FINAL ANSWER KEY

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Question1:-The centre of gravity of the volume of the liquid displaced is called

A:-metacentre

B:-centre of pressure

C:-centre of buoyancy

D:-none of these

Correct Answer:- Option-C

Question2:-The liquid used in manometers should have

A:-high surface tension

B:-high density

C:-low surface tension

D:-low density

Correct Answer:- Option-B

Question3:-When is a fluid called turbulent ?

A:-The density of the fluid is low

B:-Reynolds number is less than 2000

C:-Reynolds number is greater than 2000

D:-High viscosity of fluid

Correct Answer:- Option-C

Question4:-The compressible flow is assumed to be

A:-adiabatic only

B:-isentropic and adiabatic

C:-isentropic only

D:-polytropic

Correct Answer:- Option-C

Question5:-Which among the following is an assumption of Hagen-Poiseuille equation ?

A:-Fluid is uniform

B:-Fluid is compressible

C:-Fluid is turbulent

D:-Fluid is laminar

Correct Answer:- Option-D

Question6:-Which of the following is not a correct statement ?

A:-For irrotational flow, the curl of the velocity vector is zero.

B:-Vorticity in a fluid motion numerically equals twice the value of rotation.

C:-Circulation per unit area equals the vorticity in flow.

D:-Circulation is the line integral of the tangential component of velocity taken round a closed contour

Correct Answer:- Option-C

Question7:-In IC engine, the throttle controls

A:-fuel into cylinder

B:-engine speed

C:-quantity of charge

D:-engine load

Correct Answer:- Option-C

Question8:-The diesel injection pump is usually driven by a

A:-shaft driven from the engine crank shaft

B:-gear driven from the engine crank shaft

C:-belt driven from the engine crank shaft

D:-chain driven from the engine crank shaft

Correct Answer:- Option-B

Question9:-If the compression ratio of an engine working on Otto cycle is increased from 5 to 7, the % age increase in efficiency will be

A:-2%

B:-4%

C:-8%

D:-14%

Correct Answer:- Option-D

Question10:-What is the firing order of a six stroke I.C. engine ?

A:-1-4-2-5-6-3

B:-1-3-6-5-2-4

C:-1-5-3-4-2-6

D:-1-6-2-5-4-3

Correct Answer:- Option-C

Question11:-In MPFI-Electronic Control System, the _____ sensor sends information about the engine speed.

A:-speed

B:-air-flow

C:-ignition

D:-air-mass

Correct Answer:- Option-C

Question12:-The output of a diesel engine can be increased without increasing the engine revolution or size in following way

A:-Feeding more fuel

B:-Supercharging

C:-Heating incoming air

D:-Increasing flywheel size

Correct Answer:- Option-B

Question13:-A rod, 120 cm long and of diameter 3.0 cm is subjected to an axial pull of 18 kN. The stress in N/mm^2 is

A:-22.57

B:-25.47

C:-24.57

D:-23.47

Correct Answer:- Option-B

Question14:-The length of a wire is increased by 1 mm on the application of a certain load. In a wire of the same material but of twice the length and half the radius, the same force will produce an elongation of

A:-8 mm

B:-2 mm

C:-4 mm

D:-0.5 mm

Correct Answer:- Option-A

Question15:-Maximum shear stress in a hollow shaft subjected to a torsional moment is at the

A:-middle of thickness

B:-at the inner surface of the shaft

C:-at the middle surface of the shaft

D:-at the outer surface of the shaft

Correct Answer:- Option-D

Question16:-The ratio of lateral strain to linear strain is called

A:-Modulus of elasticity

B:-Poisson's ratio

C:-Bulk modulus

D:-Modulus of rigidity

Correct Answer:- Option-B

Question17:-With an increase in the thickness of insulation around a circular pipe, heat loss to surroundings due to

A:-convection decreases while that due to conduction increases

B:-convection increases while that due to conduction decreases

C:-convection and conduction increases

D:-convection and conduction decreases

Correct Answer:- Option-B

Question18:-Which one of the following forms of water has the highest value of thermal conductivity ?

A:-Steam

B:-Melting Ice

C:-Boiling water

D:-Solid ice

Correct Answer:- Option-D

Question19:-On a heat transfer surface, fins are provided to

A:-increase turbulence in flow for enhancing heat transfer

B:-surface area is maximum to promote the rate of heat transfer

C:-pressure drop of the fluid should be minimized

D:-increase temp gradient so as to enhancing heat transfer

Correct Answer:- Option-B

Question20:-Metals are good conductors of heat because

A:-they contain free electrons

B:-their atoms are relatively far apart

C:-their atoms collide frequently

D:-they have high density

Correct Answer:- Option-A

Question21:-The time constant of a thermocouple is

A:-the time taken to attain the final temperature to be measured

B:-the time taken to attain 50% of the value of initial temperature difference

C:-determined by the time taken to reach 100°C from 0°C

D:-the time taken to attain 63.2% of the value of initial temperature difference

Correct Answer:- Option-D

Question22:-The ratio of the maximum displacement of the forced vibration to the deflection due to the static force, is known as

A:-magnification factor

B:-damping coefficient

C:-logarithmic decrement

D:-damping factor

Correct Answer:- Option-A

Question23:-The equation of motion for a vibrating system with viscous damping is d^2x/dt^2 + c/m X dx/dt + s/m X x = 0.
If the roots of this equation are real, then the system will be

A:-critically damped

B:-under damped

C:-over damped

D:-none of the mentioned

Correct Answer:- Option-C

Question24:-For an underdamped harmonic oscillator, resonance

A:-occurs when excitation frequency is less than the undamped natural frequency

B:-occurs when excitation frequency is equal to the undamped natural frequency

C:-occurs when excitation frequency is greater than the undamped natural frequency

D:-never occurs

Correct Answer:- Option-B

Question25:-In steady state forced vibrations, the amplitude of vibrations at resonance is _____ damping coefficient.

A:-equal to

B:-directly proportional to

C:-independent of

D:-inversely proportional to

Correct Answer:- Option-D

Question26:-As per regulation 15 of Annex I of MARPOL, what is the maximum amount of oil content of the effluent without dilution that can be discharged into the sea ?

A:-10 parts per million

B:-15 parts per million

C:-5 parts per million

D:-20 parts per million

Correct Answer:- Option-B

Question27:-Which of the following statements are true with respect to the relief valve fitted on the hydraulic system of steering gear ?

i) A relief valve need not be fitted if the system is pressure tested
ii) The setting of the relief valves shall not exceed the design pressure
iii) The size of the valves must be so as to avoid an undue rise in pressure above design pressure
iv) The setting of the relief valves shall not exceed 1.5 times the design pressure

A:-Only i

B:-Only ii

C:-Only (ii and iii)

D:-Only (iii and iv)

Correct Answer:- Option-C

Question28:-What is the validity period of an International Air Pollution Prevention Certificate issued to a ship ?

A:-5 years

B:-10 years

C:-15 years

D:-20 years

Correct Answer:- Option-A

Question29:-Which among the below Codes/Conventions deals with hours of work and hours of rest of seafarers onboard a ship ?

A:-STCW 2010

B:-MLC 2006

C:-ISM Code

D:-SOLAS

Correct Answer:- Option-B

Question30:-As per ISM Code, who is responsible to establish procedures to identify, describe and respond to potential emergency shipboard situations ?

A:-Master of the ship

B:-Chief Engineer of the ship

C:-Company

D:-Safety Officer

Correct Answer:- Option-C

Question31:-Which among the below is the lubricating oil additive that neutralizes acidity formed in the oil?

A:-Depressant

B:-Anti-oxidant

C:-Corrosion Inhibitor

D:-Dispersant

Correct Answer:- Option-C

Question32:-The energy absorber unit provided on vibratory systems to offer resistance to oscillations is known as

A:-Absorber

B:-Balancer

C:-Resonator

D:-Damper

Correct Answer:- Option-D

Question33:-Which among the below statements is not true with regard to emergency bilge pump ?

A:-Its motor is enclosed in an air bell

B:-It is a multi-stage gear pump

C:-It is capable of working when completely submerged

D:-It is designed to operate for long periods without attention

Correct Answer:- Option-B

Question34:-In a centrifugal pump with the ring of guide passages around the impeller, the kinetic energy of the liquid is converted into pressure energy by

A:-Impeller

B:-Diffuser Passage

C:-Energiser

D:-Casing Ring

Correct Answer:- Option-B

Question35:-Which among the below are the functions of a viscotherm installed in a fuel oil system onboard a ship ?
i) Measure the viscosity of fuel oil
ii) Cut-off fuel supply to stop the engine
iii) Provide a signal to control the heating of fuel oil
iv) Bypass the fuel oil into a homogenizer

A:-Only (i and iv)

B:-Only (i and iii)

C:-Only (i and ii)

D:-Only (i, ii and iii)

Correct Answer:- Option-B

Question36:-Which among the below is not a reason for higher maximum pressure of ignition in a diesel engine ?

A:-Early injection

B:-Fault in the injector

C:-Use of fuel of higher ignition quality

D:-Late injection

Correct Answer:- Option-D

Question37:-Which among the below are the functions of volute casing of a centrifugal pump ?
i) It converts velocity energy into pressure energy
ii) It converts pressure energy into velocity energy
iii) It accommodates the gradual increase in quantity of fluid that builds at discharge from the circumference of the impeller
iv) It increase the velocity of flow

A:-Only (i and iii)

B:-Only (ii and iii)

C:-Only (iii and iv)

D:-Only (ii and iv)

Correct Answer:- Option-A

Question38:-Which among the following statements is not true with respect to a fixed pitch propeller fitted to the tail shaft with a key and taper ?

A:-Poor fitting is taken care

B:-It safeguards against reduced grip due to temperature differentials

C:-The fitting relies entirely on a good interference fit

D:-It safeguard against reduced grip due to differential expansion of bronze hub and steel shaft

Correct Answer:- Option-C

Question39:-Which among the below are the functions of a thrust block ?
i) It transfers forward or astern propeller thrust to the hull
ii) It dampens vibration of the hull
iii) It limits axial movement of the shaft

A:-Only i

B:-Only (ii and iii)

C:-Only (i and iii)

D:-All of the above (i, ii and iii)

Correct Answer:- Option-C

Question40:-Which among the following statements are correct with regard to propeller shafting with reduction gears ?
i) The arrangement permits engines and propellers to run at their best speeds
ii) The arrangement requires higher starting air capacity as compared to directly coupled propeller arrangement
iii) The arrangement permits use of more than one engine to be coupled to the same propeller

A:-Only (i and iii)

B:-Only (ii)

C:-Only (iii)

D:-All of the above (i, ii and iii)

Correct Answer:- Option-A

Question41:-A _____ is fitted along the bilge radius either side of the ship to damp any tendency the ship has to roll.

A:-Bilge plate

B:-Anti-roll plate

C:-Bilge Keel

D:-Keel plate

Correct Answer:- Option-C

Question42:-The tonnage value obtained by deducting the total value of the 'deducted spaces' from the gross tonnage is called

A:-Deducted tonnage

B:-Net tonnage

C:-Profit tonnage

D:-British tonnage

Correct Answer:- Option-B

Question43:-Which among the below is the purpose of a clench pin ?

A:-Pin used to engage the clutch of windlass

B:-Pin used to engage the brake of the windlass

C:-Pin used to hold the anchor cable in place while the ship is riding at anchor or the anchor is fully housed

D:-Pin used to secure the final link of the anchor cable to the ship's structure

Correct Answer:- Option-D

Question44:-The uppermost continuous deck exposed to the weather and the seas which has permanent means for the watertight closure of all exposed openings on the deck and in the side shell below is called

A:-Exposed deck

B:-Freeboard deck

C:-Open deck

D:-Water deck

Correct Answer:- Option-B

Question45:-Which among the below is the reason for keeping troughs on corrugated longitudinal watertight bulkheads in horizontal direction ?

A:-To facilitate welding

B:-To reduce the weight of the bulkhead

C:-To prevent any accumulation of liquid cargo

D:-To add to the longitudinal strength of the ship

Correct Answer:- Option-D

Question46:-As per the Fire Safety Systems Code, what must be the capacity of self-contained breathing apparatus used as part of fire fighter's outfit ?

A:-Capable of functioning for at least 15 mins

B:-Volume of air contained in the cylinders shall be at least 600 litres

C:-Capable of functioning for at least 30 mins

D:-Volume of air contained in the cylinder shall be at least 1000 litres

Correct Answer:- Option-C

Question47:-With respect to fire detectors used in fixed fire detection and fire alarm systems onboard, which among the following statements are true ?
i) Flame detectors shall only be used in addition to smoke or heat detectors
ii) Smoke detectors shall only be used in addition to flame or heat detectors
iii) Smoke detectors within accommodation spaces shall be certified to operate in the range of 2 to 12.5% obscuration per metre
iv) Heat detectors shall only be used in addition to flame or smoke detectors

A:-Only i

B:-Only (iii and iv)

C:-Only (i and iii)

D:-Only (ii and iii)

Correct Answer:- Option-C

Question48:-Which among the given options is not recorded by a Voyage Data Recorder ?

A:-Engine speed

B:-Rudder angle

C:-Bridge conversation

D:-Engine room conversation

Correct Answer:- Option-D

Question49:-Which among the below statements are true with respect to a hydrostatic release unit (HRU) used in the float-free arrangements ?
i) HRU must automatically release the life raft at a depth of not more than 8 m
ii) HRU must be permanently marked on its exterior with its type and serial number
iii) HRU must automatically release the life raft at a depth of not more than 4 m
iv) HRU must be permanently marked on its exterior with the ship's name

A:-Only (i and ii)

B:-Only (ii and iii)

C:-Only (i and iv)

D:-Only (iii and iv)

Correct Answer:- Option-B

Question50:-What is the requirement regarding capability of lifeboat launching appliance as per LSA Code ?

A:-The launching appliance shall be capable of recovering the lifeboat without its crew

B:-The launching appliance shall be capable of recovering the lifeboat with 50% of its crew

C:-The launching appliance shall be capable of recovering the lifeboat with 100% of its crew

D:-The launching appliance shall only be capable of launching the lifeboat

Correct Answer:- Option-C

Question51:-The air standard Otto cycle includes

A:-two constant volume processes and two constant entropy processes

B:-two constant pressure processes and two constant volume processes

C:-two constant pressure and two constant entropy processes

D:-none of the above

Correct Answer:- Option-A

Question52:-Thermal efficiency of a theoretical Otto cycle

A:-increases when the isentropic index (γ) increases

B:-increases when the compression ratio rises

C:-does not depend on the pressure ratio

D:-all the above

Correct Answer:- Option-D

Question53:-The lowest temperature at which a substance starts to burn is known as

A:-Flash Point Temperature

B:-Fire Point Temperature

C:-Auto Ignition

D:-Ignition Temperature

Correct Answer:- Option-D

Question54:-What is the importance of caloric value ?

A:-assists in finding fuel

B:-assists in determining which fuel is good

C:-assists in determining ignition temperature

D:-assists in determining the fire point

Correct Answer:- Option-B

Question55:-The stoichiometric air-fuel ratio for petrol is about

A:-1:1

B:-50:1

C:-15:1

D:-25:1

Correct Answer:- Option-C

Question56:-The loads sustained by a vehicle frame are

A:-Torque from engine and transmission

B:-Sudden impacts from collisions

C:-Weight of the body, passengers and cargo loads

D:-All the above

Correct Answer:- Option-D

Question57:-Which of the following is not a part of an automobile chassis ?

A:-Shock absorbers

B:-Steering System

C:-Brakes

D:-Differential

Correct Answer:- Option-D

Question58:-The transmission system of a vehicle transfers _____ from the engine to the wheels.

A:-Pressure

B:-Current

C:-Power

D:-Speed

Correct Answer:- Option-C

Question59:-Which of the following is not a component of automatic transmission ?

A:-Multiplate clutch

B:-Torque converter

C:-Sliding mesh gearbox

D:-Epicyclic gearbox

Correct Answer:- Option-C

Question60:-Which type of manual gearbox uses double declutching ?

A:-Sliding mesh gearbox

B:-Constant mesh gearbox

C:-Epicyclic gearbox

D:-Synchromesh gearbox

Correct Answer:- Option-B

Question61:-An automotive chassis does not include which of the following elements ?

A:-Differential

B:-Brakes

C:-Shock absorbers

D:-Steering System

Correct Answer:- Option-A

Question62:-The vehicle system's unsprung mass consists mainly of

A:-Gearbox and Propeller shaft

B:-Axle and Parts attached to it

C:-The frame assembly

D:-Engine and Associated parts

Correct Answer:- Option-B

Question63:-Which of the following systems is used to control a vehicle ?

A:-Cooling system

B:-Brakes and steering system

C:-Suspension system

D:-Fuel system

Correct Answer:- Option-B

Question64:-The primary benefit of employing aluminium alloy for the cylinder head is

A:-high thermal conductivity

B:-lightness in weight

C:-cost

D:-less corrosion rate

Correct Answer:- Option-A

Question65:-A square-type engine is one that

A:-has two vertical and two horizontal cylinders

B:-has cylinder bore length equal to stroke length

C:-has geometrically square structure

D:-none of the above

Correct Answer:- Option-B

Question66:-What is the purpose of an oil ring in an engine ?

A:-Reduces piston wear

B:-Maintain the vacuum

C:-Lubricate the cylinder walls

D:-Maintain compression

Correct Answer:- Option-C

Question67:-A four-cylinder engine has a capacity of 2.4 litre. The swept volume of a single cylinder is

A:-300 cubic centimeters

B:-400 cubic centimeters

C:-600 cubic centimeters

D:-900 cubic centimeters

Correct Answer:- Option-C

Question68:-What is the connecting rod's material ?

A:-Cast Iron

B:-Mild Steel

C:-Tool Steel

D:-Forged Steel

Correct Answer:- Option-D

Question69:-What are the key factors that influence gear selection ?

A:-Engine speed and road condition

B:-Vehicle load and engine speed

C:-Vehicle speed and engine load

D:-Vehicle load and road condition

Correct Answer:- Option-C

Question70:-The front wheel alignment is adjusted by changing the

A:-Length of Track Arm

B:-Angle of Track Arm

C:-Position of Drag Link

D:-Distance between King Pins

Correct Answer:- Option-A

Question71:-How do you fix noise in hydraulic steering ?

A:-Replace the flow control valve

B:-Adjust the torsion bar link

C:-Replace the new fluid

D:-Fill fluid to correct level and bleed the system

Correct Answer:- Option-D

Question72:-What happens in the floating chamber while the fuel pump idles ?

A:-It remains filled

B:-It remains empty

C:-It remains partially filled

D:-None of the above

Correct Answer:- Option-A

Question73:-What is the reason for the low voltage output from the alternator ?

A:-Loose mountings

B:-Worn out bearing

C:-Faulty regulator

D:-Loose drive pulley

Correct Answer:- Option-C

Question74:-The device used for measuring the clearance between the valve and tappet of an internal combustion engine is

A:-Snap gauge

B:-Feeler gauge

C:-Micrometer

D:-Slip gauge

Correct Answer:- Option-B

Question75:-Dry sump is not desirable in the small vehicle due to

A:-high pressure oil lines

B:-complex

C:-costlier

D:-all the above

Correct Answer:- Option-D

Question76:-A floating buoy in the form of a vertical cylinder with diameter, "d" and height "h". The density of the material of the buoy is"ρb". If the density of seawater is "ρs". The distance form centre of buoyancy to centre of gravity is

A:-$h\left[1-\frac{\rho b}{\rho s}\right]$

B:-$\frac{h}{2}\left[1-\frac{\rho b}{\rho s}\right]$

C:-$h\left[1-\frac{\rho s}{\rho b}\right]$

D:-$\frac{h}{2}\left[1-\frac{\rho s}{\rho b}\right]$

Correct Answer:- Option-B

Question77:-According to the International Maritime Organization (IMO), International Code on Intact Stability, the initial transverse metacentric height should not be less than _____ meters.

A:-0.3

B:-0.25

C:-0.2

D:-0.15

Correct Answer:- Option-D

Question78:-What does the angle of vanishing stability on the stability curve for ships represent ?

A:-The angle at which the ship's righting arm is maximum

B:-The angle of heel at which the sign of righting lever changes from positive to negative

C:-The angle at which the ship's centre of gravity and centre of buoyancy align vertically

D:-None of the above

Correct Answer:- Option-B

Question79:-Which of the following statements accurately describes parametric rolling in ship dynamics ?

A:-It is a type of oscillation that occurs when a ship's engine produces vibrations that resonate with the natural frequency of the ship's hull

B:-It occurs when a ship's natural roll frequency synchronizes with the frequency of waves encountered

C:-It is primarily influenced by ship's propulsion system and its general arrangement

D:-It is a phenomenon exclusive to large oil tankers

Correct Answer:- Option-B

Question80:-The block coefficient "C_B" prismatic coefficient, "C_P " and mid-ship coefficient "C_M " are related as

A:-$C_B = C_P X\ C_M$

B:-$C_M = C_P X\ C_B$

C:-$C_P = C_M X C_B$

D:-None of the above

Correct Answer:- Option-A

Question81:-What is the main reason for the residuary resistance curve exhibiting a series of 'humps' and 'hollows' ?

A:-The wave resistance oscillates about the mean curve as the frictional resistance varies with changes in the Froude number

B:-The wave resistance oscillates about a mean curve depending on whether the interference effects from the bow and stern systems resulting in maximum or minimum resistance

C:-The vessel heaves and pitches about the free surface of the water

D:-Generation of eddies leading to fluctuations in resistance

Correct Answer:- Option-B

Question82:-A ship 100 meters length has a speed of 12 knots. The corresponding speed for a model vessel of 9 meters is _____ knots.

A:-10.8

B:-4.8

C:-6.0

D:-3.6

Correct Answer:- Option-D

Question83:-Propulsive efficiency is the product of _____ and shaft transmission efficiency.

A:-Wake factor

B:-Thrust reduction factor

C:-Quasi propulsive coefficient

D:-Power coefficient

Correct Answer:- Option-C

Question84:-Which of the following are the requirements of similitude for cavitating propellers ?
i) Same speed of advance
ii) Same Reynolds number
iii) Same slip
iv) Same cavitation number

A:-(i) and (ii) are correct and (iii) and (iv) are incorrect

B:-(i) and (ii) are incorrect and (iii) and (iv) are correct

C:-All options (i) to (iv) are correct

D:-All options (i) to (iv) are incorrect

Correct Answer:- Option-C

Question85:-The propeller boss diameter of a controllable pitch propeller in comparison to a fixed pitch propeller will be

A:-same

B:-higher

C:-lower

D:-None of the above

Correct Answer:- Option-B

Question86:-Restoring effect applies to degrees of freedom of a ship in

A:-Translational motions

B:-Rotational motions

C:-Horizontal plane

D:-Vertical plane

Correct Answer:- Option-D

Question87:-A ship has the following principal particulars

Sl. No.	Particular	Value	Unit
1.	Length between perpendiculars	L	m
2.	Beam	B	m
3.	Draft	T	m
4.	Area of water plane	A_{WP}	m^2
5.	Block coefficient	C_B	
6.	Water plane coefficient	C_{WP}	

Assuming C_B is same as C_{WP} , added mass in heave can be taken 80% of body mass and if g is the acceleration due to gravity, the natural time period of oscillation of the vessel in heave motion is

A:-$\frac{2\pi}{3}\sqrt{\frac{5T}{g}}$

B:-$4\pi\sqrt{\frac{T}{5g}}$

C:-$6\pi\sqrt{\frac{T}{5g}}$

D:-$\frac{4\pi}{3}\sqrt{\frac{5T}{g}}$

Correct Answer:- Option-C

Question88:-In a beam sea, the following relationship exists between the frequency of encounter "ω_e" and wave frequency ''ω_w''

A:-$\omega_e > \omega_w$

B:-$\omega_e < \omega_w$

C:-$\omega_e = \omega_w$

D:-None of the above

Correct Answer:- Option-C

Question89:-Acceleration dependent hydrodynamic derivatives of a surface ship are obtained from which of the below captive model tests.

A:-Planar motion mechanism tests

B:-Rotating arm tests

C:-Straight line tests

D:-All of the above

Correct Answer:- Option-A

Question90:-The tactical diameter in turning manoeuvre is sallow water is _____ to that in deep water.

A:-lower

B:-larger

C:-equal

D:-not comparable

Correct Answer:- Option-B

Question91:-Which of the following hull design features can help reduce the frequency and intensity of bow slamming in a high-speed vessel ?

A:-Reduce beam-to-length ratio

B:-Increased block coefficient

C:-Fine entry bow with moderate flare

D:-Increased displacement

Correct Answer:- Option-C

Question92:-Which type of anchor is characterized by a lower holding-power-to-weight ratio but is favoured in large ships due to ease of handling and stowage ?

A:-Danforth anchors

B:-Admiralty Pattern anchors

C:-Stockless anchors

D:-Grapnel anchors

Correct Answer:- Option-C

Question93:-In terms of ship safety, what is the main advantage of free-fall type lifeboats compared to davit type lifeboats ?

A:-They are less expensive to manufacture

B:-They can be launched even if the ship has a heavy inclination

C:-They require fewer crew members to operate

D:-They are faster to reach the sea surface from the ship

Correct Answer:- Option-B

Question94:-The weight of liquids in pipes of the ship will be considered as

A:-A part of light ship weight

B:-A part of dead weight

C:-It can be considered in light ship weight or dead weight

D:-None of the above

Correct Answer:- Option-A

Question95:-MARPOL, (Annex-I, Regulation 12 A) impacts the design of oil tankers by requiring certain protective measures. Which of the following is a direct consequence of this regulation on tanker design ?

A:-Mandatory double hulls for all cargo spaces

B:-Installation of additional bilge pumps

C:-Specific requirements for the protection and positioning of fuel oil tanks

D:-Enhanced radar and navigation systems

Correct Answer:- Option-C

Question96:-Deck beams on a ship are generally spaced at equal intervals and run

A:-transversely

B:-longitudinally

C:-vertically

D:-intermittently

Correct Answer:- Option-A

Question97:-For LNG carrier construction which of the following Aluminium alloys are preferred ?

A:-Aluminium-Silicon

B:-Aluminium-Magnesium

C:-Aluminium-Copper

D:-Aluminium-Manganese

Correct Answer:- Option-B

Question98:-The purpose of using longitudinal water tight bulkheads in the cargo hold of oil tankers is

A:-Decrease rolling period

B:-Reduce weight by other stiffeners

C:-Increase metacentric height

D:-Reduce sloshing due to free-surface effects

Correct Answer:- Option-D

Question99:-Which of the following is "not true" about "A" brackets ?

A:-Provides lateral support to rudder enhancing manoeuvrability

B:-Supports the propeller shaft overhang

C:-Struts of the "A" bracket employ aerofoil sections

D:-Fitting on the hull is easier from a production point over view

Correct Answer:- Option-A

Question100:-Which of the following statements regarding Gas Metal Arc Welding (GMAW) is "true" ?

A:-It is not suitable for welding in all positions due to its limited flexibility

B:-It provides lower deposition rates compared to Shielded Metal Arc Welding (SMAW)

C:-It requires slag removal and cleaning after welding

D:-It offers continuous electrode feeding, resulting in reduced starts and stops during welding

Correct Answer:- Option-D