGEMENT CERTIFICATE
(16) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE
(17) CARGO SHIP SAFETY EQUIPMENT CERTIFICATE
(18) CARGO SHIP SAFETY RADIO CERTIFICATE
(19) CARGO SHIP SAFETY CERTIFICATE
(20) EXEMPTION CERTIFICATE
(21) DOCUMENT OF COMPLIANCE WITH SPECIAL REQUIREMENTS FOR SHIPS CARRYING DANGEROUS GOODS
(22) DANGEROUS GOODS MANIFEST OR STOWAGE PLAN
(23) DOCUMENT OF AUTHORIZATION FOR THE CARRIAGE OF GARIN
(24) CERTIFICATE OF INSURANCE OR OTHER FINANCIAL SECURITY IN RESPECT OF CIVIL LIABILITY FOR OIL POLLUTION DAMAGE
(25) ENHANCED SURVEY REPORT FILE
(26) RECORD OF OIL DISCHARGE MONITORING & CONTROL SYSTEM FOR THE LAST BALLAST VOYAGE
(27) BULK CARRIER BOOKLET

ANY SHIP CARRYING NOXIOUS LIQUID CHEMICAL SUBSTANCES IN BULK SHALL CARRY: -
(1) INTERNATIONAL TONNAGE CERTIFICATE (1969)
(2) INTERNATIONAL LOAD LINE CERTIFICATE
(3) INTERNATIONAL LOAD LINE EXCEMPTION CERTIFICATE
(4) INTACT STABILITY BOOKLET
(5) DAMAGE CONTROL BOOKLET
(6) MINIMUM SAFE MANNING DOCUMENT
(7) CERTIFICATE FOR MASTER, OFFICERS & RATINGS
(8) INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(9) OIL RECORD BOOK
(10) SHIPBOARD OIL POLLUTION EMERGENCY PLAN
(11) GARBAGE MANAGEMENT PLAN
(12) GARBAGE RECORD BOOK
(13) CARGO SECURING MANUAL
(14) DOCUMENT OF COMPLIANCE
(15) SAFETY MANAGEMENT CERTIFICATE
(16) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE
(17) CARGO SHIP SAFETY EQUIPMENT CERTIFICATE
(18) CARGO SHIP SAFETY RADIO CERTIFICATE
(19) CARGO SHIP SAFETY CERTIFICATE
(20) EXEMPTION CERTIFICATE
(21) DOCUMENT OF COMPLIANCE WITH SPECIAL REQUIREMENTS FOR SHIPS CARRYING DANGEROUS GOODS
(22) DANGEROUS GOODS MANIFEST OR STOWAGE PLAN
~~(23) DOCUMENT OF AUTHORIZATION FOR THE CARRIAGE OF GARIN~~
(24) CERTIFICATE OF INSURANCE OR OTHER FINANCIAL SECURITY IN RESPECT OF CIVIL LIABILITY FOR OIL POLLUTION DAMAGE
(25) ENHANCED SURVEY REPORT FILE
(26) RECORD OF OIL DISCHARGE MONITORING & CONTROL SYSTEM FOR THE LAST BALLAST VOYAGE
~~(27) BULK CARRIER BOOKLET~~
(28) INTERNATIONAL POLLUTION PREVENTION CERTIFICATE FOR THE CARRIAGE OF NOXIOUS LIQUID SUBSTANCE IN BULK (NLS CERTIFICATE)

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(29) CARGO RECORD BOOK
(30) PROCEDURES & ARRANGEMENTS MANUAL (P & A MANUAL)
(31) SHIPBOARD MARINE POLLUTION EMERGENCY PLAN FOR NOXIOUS LIQUID SUBSTANCE

CHEMICAL TANKER SHALL CARRY: -
(1) INTERNATIONAL TONNAGE CERTIFICATE (1969)
(2) INTERNATIONAL LOAD LINE CERTIFICATE
(3) INTERNATIONAL LOAD LINE EXCEMPTION CERTIFICATE
(4) INTACT STABILITY BOOKLET
(5) DAMAGE CONTROL BOOKLET
(6) MINIMUM SAFE MANNING DOCUMENT
(7) CERTIFICATE FOR MASTER, OFFICERS & RATINGS
(8) INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(9) OIL RECORD BOOK
(10) SHIPBOARD OIL POLLUTION EMERGENCY PLAN
(11) GARBAGE MANAGEMENT PLAN
(12) GARBAGE RECORD BOOK
(13) CARGO SECURING MANUAL
(14) DOCUMENT OF COMPLIANCE
(15) SAFETY MANAGEMENT CERTIFICATE
(16) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE
(17) CARGO SHIP SAFETY EQUIPMENTCERTIFICATE
(18) CARGO SHIP SAFETY RADIO CERTIFICATE
(19) CARGO SHIP SAFETY CERTIFICATE
(20) EXEMPTION CERTIFICATE
(21) DOCUMENT OF COMPLIANCE WITH SPECIAL REQUIREMENTS FOR SHIPS CARRYING DANGEROUS GOODS
(22) DANGEROUS GOODS MANIFEST OR STOWAGE PLAN
(23) DOCUMENT OF AUTHORIZATION FOR THE CARRIAGE OF GARIN
(24) CERTIFICATE OF INSURANCE OR OTHER FINANCIAL SECURITY IN RESPECT OF CIVIL LIABILITY FOR OIL POLLUTION DAMAGE
(25) ENHANCED SURVEY REPORT FILE
(26) RECORD OF OIL DISCHARGE MONITORING & CONTROL SYSTEM FOR THE LAST BALLAST VOYAGE
(27) BULK CARRIER BOOKLET
(28) CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICALS IN BULK
(29) INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICAL IN BULK

GAS CARRIER SHALL CARRY: -
(1) INTERNATIONAL TONNAGE CERTIFICATE (1969)
(2) INTERNATIONAL LOAD LINE CERTIFICATE
(3) INTERNATIONAL LOAD LINE EXCEMPTION CERTIFICATE
(4) INTACT STABILITY BOOKLET
(5) DAMAGE CONTROL BOOKLET
(6) MINIMUM SAFE MANNING DOCUMENT
(7) CERTIFICATE FOR MASTER, OFFICERS & RATINGS
(8) INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(9) OIL RECORD BOOK
(10) SHIPBOARD OIL POLLUTION EMERGENCY PLAN
(11) GARBAGE MANAGEMENT PLAN
(12) GARBAGE RECORD BOOK
(13) CARGO SECURING MANUAL
(14) DOCUMENT OF COMPLIANCE
(15) SAFETY MANAGEMENT CERTIFICATE
(16) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE
(17) CARGO SHIP SAFETY EQUIPMENTCERTIFICATE
(18) CARGO SHIP SAFETY RADIO CERTIFICATE
(19) CARGO SHIP SAFETY CERTIFICATE
(20) EXEMPTION CERTIFICATE
(21) DOCUMENT OF COMPLIANCE WITH SPECIAL REQUIREMENTS FOR SHIPS CARRYING DANGEROUS GOODS
(22) DANGEROUS GOODS MANIFEST OR STOWAGE PLAN
(23) DOCUMENT OF AUTHORIZATION FOR THE CARRIAGE OF GARIN
(24) CERTIFICATE OF INSURANCE OR OTHER FINANCIAL SECURITY IN RESPECT OF CIVIL LIABILITY FOR OIL POLLUTION DAMAGE
(25) ENHANCED SURVEY REPORT FILE
(26) RECORD OF OIL DISCHARGE MONITORING & CONTROL SYSTEM FOR THE LAST BALLAST VOYAGE
(27) BULK CARRIER BOOKLET

(28) CERTIFICATE OF FITNESS FOR THE CARRIAGE OF LIQUEFIED GASES IN BULK
(29) INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF LIQUEFIED GASES IN BULK

Q.192. WHAT DO YOU KNOW ABOUT PORT STATE & FLAG STATE INSPECTION?
A.192.

Q.193. WHAT IS THE DIFFERENCE BETWEEN FLAG STATE & PORT STATE?
A.193.

FLAG STATE	PORT STATE
SET, MONITOR & ENFORCE STANDARDS OF SAFETY & POLLUTION ON ALL ITS VESSEL	WHEN VESSEL IS IN PORT OR WITHIN ITS PORT LIMITS, THE PORT STATE MAY PROCEED AGAINST A VESSEL TO PREVENT POLLUTION
SURVEY & INSPECT VESSELS IN ACCORDANCE WITH DOMESTIC & INTERNATIONAL REGULATION	PORT STATE INSPECTOR HAVE THE POWER TO CARRY OUT THE GENERAL INSPECTION & ALSO IF THERE IS SUFFICIENT EVIDENCE TO DETAIN UNSAFE SHIPS
INVESTIGATE ACCIDENTS INVOLVING ITS OWN SHIPS & SHIPS OF OTHER FLAGS WHEN IN THE STATES WATER	PORT STATE MAY ALSO INVESTIGATE ON BEHALF OF ANOTHER FLAG STATE OR ANOTHER STATE WHERE POLLUTION HAS OCCURRED

Q.194. WHAT IS THE MATE DUTY AS PER STCW 95?
A.194.

Q.195. WHAT ARE THE STATUTORY CERTIFICATES?
A.195. STATUTORY CERTIFICATES:
(1) CARGO SHIP SAFETY CONSTRUCTION CERTIFICATES
(2) CARGO SAFETY EQUIPMENT CERTIFICATES
(3) CARGO SHIP SAFETY RADIO TELEPHONY CERTIFICATES
(4) SAFETY MANAGEMENT CERTIFICATES

Q.196. WAHT ARE THE PERIOD OF REST HOURS AS PER STCW 95?
A.196. ALL WATCHKEEPERS SHALL HAVE TO BE PROVIDED AT LEAST 10 HRS OF REST EVERY DAY. THESE 10 HRS OF REST MAY BE DIVIDED INTO 2 PERIODS, ONE OF WHICH SHALL BE ATLEAST 6 HRS. THE REQUIREMENTS OF REST PERIODS NEED NOT TO BE MAINTAINED IN THE CASE OF AN ERMERGENCY OR EMERGENCY DRILL OR IN AN OVERRIDING OPERATIONAL CONDITION. FOR NOT MORE THAN 2 DAYS IN A WEEK 10 HRS MAY BE REDUCED TO 1 SINGLE PERIOD OF 6 HRS, PROVIDED TOTAL REST FOR THE WEEK IS MORE THAN 70 HRS.

Q.197. WHAT IS NORMAL BODY TEMP, PULSE & HAERT BEAT?
A.197.
PULSE : 60-80 PER MIN
RESPIRATION : 16-18 PER MIN
TEMPERATURE : 37°C OR 98.6° F
BLOOD PRESSURE : 120- 180

Q.198. WHAT DO YOU UNDERSTAND BY TREATIES?
A.198. A TREATY IS A WRITTEN INTERNATIONAL AGREEMENT BETWEEN TWO STATES OR BETWEEN A NUMBERS OF STATES, WHICH IS BINDING IN INTERNATIONAL LAW

Q.199. WHAT IS THE PURPOSE OF IMO?
A.199. PURPOSE OF IMO IS STATED IN ARTICLE 1 OF THE CONVENTION ON THE INTERNATIONAL MARITIME ORGANIZATION.
(1) TO FACILATE INTER-GOVERMENTAL CO-OPERATION ON STATE REGULATION & PARCTICES RELATING TO MARITIME TECHNICAL MATTERS
(2) TO ENCOURAGE & FACILATE THE ADOPTION OF THE HIGHEST PRACTICABLE STANDARDS OF MARITIME SAFETY, EFFICIENCY OF NAVIGATION & PREVENTION & CONTROL OF MARINE POLLUTION FROM SHIPS.

Q.200. WHAT IS FAL CONVENTION?
A.200. CONVENTION ON FACILITATION OF INTERNATIONAL MARITIME TRAFFIC 1965 AS AMMENDED (FAL 1965). ENTERED INTO FORCE 5TH MARCH 1967. INDIA RATIFIED ON 25TH MAY 1976.
PURPOSE OF THIS CONVENTION IS TO SIMPLIFY & FACILATE MARITIME TRANSPORT & REDUCE TO A MINIMUM THE FORMALITIES, DOCUMENTATION & PROCEDURES ON ARRIVAL, STAY & DEPARTURE OF SHIPS ON INTERNATIONAL VOYAGES

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Q.201. WHAT ARE THE STANDARD DOCUMENTATION REQUIRED ON ARRIVAL & DEPARTURE OF SHIPS AS PER FAL CONVENTION?

A.201. (1) GENERAL DECLARATION
(2) CARGO DECLARATION
(3) SHIPS STORE DECLARATION
(4) CREW EFFECT DECLARATION
(5) CREW LIST
(6) PASSENGER LIST
(7) DOCUMENT REQUIRED FOR MAIL UNDER UNIVERSAL POSTAL CONVENTION
(8) MARITIME DECLARATION

Q.202. WHAT IS SUA CONVENTION 88?

A.202. CONVENTION FOR THE SUPPRESSION OF UNLAWFUL ACTS AGAINST THE SAFETY OF MARITIME NAVIGATION. IT IS BASICALLY A CONVENTION AGAINST INTERNATIONAL TERRORISM, HUMAN RIGHTS VIOLATIONS & OTHER VIOLENCE ON SHIPS UNDERGOING NAVIAGATION.IT DOES NOT APPLY TO WAR SHIPS, CUSTOMS, POLICE etc & SHIP WITHDRAWN FROM NAVIGATION.

Q.203. DEFINE PIRACY?

A.203. ANY ILLEGAL ACT OF VIOLENCE ORDETENTION, OR ANY ACT OF DEPREDATION, COMMITTED FOR PRIVATE ENDS BY THE CREW OR THE PASSENGER OF A PRIVATE SHIP OR PRIVATE AIR CARFT & DIRECTED.

Q.204. WHAT ARE THE SOPEP EQUIPMENTS?

A.204. SOPEP EQUIPMENTS ARE
(1) WILDEN PUMP
(2) BROOM
(3) SCOOP
(4) LIQUID DETERGENT
(5) OIL ABSORBENT PAD
(6) OIL BOOMS
(7) EMPTY DRUMS
(8) SPARE SCUPPERS
(9) BOOTS
(10) RUBBER GLOVES
(11) ABSORBENT ROLLS
(12) ABSORBENT GRANULES
(13) ABSORBENT MATERIALS (SAWDUST)
(14) OIL SPILL DISPERSANT
(15) PORTABLE AIR DRIVEN PUMPS
(16) SHOVEL

Q.205. WHAT IS AC & NC WITH RESPECT TO RADAR LOG?

A.205. AC : - ASPECT
NC : - NEAREST APPROACH OR RANGE AT CPA

Q.206. WHAT IS THE REGULATION FOR SOPEP?

A.206. (1) EVERY OIL TANKER OF 150 GRT & ABOVE & EVERY SHIP OTHER THAN OIL TANKER OF 400 GRT& ABOVE SHALL CARRY ON BAORD A SHIPBOARD OIL POLLUTION EMERGENCY PLAN APPROVED BY THE ADMINISTRATION
(2) SUCH A PLAN SHALL BE PREPARED BASED ON GUIDELINES DEVELOPED BY THE ORGANIZATION & WRITTEN IN THE WORKING LANGUAGE OF THE MASTER & OFFICER
(3) THE PLAN SHALL CONSIST AT LEAST OF (a) THE PROCEDURE TO BE FOLLOWED BY THE MASTER OR OTHER PERSONS HAVING CHARGE OF THE SHIP TO REPORT AN OIL POLLUTION INCIDENT (b) THE LIST OF AUTHORITIES OR PERSONS TO BE CONTACTED IN THE EVENT OF AN OIL POLLUTION INCIDENT (c) A DETAILED DESCRIPTION OF THE ACTION TO BE TAKEN IMMEDIATELY BY PERSONS ONBOARD TO REDUCE OR CONTROL THE DISCHARGE OF OIL FOLLOWING THE INCIDENT (d) THE PROCEDURE & POINT OF CONTACT ON THE SHIP FOR CO-ORDINATING SHIPBOARD ACTION WITH NATIONAL & LOCAL AUTHORITIES IN COMBATING POLLUTION
(4) ALL OIL TANKERS OF 5000TONNES DEADWEIGHT OR MORE SHALL HAVE PROMPT ACCESS TO COMPUTERIZED SHORE BASED DAMAGE STABILITY & RESIDUAL STRUCTURAL STRENGTH CALCULATION PROGRAMS

Q.207. WHAT ARE THE ALARMS IN BULK CARRIER?

A.207. (1) IN EACH CARGO HOLD, GIVING AUDIABLE & VISUAL ALARMS, ONE WHEN THE WATER LEVEL ABOVE THE INNER BOTTOM IN ANY HOLD REACHES A HEIGHTOF 0.5 m & ANOTHER AT A HEIGHT NOT LESS THAN 15% OF THE DEPTH OF THE CARGO HOLD BUT NOT MORE THAN 2m
(2) IN ANY BALLAST TANK FORWARD OF THE COLLISION BULKHEAD, GIVING AN AUDIABLE & VISUAL ALARM WHEN THE LIQUID IN THE TANK REACHES A LEVEL NOT EXCEEDING 10% OF THE TANK CAPACITY

(3) IN ANY DRY OR VOID SPACE OTHER THAN A CHAIN CABLE LOCKER, ANY PART OF WHICH EXTENDS FORWARD OF THE FOREMOST CARGO HOLD, GIVING AN AUDIABLE & VISUAL ALARM AT A WATER LEVEL OF 0.1 m ABOVE THE DECK
(4) THE AUDIBLE & VISUAL ALARMS SHALL BE LOCATED ON THE NAVIGATION BRIDGE
(5) THE VISUAL ALARMS SHALL CLEARLY DISCRIMINATE BETWEEN THE TWO DIFFERENT WATER LEVELS DETECTD IN EACH HOLD

Q.208. WHAT IS THE STRENGTHNING MEMBERS ON BULK CARRIER?
A.208. THE TRANSVERSE WATERTIGHT BULKHAED BETWEEN THE TWO FOREMOST CARGO HOLDS & THE DOUBLE BOTTOM OF THE FOREMOST CARGO HOLD.

Q.209. what is difference between L/B drill and Abondon ship drill

A.209

L/B Drill	Abondon ship drill

Q.210. 1000 meter means how many mile?
A.210 0.5 mile

Q.211. From where you will find Load density of hold?
A.211.

Q.212. what is Seaving Code, & how will you go For lashing?
A.212

Q.213. how will you take a siglet of celestial object?
A.213

Q.214 how often you have taken siglet? what siglet & when?
A.214.

Q.215. how will you load heavy lift?
A.215.

Q.216 ROR Card CBD, Mine clearance, dredger, single white light's possibilities!

Q.217. Types of Containers & their sizes?

Q.218 how will you do the lashing of containers?

Q.219 Error of Sextant & how to correct it?

Q.220 how will you lowers the life boat?

Q.221 Rule No.7. word to word.