Subject Code : 104

| Subject Code | Exam Date | $\begin{aligned} & \mathbf{Q} \\ & \text { Id } \end{aligned}$ | Questions | Answer Key |
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| 104 | 26-10-2019 | 301 | The novel "Coolie" is a famous work of <br> (A) Shri Khushwant Singh <br> (B) Shri V.S. Naipaul <br> (C) Shri Mulk Raj Anand <br> (D) Shri R.K. Narayan | (C) |
| 104 | 26-10-2019 | 302 | India's first National Police Museum, set up by the Intelligence Bureau in coordination with the Central Armed Police Forces under the Union Home Ministry, is located at <br> (A) Delhi <br> (B) Noida <br> (C) Hyderabad <br> (D) Ahmedabad | (A) |
| 104 | 26-10-2019 | 303 | Who said "The soul of India lives in its villages"? <br> (A) Shri Vinoba Bhave <br> (B) Shri Jayaprakash Narayan <br> (C) Shri Mahatma Gandhi <br> (D) Shri Jawahar Lal Nehru | (C) |
| 104 | 26-10-2019 | 304 | International Poverty Eradication Day is celebrated across the globe every year on $\ldots \ldots \ldots \ldots \ldots \ldots$............ raise awareness and highlight the problems faced by the poverty-stricken people or families and work towards eradicating poverty globally in all its forms. <br> (A) 7 September <br> (B) 17 September <br> (C) 7 October <br> (D) 17 October | (D) |

$\left.\begin{array}{||c||l|l||l|}\text { 26-10-2019 } & & \begin{array}{l}\text { The National Highway starting from Kapurthala } \\ \text { connecting Gobindwal Sahib and terminating } \\ \text { near Taran Taran in the State of Punjab has been } \\ \text { declared as new National Highway No. 703AA, } \\ \text { and is announced to be named after......... } \\ \text { effective November 2019. }\end{array} \\ \text { (A) Shri Sardar Vallabhbhai Patel }\end{array}\right\}$ (B)




| 10/29/2019 |  | 2.191. | postExam/qp_check_dashboard.php?exam=Y3Nsb2NOMjYxOQ== |  |
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|  |  |  | walked 3 feet. Again she turned right and walked 14 feet. How far is she from the starting point. <br> (A) 4 feet <br> (B) 5 feet <br> (C) 24 feet <br> (D) 25 feet |  |
| 104 | 26-10-2019 | 321 | As per IMO, ECA stands for <br> (A) Emission Complaint Area <br> (B) Emission Control Area <br> (C) Environment Compliant Area <br> (D) Economical Control Area | (B) |
| 104 | 26-10-2019 | 322 | Which of these are not part of deadweight of a ship? <br> (A) Ballast <br> (B) Fuel Oil <br> (C) Fresh Water <br> (D) Provisions | (A) |
| 104 | 26-10-2019 | 323 | As per IRS Rules and Regulations for the Construction and Classification of Steel Ships 2019, the formula for the calculation of ideal elastic buckling stress for axially loaded member is ; $\operatorname{sigma} \mathrm{E}=0.001 \mathrm{CE}(\mathrm{i} / \mathrm{lm})^{2}$ <br> Where, <br> $\mathrm{E}=$ modulus of elasticity $\left[\mathrm{N} / \mathrm{mm}^{2}\right]$ <br> sigma $\mathrm{E}=$ ideal elastic buckling stress $\left[\mathrm{N} / \mathrm{mm}^{2}\right]$ <br> $\mathrm{i}=$ radius of gyration of the member, $[\mathrm{cm}]$ <br> $1 \mathrm{~m}=\mathrm{m}=$ length of the member, $[\mathrm{m}]$ <br> The value of C in the equation for both ends fixed is; <br> (A) 2 <br> (B) 4 <br> (C) 1 <br> (D) None of the options | (B) |


| 104 | 26-10-2019 | 324 | The fully loaded displacement of a vessel is 125 tons in fresh water. The weight of a geometrically similar wax model with linear scale ratio 10 is 92 kg . The additional weight to be placed in the model to satisfy the condition of geometric similarity for model testing is (assume fresh water in towing tank); <br> (A) 125 kg <br> (B) 33 kg <br> (C) 24.5 kg <br> (D) 52 kg | (B) |
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| 104 | 26-10-2019 | 325 | The condition at which the encounter frequency is greater than the wave frequency is: <br> (A) Beam seas <br> (B) Head Seas <br> (C) Following seas <br> (D) Possible in all mentioned sea conditions | (B) |
| 104 | 26-10-2019 | 326 | Reynolds number signifies the ratio of <br> (A) gravity forces to viscous forces <br> (B) inertial forces to viscous forces <br> (C) inertial forces to gravity forces <br> (D) buoyant forces to inertial forces | (B) |
| 104 | 26-10-2019 | 327 | Difference between classification society GRADE A,B,D \& E STEELS is in <br> (A) yield strength <br> (B) tensile strength <br> (C) impact strength <br> (D) None of the options | (C) |
| 104 | 26-10-2019 | 328 | If the radius of wire stretched by a tensile load is doubled, then its Young's modulus of the wire will be <br> (A) two times | (D) |


|  |  |  | (B) one half <br> (C) four times <br> (D) remain unaffected |  |
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| 104 | 26-10-2019 | 329 | Which of the following statements about The Baltic Dry Index is correct? <br> (A) BDI is reported annually. <br> (B) BDI is reported monthly. <br> (C) BDI is reported weekly. <br> (D) BDI is reported daily. | (D) |
| 104 | 26-10-2019 | 330 | Height of hatch coamings in position 1 as per ICLL <br> (A) 600 <br> (B) 760 <br> (C) 900 <br> (D) 500 | (A) |
| 104 | 26-10-2019 | 331 | The floating condition of a vessel during <br> Lightship Survey is as below:- <br> Draft Aft=0.6m <br> Draft Fwd $=0.4 \mathrm{~m}$ <br> Trim=0.6-0.4 $=0.2 \mathrm{~m}=20 \mathrm{~cm}$ <br> From the even keel hydrostatic data <br> corresponding to the true mean draft is as given <br> below:- <br> MCT1C $=5 \mathrm{t}-\mathrm{m} / \mathrm{cm}$ (moment to change trim by 1 <br> cm) <br> Displacement $=100$ ton <br> Which of the following statement is true regarding the longitudinal centre of gravity and longitudinal centre of buoyancy when measured along an axis parallel to the keel of the vessel ? <br> (A) The Centre of Gravity of the vessel is located <br> 1 m forward of the centre of buoyancy <br> (B) The Centre of Gravity of the vessel is located <br> 1 m aft of the centre of buoyancy <br> (C) The Centre of Gravity of the vessel is located <br> 0.5 m forward of the centre of buoyancy <br> (D) The Centre of Gravity of the vessel is located <br> 0.5 m aft of the centre of buoyancy | (B) |


| 104 | 26-10-2019 | 332 | Class societies allow for a $\qquad$ \% weight reduction for the High Holding Power anchors compared to conventional ones because of their higher holding capacity. <br> (A) 25 <br> (B) 50 <br> (C) 75 <br> (D) 40 | (A) |
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| 104 | 26-10-2019 | 333 | The slope of shear force diagram at any section of the beam gives <br> (A) Beam curvature at that section <br> (B) Bending moment at that section <br> (C) Rate of loading at that section <br> (D) None of the options | (C) |
| 104 | 26-10-2019 | 334 | Intermittent welding is used to <br> (A) increase strength of weld joints <br> (B) reduce heat input due to welding <br> (C) weld stiffeners in strength bulkheads <br> (D) None of the options | (B) |
| 104 | 26-10-2019 | 335 | The continuity equation is based on the principle of <br> (A) conservation of mass <br> (B) conservation of momentum <br> (C) conservation of energy <br> (D) conservation of force | (A) |
| 104 | 26-10-2019 | 336 | During docking of ships, metacentric height $\qquad$ ------during initial contact of ship on keel blocks <br> (A) Remains same <br> (B) Reduces <br> (C) Increases | (B) |





|  |  |  | (D) $\mathrm{B} / 6$ |  |
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| 104 | 26-10-2019 | 350 | A ship is directionally stable when <br> (A) It can resume a straight line in any direction after a disturbance <br> (B) It can resume a straight line in the original direction after disturbance <br> (C) It cannot resume a straight line in any direction <br> (D) None of the options | (B) |
| 104 | 26-10-2019 | 351 | To determine what navigation lights and dayshapes that must be displayed on a passenger vessel, you should check the $\qquad$ <br> (A) MARPOL <br> (B) COLREG <br> (C) SOLAS <br> (D) None of the options | (B) |
| 104 | 26-10-2019 | 352 | Which of the following parameter is not used for Net Tonnage calculation as per Tonnage Convention 1969? <br> (A) Cargo Volume <br> (B) No. of Passengers/Crew <br> (C) Beam <br> (D) Draught | (C) |
| 104 | 26-10-2019 | 353 | Which of the following is true for stable equilibrium for a submarine? <br> (A) For a submarine on the surface, the metacentre should be above the centre of gravity whereas for a fully submerged submarine, centre of buoyancy should be above the centre of gravity. <br> (B) For a submarine on the surface, the metacentre should be above the centre of gravity whereas for a fully submerged submarine, centre of buoyancy should be below the centre of gravity. | (A) |


| 10/29/2019 |  | 2.191 .1 | 2/postExam/qp_check_dashboard.php?exam=Y3Nsb2N0MjYxOQ== <br> (C) For a submarine on the surface, the metacentre should be below the centre of gravity whereas for a fully submerged submarine, centre of buoyancy should be above the centre of gravity. <br> (D) For a submarine on the surface, the metacentre should be below the centre of gravity whereas for a fully submerged submarine, centre of buoyancy should be below the centre of gravity. |  |
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| 104 | 26-10-2019 | 354 | Equipment Number calculation does not depend on <br> (A) Displacement <br> (B) Profile Area <br> (C) Beam <br> (D) Propulsion Power | (D) |
| 104 | 26-10-2019 | 355 | Rescue boats shall be not less than $\qquad$ $m$ and not more than $\qquad$ m in length <br> (A) 4,10 <br> (B) $3.5,12$ <br> (C) $3.8,8.5$ <br> (D) $5,12.5$ | (C) |
| 104 | 26-10-2019 | 356 | Consider the following statements regarding full scale ship and its geometrically similar model satisfying the Froude's Law:- <br> I. The residuary resistance of the full scale ship and model are the same. <br> II. The residuary resistance coefficient of the full scale ship and model are the same. <br> III. The frictional resistance of the full scale ship and model are the same. <br> IV. The frictional resistance coefficient of the full scale ship and model are the same. <br> (A) Only Statement I is true <br> (B) Only Statement II is true <br> (C) I and IV are true <br> (D) II and III are true | (B) |


| 104 | 26-10-2019 | 357 | The critical speed in shallow water of depth 10 m for a vessel with Length of 360 m is (assume $\mathrm{g}=$ $10 \mathrm{~m} / \mathrm{s}^{2}$ ); <br> (A) $10 \mathrm{~m} / \mathrm{s}$ <br> (B) $20 \mathrm{~m} / \mathrm{s}$ <br> (C) $40 \mathrm{~m} / \mathrm{s}$ <br> (D) $60 \mathrm{~m} / \mathrm{s}$ | (A) |
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| 104 | 26-10-2019 | 358 | Which among the following is the requirement for Antifouling paints? <br> (A) Epoxy Free <br> (B) Tin Free <br> (C) Polymer Free <br> (D) Lead Free | (B) |
| 104 | 26-10-2019 | 359 | Anchor and chain specifications of a ship is based on <br> (A) Admirality coefficient <br> (B) Equipment number calculation <br> (C) Drag coefficient <br> (D) Reynold's number | (B) |
| 104 | 26-10-2019 | 360 | As per MARPOL, the oily effluent that can be discharged overboard cannot exceed <br> (A) 5 PPM <br> (B) 7 PPM <br> (C) 12 PPM <br> (D) 15 PPM | (D) |

