झारखण्ड कर्मचारी चयन आयोग,

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झारखण्ड डिप्लोमा स्तर संयुक्त प्रतियोगिता परीक्षा–2023 (नियमित एवं बैकलॉग)

(विज्ञापन संख्या–04/2023 एवं 05/2023)

आवश्यक सूचना-21

दिनांक—12.01.2024

झारखण्ड डिप्लोमा स्तर संयुक्त प्रतियोगिता परीक्षा—2023 के अन्तर्गत आवश्यक सूचना संख्या— 20 दिनांक 27.11.2023 के माध्यम से प्रकाशित औपबंधिक उत्तर कुँजी के विरूद्ध दिनांक 03.12.2023 तक आपत्तियाँ प्राप्त की गई। प्राप्त आपत्तियों के आलोक में विशेषज्ञ समिति मंतव्य के अनुसार आयोग द्वारा सम्यक विचारोपरान्त Master Question Paper के आधार पर विषयवार अंतिम उत्तर निम्नवत् प्रकाशित की जाती है:—

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| | Subject: Mechanical Engineering | | |
| 1. | Question ID : 630680354765: In cam design, the prime circle is significant because Answers: Option Id :6306801381133 1. it represents the maximum speed of the follower. Option Id :6306801381134 2. it shows the exact path the follower will trace. Option Id :6306801381135 3. it's the smallest circle that can be drawn tangent to the cam profile. Option Id :6306801381136 4. it determines the base circle of the cam. | 3. Its the smallest circle that can be drawn tangent to the cam profile. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|----------------|
| 1 | 2 | 3 | 4 |
| 2. | Guestion ID : 630680354776: The torsion equation relates the torque applied to a circular shaft to the resulting angle of twist. Which of the following represents the torsion equation? Answers: Option Id :6306801381177 $T = \frac{1}{r} \ge \tau$ Option Id :6306801381178 $T = \frac{T}{r} \ge T$ Option Id :6306801381179 $T = \int x \ x$ Option Id :6306801381180 $T = \frac{G \ge \theta}{L}$ | Option Id :6306801381177 $T = \frac{J}{r} \ge \tau$ | Benefit to all |
| 3. | Question ID : 630680354801: An ideal gas undergoes a process where both pressure and volume increase. This could be a result of Answers: Option Id :6306801381277 1 Isothermal expansion. Option Id :6306801381278 Isochoric heating. 2 Isochoric heating. Option Id :6306801381279 Isochoric heating. 3 Adiabatic compression. Option Id :6306801381280 Isobaric compression. | 1. Isothermal expansion | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|---|
| 1 | 2 | 3 | 4 |
| 4. | Question ID : 630680354808: For a Stirling cycle, which of the following statements are true? Answers: Option Id :6306801381305 1. Heat addition occurs at constant volume and heat rejection at constant pressure. Option Id :6306801381306 2 2. Heat addition occurs at constant pressure and heat rejection at constant volume. Option Id :6306801381307 3 3. Both heat addition and heat rejection occur at constant volume. Option Id :6306801381308 4 | 4.Both heat addition and heat rejection occur at constant pressure | 3. both heat addition and heat rejection occur at constant volume |
| 5. | Question ID : 630680354670: An alloy bar, 1 meter long and with a cross-sectional area of 100 mm ² , is subjected to a compressive force of 30 kN. The modulus of elasticity for the alloy is 200 GigaPascals (GPa). Determine the decrease in the length of the bar due to this compressive force. Answers: Option Id :6306801380753 1 0.015mm Option Id :6306801380754 2 2 1.015mm Option Id :6306801380755 3 3 2.015mm Option Id :6306801380755 3 4 3.015mm | 1. 0.015mm | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|--|
| 1 | 2 | 3 | 4 |
| 6. | Question ID : 630680354673: In a system where a gas is held at a constant pressure P, and its volume increases from V1 to V2 while 'Q' amount of heat is removed from the system, what will happen to the internal energy? Answers: Option Id :6306801380765 1 The internal energy will remain the same if Q = P(V1 - V2) Option Id :6306801380766 Option Id :6306801380767 2 The internal energy will decrease by an amount P(V2 - V1) - Q Option Id :6306801380767 The internal energy will decrease by an amount Q + P(V2 - V1) Option Id :6306801380768 The internal energy will increase by some unknown amount | 3. The internal energy will decrease by an amount Q+P(V2-V1) | 2. The internal energy will decrease by an amount P(V2-V1)-Q |
| 7. | Question ID : 630680354674: What type of thermodynamic system can 'The Universe' be compared to? Answers: Option Id :6306801380769 1. Closed system Option Id :6306801380770 2. Isolated system Option Id :6306801380771 3. Open system Option Id :6306801380772 4. Adiabatic system | 3. Open system | 2. Isolated system |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 8. | Question ID : 630680354675: | 3. C only | 2. B only |
| | Which of the below is an example of open system A. Hot coffee in a closed cup. B. Hot coffee in an open cup. C. Hot coffee in thermos bottle Choose the correct option. | | |
| | Answers: Option Id :6306801380773 1. A, B & C only | | |
| | Option Id :6306801380774 2. B only | | |
| | Option Id :6306801380775 3. C Only | | |
| | Option Id :6306801380776 4. A & C only | | |
| 9. | Question ID : 630680354676: | 3. laws of Motion | Benefit to all |
| - | What are the governing laws for the mechanical system in an internal combustion engine? | | |
| | Answers: Option Id :6306801380777 1. Thermodynamic laws | | |
| | Option Id :6306801380778 2. Both Thermodynamic laws and Laws of motion | | |
| | Option Id :6306801380779 3. Laws of Motion | | |
| | Option Id :6306801380780 4. Neither Thermodynamic laws nor Laws of motion | | |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|---|
| 1 | 2 | 3 | 4 |
| 10. | Question ID : 630680354685: Which of the following statement is NOT true regarding the air standard cycle? Answers: Option Id :6306801380813 1 The cycle converts heat energy into mechanical power by considering air as a working fluid with constant specific heats Option Id :6306801380814 Image: Content is no internal energy generation through fluid combustion. Option Id :6306801380815 Image: Heat is added and rejected through the same heat exchanger Option Id :6306801380816 Mass transfer (intake or contract of sit) is allowed in the cycle | 4. Mass Transfer (intake or exhaust of air) is allowed in the cycle | 3. Heat is added and rejected through the same heat exchanger |
| 11. | Question ID : 630680354693: The compression ratio (r) in an engine is defined as: | 4. the ratio swept volume (Vs) to cylinder Volume (V) | 3. The ration of cylinder volume (V) to clearance volume (Vc) |
| | Answers: Option Id :6306801380845 1. The ratio of clearance volume (Vc) to cylinder volume (V) | | |
| | Option Id :6306801380846 2 The ratio of swept volume (Vs) to clearance volume (Vc) | | |
| | Option Id :6306801380847 3. The ratio of cylinder volume (V) to clearance volume (Vc) | | |
| | Option Id :6306801380848 4 The ratio of swept volume (Vs) to cylinder volume (V) | | |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 12. | Question ID : 630680354706 During which process in the Rankine Cycle does the working fluid experience a decrease in temperature and pressure? Answers: Option Id :6306801380897 1 Process 1-2 Option Id :6306801380898 2 Process 2-3 Option Id :6306801380899 3 Process 3-4 | 3. Process 3-4 | 4. process 4-1 |
| 13. | Option Id :6306801380900 4 Process 4-1 Question ID : 630680354707: In the Rankine Cycle, which stage represents the conversion of wet vapor to saturated liquid? Answers: Option Id :6306801380901 1. Process 1-2 Option Id :6306801380902 2. Process 2-3 Option Id :6306801380903 3 Process 3-4 Option Id :6306801380904 4 Process 4-1 | 4. Process 4-1 | 2. process 2-3 |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 14. | Question ID : 630680354729: Consider the following statements about the effects of super-saturation in a nozzle: A. Super-saturation increases the entropy and specific volume of the steam. B. The super-saturation reduces the heat drop below that for thermal equilibrium. C. The super-saturation increases the exit velocity of the steam. D. Super-saturation increases the exit velocity of the steam. Choose the correct answer: Answers: Option Id :6306801380989 1 A.B.& Conly Option Id :6306801380990 2 2 B.& Conly Option Id :6306801380991 3 3 A.B.C.& D Option Id :6306801380992 4 C & D only 0ption Id :6306801380992 | 3. A,B,C & D | Benefit to all |
| 15. | Question ID : 630680354731: A CURTIS TURBINE is an example of A. Velocity Compounding B. Pressure Compounding C. Pressure Velocity Compounding Choose the correct answer: Answers: Option Id :6306801380997 1. A, B & C Option Id :6306801380998 2. A only Option Id :6306801380999 3. B only Option Id :6306801381000 4. C only | 4. C only | 2. A only |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 16. | Question ID : 630680354738: Why does turbulent flow result in a greater loss of energy compared to laminar flow? Answers: Option Id :6306801381025 1 Because of continuous mixing of fluid particles Option Id :6306801381026 | 3. Eddy current cause excessive energy loss | Benefit to all |
| | Due to high viscosity of the fluid Option Id :6306801381027 Eddy currents cause excessive energy loss Option Id :6306801381028 Turbulent flow has lower shear stresses | | |
| 17. | Question ID : 630680354746: If a force of 2500 Newtons is applied to a circular piston with a diameter of 0.005 meters, what is the fluid pressure working against the piston? Answers: Option Id :6306801381057 1 159,154 94 Pa Option Id :6306801381058 2 318,309.89 Pa Option Id :6306801381059 3 796,574 72 Pa Option Id :6306801381060 4 1,592,098.08 Pa | 2. 318, 309.89 Pa | Benefit to all |
| 18. | Question ID : 630680354748: Which formula represents the relationship between Brake Horsepower (BHP), Water Horsepower (WHP), and Pump Efficiency? Answers: Option Id :6306801381065 1. BHP = WHP x Pump Efficiency Option Id :6306801381066 2. BHP = WHP / Pump Efficiency Option Id :6306801381067 3. WHP = BHP x Pump Efficiency Option Id :6306801381068 4. WHP = BHP / Pump Efficiency | 2. BHP=WHP / Pump Efficiency | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------|-----------------|
| 1 | 2 | 3 | 4 |
| 19. | Question ID : 630680336281: A Brayton cycle consist of a pair of Answers: Option Id :6306801307845 1. Isochoric process Option Id :6306801307846 2. Isothermal process Option Id :6306801307847 3. Isobaric process Option Id :6306801307848 4. Isentropic process | 3. Isobaric process | Benefit to all |
| 20. | Question ID : 630680336285: Which is an air-standard power cycle with internal combustion? Answers: Option Id :6306801307861 1. Ericsson cycle Option Id :6306801307862 2. Stirling cycle Option Id :6306801307863 3. Brayton cycle Option Id :6306801307864 4. Diesel cycle | 3. Brayton cycle | 4. Diesel cycle |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------------------|---|
| 1 | 2 | 3 | 4 |
| 21. | Question ID : 630680336313: In which criteria, the rotary compressor is better than reciprocating compressor? Answers: Option Id :6306801307973 1. Operation speed Option Id :6306801307974 2. Suitability for large discharge Option Id :6306801307975 3. Supply of air Option Id :6306801307976 4. Balancing | 2. Suitability for large discharge | Benefit to all |
| 22. | Question ID : 630680336338: Which is the assumption of Euler's equation in fluid dynamics? Answers: Option Id :6306801308073 1. The substance is viscous. Option Id :6306801308074 2. The flow is two-dimensional. Option Id :6306801308075 3. Continuous and rotational flow is present. Option Id :6306801308076 4. The substance is uniform and incompressible. | 2. The flow is two- dimensional. | 4. The substance is uniform and incompressible |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------------------------|-------------------------------|
| 1 | 2 | 3 | 4 |
| 23. | Question ID : 630680336169: Which of the following device is used for the measurement of B.P.? Answers: Option Id :6306801307397 1. Spectroscopic analysers Option Id :6306801307398 2. Gas chromatography Option Id :6306801307399 3. Balanced diaphragm type indicator Option Id :6306801307400 4. Absorption dynamometers | 3. Balanced diaphragm type indicator | 4. Absorption dynamometers |
| 24. | Question ID : 630680336201: In which criteria, the rotary compressor is better than reciprocating compressor? Answers: Option Id :6306801307525 1. Air handling capacity Option Id :6306801307526 2. Operation speed Option Id :6306801307527 3. Supply of air Option Id :6306801307528 4. Balancing | 1. Air handling capacity | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------------------|---|
| 1 | 2 | 3 | 4 |
| 25. | Question ID : 630680336224: Which characteristic curves of centrifugal pump, are obtained by keeping the pump at constant speed and varying the discharge over desired range? Answers: Option Id :6306801307617 1 Constant head and constant discharge curves Option Id :6306801307618 Constant efficiency curve 2 Constant efficiency curve Option Id :6306801307619 Operating characteristics curve 3 Operating characteristics curves Option Id :6306801307620 4 | 4. Main characteristics curves | 3 . Operating characteristics curves |
| 26. | Question ID : 630680336043: An otto cycle consist of a pair of Answers: Option Id :6306801306893 1 Isochoric process Option Id :6306801306894 2 Isothermal process Option Id :6306801306895 3 Isobaric process Option Id :6306801306896 4 Isentropic process | 1. Isochoric process | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|-------------------------------|
| 1 | 2 | 3 | 4 |
| 27. | Question ID : 630680336047: Which is an air-standard power cycle with internal combustion? Answers: Option Id :6306801306909 Ericsson cycle Option Id :6306801306910 Stirling cycle Option Id :6306801306911 Otto cycle Option Id :6306801306912 Diesel cycle 4 | 3.Otto Cycle | Benefit to all |
| 28. | Question ID : 630680336050: Which of the following device is used for the measurement of frictional power? Answers: Option Id :6306801306921 1 Spectroscopic analysers Option Id :6306801306922 Option Id :6306801306922 2 Absorption dynamometers Option Id :6306801306923 Balanced diaphragm type indicator 3 Balanced diaphragm type indicator 4 Motoring test | 4.Motoring test | 2. Absorption dynamometers |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|------------------|
| 1 | 2 | 3 | 4 |
| 29. | Question ID : 630680336052: What is called to an engine in which bore is equal to stroke? Answers: Option Id :6306801306929 1. Smart engine Option Id :6306801306930 2. Square engine Option Id :6306801306931 3. Undersquare engine Option Id :6306801306932 4. Oversquare engine | 3. Undersquare engine | 2. square engine |
| 30. | Question ID : 630680336056: In Two-stroke engine, completion of a cycle corresponds to Answers: Option Id :6306801306945 1 360-degree crank angle revolution of a flywheel. Option Id :6306801306946 2 180-degree crank angle revolution of a flywheel. Option Id :6306801306947 3 One revolution of a flywheel. Option Id :6306801306948 Two revolutions of a flywheel. 4 | 1. 360 degree crank angle revolution of a flywheel. | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|------------------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 31. | Question ID : 630680336076: In which criteria, the rotary compressor is better than reciprocating compressor? Answers: Option Id :6306801307025 Small size for same capacity. Option Id :6306801307026 Operation speed Option Id :6306801307027 Supply of air Option Id :6306801307028 Balancing | 1. Small size for same capacity | Benefit to all |
| 32. | Question ID : 630680336110: What can be defined as the angle between the tool face and a line parallel to the base of the tool? Answers: Option Id :6306801307161 Back rack angle Option Id :6306801307162 Side rack angle Option Id :6306801307163 Relief angle Option Id :6306801307164 End cutting edge angle | 2. Side rack angle | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 33. | Question ID : 630680335889: As per method of resolution for the resultant force, when algebraic sum of all horizontal forces is +ve, the resultant makes an angle between Answers: Option Id :6306801306277 1. 0° to 90° Option Id :6306801306278 2. 0° to 180° Option Id :6306801306279 3. 180° to 270° Option Id :6306801306280 4. 180° to 360° | 2. 0° to 180° | 1. 0° to 90° |
| 34. | Question ID : 630680335891: What is the expression for an effort required to lift a load on an inclined rough plane? Where α is helix angle and φ is angle of friction. Answers: Option Id :6306801306285 1. $P = W \tan (\varphi - \alpha)$ Option Id :6306801306286 2. $P = W \tan (\alpha - \varphi)$ Option Id :6306801306287 3. $P = W \tan (\alpha + \varphi)$ Option Id :6306801306288 4. $P = W \tan (\varphi + \alpha)$ | Option Id :6306801306287 3. $P = W \tan (\alpha + \varphi)$ | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| 35 | Question ID : 630680335898: What is defined as the quantity of heat required to convert 1 kg of water at 0 °C at constant pressure into wet steam? Answers: Option Id :6306801306313 1. Enthalpy of water Option Id :6306801306314 2. Latent heat of steam Option Id :6306801306315 3. Saturated steam Option Id :6306801306316 4. Enthalpy of steam | 1. Enthalpy of water | 4 . Enthalpy of steam |
| 36. | Question ID : 630680335905: Which thermodynamic property is categorised as extensive property? Answers: Option Id :6306801306341 1. Temperature Option Id :6306801306342 2. Density Option Id :6306801306343 3. Pressure Option Id :6306801306344 4. Work | 4. Work | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| 37. | Question ID : 630680335920: $P = \int_{0}^{3} \int_{0}^{2} \int$ | 4. 4 to 1 | Benefit to all |
| 38. | Question ID : 6306801306404 4 to 1 Question ID : 630680335924: An Ericsson cycle consist of a pair of Answers: Option Id :6306801306417 1. Isothermal process Option Id :6306801306418 2. Adiabatic process Option Id :6306801306419 3. Isochoric process Option Id :6306801306420 4. Isentropic process | 3 . Isochoric process | 1. Isothermal process |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 39. | Question ID : 630680335939: The efficiency of Carnot cycle increases as Answers: Option Id :6306801306477 1. temperature decreases. Option Id :6306801306478 2. temperature increases. Option Id :6306801306479 3. temperature remains constant. Option Id :6306801306480 a. pressure remains constant. | 1. Temperature Decreases | Benefit to all |
| 40. | Question ID : 630680335943: Which cycle allows the working medium to expand more for same compression ratio and heat addition? Answers: Option Id :6306801306493 1. Semi-diesel cycle Option Id :6306801306494 2. Diesel cycle Option Id :6306801306495 3. Otto cycle Option Id :6306801306496 4. Dual cycle | 1. Semi-diesel cycle | 3 . Otto cycle |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 41. | Question ID : 630680335959: In which criteria, the rotary compressor is better than reciprocating compressor? Answers: Option Id :6306801306557 1. Supply of air Option Id :6306801306558 2. Operation speed Option Id :6306801306559 3. Lubricating system Option Id :6306801306560 4. Balancing | 3 . Lubricating system | Benefit to all |
| 42. | Question ID : 630680335991: What should be the average cutting speed (m/min) for machining bronze using a high-speed steel tool? Answers: Option Id :6306801306685 1. 15-20 Option Id :6306801306686 2. 18-25 Option Id :6306801306687 3. 20-30 Option Id :6306801306688 4. 45-90 | 1. 15-20 | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------|------------------|
| 1 | 2 | 3 | 4 |
| | Subject: Common Engineering | | |
| 1. | Question ID : 630680394474: What is the application of shaded pole induction motor? Answers: Option Id :6306801538182 1. Crane Option Id :6306801538183 2. Cooler pump Option Id :6306801538184 3. Deep cutting lathe Option Id :6306801538185 4. Hair drier | 2. Cooler pump | 4. Hair drier |
| 2. | Question ID : 630680394483: Identify one of the types of resistance welding? Answers: Option Id :6306801538218 1 Thermit welding 0ption Id :6306801538219 2 Flash welding 0ption Id :6306801538220 3 Explosion welding 0ption Id :6306801538221 4 Friction welding | 4. Friction welding | 2. Flash welding |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|----------------|
| 1 | 2 | 3 | 4 |
| 3. | Question ID : 630680394486: Which among the following characteristics of PNP transistor is true? Answers: Option Id :6306801538230 1. Switching time is slower. Option Id :6306801538231 2. Majority charge carrier is electron. Option Id :6306801538232 3. Minority charge carrier is hole. Option Id :6306801538233 4. Positive voltage in emitter terminal. | 1. Switching time is slower. | Benefit to all |
| 4. | Question ID : 630680394542: MUKBANG Find out the correct mirror image of the above given image? Answers: Option Id :6306801538454 NOKBANG 2. 0ption Id :6306801538455 2. NOKBANG 3. Option Id :6306801538456 | Option Id :6306801538457 WNKBVNC 4. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|-------------------|
| 1 | 2 | 3 | 4 |
| 5. | Question ID : 630680394543: education Find out the correct mirror image of the above given image? Answers: Option Id :6306801538458 UO it POUPƏ Option Id :6306801538459 eqn c g f i o U Option Id :6306801538460 3. no it POUDƏ Option Id :6306801538461 00 it POUDƏ | Option Id :6306801538459 GQNCSTION 2. | Benefit to all |
| 6. | 4. Question ID : 630680333932: With which State is the Stupa of Sanchi, one of the major architectural works of Indian history, associated? Answers: Option Id :6306801299001 1. Maharashtra Option Id :6306801299002 2. Uttar Pradesh Option Id :6306801299003 3. Bihar Option Id :6306801299004 4. Madhya Pradesh | 2. Uttar Pradesh | 4. Madhya Pradesh |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|-----------------------|-----------------|
| 1 | 2 | 3 | 4 |
| 7. | Question ID : 630680333964: Identify the example of thin cylinders? Answers: Option Id :6306801299129 1 Hydraulic cylinder Option Id :6306801299130 2 LPG cylinder Option Id :6306801299131 3 Steam pipes Option Id :6306801299132 4 Pneumatic reservoir | 1. Hydraulic cylinder | 2. LPG cylinder |
| 8. | Question ID : 630680333966: Which thermodynamic system can exchange both energy and matter with its surroundings? Answers: Option Id :6306801299137 1 Open system 0ption Id :6306801299138 2 Closed system 0ption Id :6306801299139 3 Isolated system 0ption Id :6306801299140 4 Solid system | 4. Solid system | 1. Open system |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|----------------|
| 1 | 2 | 3 | 4 |
| 9. | Question ID : 630680395593:The bulk modulus (K) of a fluid is defined as the ratio of:Answers:Option Id :63068015425361Shear stress to shear strainOption Id :63068015425372Normal stress to volumetric strainOption Id :63068015425383Volumetric stress to shear strainOption Id :63068015425394 | 4. Change in pressure to volumetric Strain | Benefit to all |
| 10. | Question ID : 630680395605: Which truss is characterized by vertical members and diagonals that slope up towards the center, and is commonly used in bridge construction? Answers: Option Id :6306801542584 1 Vierendeel Truss Option Id :6306801542585 2 2 Fink Truss Option Id :6306801542586 3 3 Howe Truss Option Id :6306801542587 4 Pratt Truss | 4. Pratt Truss | 3. Howe Truss |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 11. | Question ID : 630680395617: An RL circuit has R = 5 ohms and L = 10 mH. If the frequency of the AC source is 50 Hz, what is the inductive reactance? Answers: Option Id :6306801542632 1. 3.14 ohms Option Id :6306801542633 2. 1.57 ohms Option Id :6306801542634 3. 31.4 ohms Option Id :6306801542635 4. 15.7 ohms | 3. 31.4 ohms | 1. 3.14 ohms |
| 12. | Question ID : 630680395622: Which feature is a characteristic of many FHP motors due to their applications? Answers: Option Id :6306801542652 1. वॉटरपूर्णिंग Option Id :6306801542653 2. एकाधिक वाईडिंग सेट Option Id :6306801542654 3. पुनर्योजी ब्रेकिंग Option Id :6306801542655 4. उच्च जड़ता | 1. वॉटरप्रूफिंग | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 13. | Question ID : 630680395644: Which of the following is NOT a type of I.C. engine based on the number of strokes? Answers: Option Id :6306801542740 1 2-stroke Option Id :6306801542741 2 3-stroke Option Id :6306801542742 3 4-stroke Option Id :6306801542743 4 6-stroke | 3. 4-stroke | 2. 3-stroke |
| 14. | Question ID : 630680334114: In which type of roads, parking is unrestricted? Answers: Option Id :6306801299729 1. Collector streets Option Id :6306801299730 2. Sub-arterial streets Option Id :6306801299731 3. Arterial streets Option Id :6306801299732 4. Expressways | 4. Expressways | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------------|
| 1 | 2 | 3 | 4 |
| 15. | Question ID : 630680334154: Which of the following statement for thick cylinders is correct in relation to thin cylinders? Answers: Option Id :6306801299889 1 They are utilized for low-pressure operations. Option Id :6306801299890 0 2 they have a larger diameter than its wall thickness. Option Id :6306801299891 0 3 The circumferential stresses in this cylinder are not homogeneous. Option Id :6306801299892 0 4 A thick cylinder is utilized in labs and on a small scale. | 2. they have a larger diameter than its wall thickness. | Benefit to all |
| 16. | Question ID : 630680334171: What is called to the negative pressure in a system minus atmospheric pressure? Answers: Option Id :6306801299957 1. Absolute pressure Option Id :6306801299958 2. Gauge pressure Option Id :6306801299959 3. Vacuum pressure Option Id :6306801299960 4. Differential pressure | 3. Vacuum pressure | 1. Absolute pressure |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 17. | Question ID : 630680334203: Six friends A, B, C, D and E are sitting in a row facing East. C is between A and E. B is just to the right of E but left of D. F is not at the right end. Who is at the right end? Answers: Option Id :6306801300085 1. A Option Id :6306801300086 2. F Option Id :6306801300087 3. C Option Id :6306801300088 4. B | 4. B | Benefit to all |
| 18. | Question ID : 630680334209: Which number will come opposite to the number 5 on the basis of the given dice? $\overrightarrow{3 1 5 2 6}$ Answers: Option Id :6306801300109 1. 4 Option Id :6306801300110 2 5 Option Id :6306801300111 3 6 Option Id :6306801300112 4. 3 | 2.5 | 3.6 |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 19. | Question ID : 630680397754: The piezometric head is represented by: Answers: Option Id :6306801551030 Pressure energy of the fluid Option Id :6306801551031 Sum of kinetic and potential energy Option Id :6306801551032 Potential energy of the fluid Option Id :6306801551033 Kinetic energy of the fluid | 1. Pressure energy of the fluid | Benefit to all |
| 20. | Question ID : 630680397824: Who won Bihari Award 2022? Answers: Option Id :6306801551310 Gyan Chaturvedi Option Id :6306801551311 Shiv Shankari Option Id :6306801551312 Dr. Madhav Harda Option Id :6306801551313 A Ramdarsha Mishra | 1. Gyan Chaturvedi | 3. Dr. Madhav Harda |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|-------------------|
| 1 | 2 | 3 | 4 |
| 21. | Question ID : 630680399245: What type of error is introduced when the chain or tape is longer than its standard length? Answers: Option Id :6306801556927 1 Zero error Option Id :6306801556928 2 Negative error Option Id :6306801556929 3 Positive error Option Id :6306801556930 4 Systematic error | 3. Positive error | 2. Negative error |
| 22. | Question ID : 630680399249: A soil sample has liquid limit of 46%, plastic limit of 25% and shrinkage limit of 15 percent, for natural moisture content of 30% the consistency index is Answers: Option Id : 6306801556943 1. 48% Option Id : 6306801556944 2. 75% Option Id : 6306801556945 3. 84% Option Id : 6306801556946 4. 64 % | 3. 84% | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|----------------|
| 1 | 2 | 3 | 4 |
| 23. | Question ID : 630680399315: Pascal's principle can be best described by: Answers: Option Id :6306801557207 1 Change in pressure is transmitted undiminished in all directions Option Id :6306801557208 Pressure in a fluid at rest is the same at all points at the same depth Option Id :6306801557209 Pressure decreases with increasing velocity in a fluid stream Option Id :6306801557210 The velocity of a fluid particle remains constant over time | 1. Change in pressure is transmitted undiminished in all directions | Benefit to all |
| 24. | Question ID : 630680399332: Which of the following is a tributary of Damodar River? Answers: Option Id :6306801557275 Ajay Option Id :6306801557276 Barakar Option Id :6306801557277 Mayurakshi Option Id :6306801557278 Agatari | 4. Qatari | 2. Barakar |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|---------------------------|
| 1 | 2 | 3 | 4 |
| 25. | Question ID : 630680399268: What does the term "reinforcement ratio" in RCC design refer to? Answers: Option Id :6306801557019 1 The ratio of the cross-sectional area of concrete to the area of reinforcement Option Id :6306801557020 The ratio of tensile strength to compressive strength of concrete Option Id :6306801557020 The ratio of steel reinforcement to concrete volume in a structural element Option Id :6306801557021 The ratio of steel reinforcement to concrete volume in a structural element Option Id :6306801557022 The ratio of the thickness of the cover to the diameter of the longitudinal bars | 3. The ratio of steel reinforcement to concrete volume in a structural element | Benefit to all |
| 26. | Question ID : 630680400218: For a given pipe, if the flow rate is doubled, the major head loss due to friction will: Answers: Option Id :6306801560741 1 Increase by eight times Option Id :6306801560742 2 Increase by four times Option Id :6306801560743 3 Double Option Id :6306801560744 4 Remain the same | 1. Increase by eight times | 2. Increase by four times |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 27. | Question ID : 630680400219: Which component of a canal regulator is specifically designed to dissipate energy and prevent erosion downstream? Answers: Option Id :6306801560745 1. Baffles Option Id :6306801560746 2. Weirs Option Id :6306801560747 3. Drops Option Id :6306801560748 4. Cistern | 3. Drops | Benefit to all |
| 28. | Question ID : 630680400227: A column subjected to an axial load will primarily experience which type of stress? Answers: Option Id :6306801560777 1. Shear stress Option Id :6306801560778 2. Torsional stress Option Id :6306801560779 3. Tensile stress Option Id :6306801560780 4. Bending stress | 3. Tensile stress | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 29. | Question ID : 630680400249:A voltage regulation test is to be performed on a 3-phase Y-connected alternator. Its line-to-line voltage drop is takenwith a d.c. supply to find its armature circuit resistance. The readings are: dc voltage drop=9 V and line current =15what is the per phase d.c. resistance?Answers:Option Id :630680156086510.6 Ω Option Id :630680156086620.3 Ω Option Id :630680156086733 Ω Option Id :630680156086849 Ω | 2. 0.3 Ω | 1.0.6 Ω |
| 30. | Question ID : 630680400293: Which of the following is correctly matched? Answers: Option Id :6306801561041 1 Article 153 - Governors of state Option Id :6306801561042 2 Article 163 - Council of Ministers to aid and advise the governor Option Id :6306801561043 3 Article 165 - Advocate general of the state Option Id :6306801561044 4 Article 213 - Bills reserved by the governor for consideration of the Presider | 4. Article 23- Bills reserved by the governor for consideration of the president. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|----------------|
| 1 | 2 | 3 | 4 |
| 31. | Question ID : 630680400298: Which of the following is a tributary of Brahmani River? Answers: Option Id :6306801561061 1 Kokro Option Id :6306801561062 2 Auero Option Id :6306801561063 3 Kanchi Option Id :6306801561064 4 Kharkai | 2. Auero | 1. Kokro |
| 32. | Question ID : 630680334278: Identify the assumption for air standard cycle? Answers: Option Id :6306801300385 1 The working fluid is homogenous throughout with chemical reaction. Option Id :6306801300386 Exhaust process is replaced by an equivalent heat addition process. Option Id :6306801300387 The cycle is open and processes are completely non-flow processes. Option Id :6306801300388 The water as the working fluid flow follows the perfect gas law i.e., pV=mRT. | 4. The water as the working fluid flow follows the perfect gas law i.e., pV=mRT. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 33. | Question ID : 630680334326: How is the only son of Ram's father related to Ram? Answers: Option Id :6306801300577 1. Son Option Id :6306801300578 2. Father Option Id :6306801300579 3. Uncle Option Id :6306801300580 4. Grand Father | 1. Son | Benefit to all |
| 34. | Question ID : 630680334337: Which among the following is not an Output Device? Answers: Option Id :6306801300621 1. Monitor Option Id :6306801300622 2. Printer Option Id :6306801300623 3. V.D.U. Option Id :6306801300624 4. Key Board | 2. Printer | 4. Key Board |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|-----------------------|----------------|
| 1 | 2 | 3 | 4 |
| 35. | Question ID : 630680334223:What should be the contour interval for location surveys with scale 1cm = 10m or less?Answers:Option Id :6306801300165 1 2m to 3m Option Id :6306801300166 | 1. 2m to 3 m | Benefit to all |
| 36. | Question ID : 630680334284: In which case of boiler draught, mechanical equipment's are used for producing the required draught? Answers: Option Id :6306801300409 1 Non-chimney draught Option Id :6306801300410 2 Artificial draught Option Id :6306801300411 3 Natural draught Option Id :6306801300412 4 Forced draught | 2. Artificial draught | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---------------------------|------------------|
| 1 | 2 | 3 | 4 |
| 37. | Question ID : 630680334544: Identify one of the effects of hot weather concreting? Answers: Option Id :6306801301445 1 Repeated freezing and thawing. Option Id :6306801301446 2 Increased tendency to crack. Option Id :6306801301447 3 Reduction in strength. Option Id :6306801301448 4 Stresses due to temperature differentials. | 3. Reduction in strength. | Benefit to all |
| 38. | Question ID : 630680334549: Which of the following is NOT a unit of energy? Answers: Option Id :6306801301465 1 Calorie-hour Option Id :6306801301466 2 Electron-volts Option Id :6306801301467 3 Barrel of oil Option Id :6306801301468 4 Kilowatt-hour | 1. Calorie-hour | 3. Barrel of oil |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 39. | Question ID : 630680334550: An electric bulb draws a current of 0.6 A and works on 250 V on the average 8 hours a day. Find the energ consumption by the bulb in 30 days. Answers: Option Id :6306801301469 1 12 KWH Option Id :6306801301470 2 24 KWH Option Id :6306801301471 3 48 KWH Option Id :6306801301472 4 96 KWH | 3. 48 KWH | Benefit to all |
| 40. | Question ID : 630680334572: How many biasing conditions are there for P-N junction diode? Answers: Option Id :6306801301557 1. Two Option Id :6306801301558 2. Three Option Id :6306801301559 3. Four Option Id :6306801301560 4. Six | 3. Four | 2. Three |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| 41. | Question ID : 630680334585: Which of the following draught is classified as forced and induced? Answers: Option Id :6306801301609 1. Chimney draught Option Id :6306801301610 2. Artificial draught Option Id :6306801301611 3. Natural draught Option Id :6306801301612 4. Composite draught | 3. Natural draught | 2. Artificial draught |
| 42. | Question ID : 630680403430: What is the penetration depth of the Vicat plunger in a cement paste of standard consistency? Answers: Option Id :6306801573230 1. 33-35mm Option Id :6306801573231 2. 20-24mm Option Id :6306801573232 3. 50-55mm Option Id :6306801573233 4. 5-7mm | 1. 33-35mm | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 43. | Question ID : 630680403507: In a library, the ratio of number of story books to that of non-story books was 4:3 and total number of story books was 2496. When some more story books were bought, the ratio became 5:3. Find the number of story books bought. Answers: Option Id : 6306801573538 1 1248 Option Id : 6306801573539 2 1456 Option Id : 6306801573540 3 1200 Option Id : 6306801573541 4 1400 | 1. 1248 | Benefit to all |
| 44. | Question ID : 630680403512: In a row of 20 students facing North, Kali is 4th to the left of Suman. If Suman is 10th from the left end of the row, how far is Kali from the right end of the row? Answers: Option Id :6306801573558 1 5 th Option Id :6306801573559 2 6 th Option Id :6306801573560 3 7 th Option Id :6306801573561 4 8 th | 3. 7 th | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|------------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 45. | Question ID : 630680403523: Which of the following is not an example of an Input device called? Answers: Option Id :6306801573602 1. Mouse Option Id :6306801573603 2. Keyboard Option Id :6306801573604 3. Scanner Option Id :6306801573605 4. Printer | 4. Printer | Benefit to all |
| 46. | Question ID : 630680402371: Identify the type of rail that has the major drawback of the need of chairs for fixing it to the sleepers? Answers: Option Id :6306801569047 1. T-type rail Option Id :6306801569048 2 Bull-headed rail Option Id :6306801569049 3 Flat-footed rail Option Id :6306801569050 4 Double-headed rail | 4. Double- headed rail | 2. Bull-headed rail |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 47. | Question ID : 630680402381: Which of the following is NOT considered a limit state? Answers: Option Id :6306801569087 1. Fatigue limit state Option Id :6306801569088 2. Elasticity limit state Option Id :6306801569089 3. Ultimate limit state Option Id :6306801569090 4. Serviceability limit state | 2. Elasticity limit state | Benefit to all |
| 48. | Question ID : 630680402422: Which of the following cycles uses an external heat source and typically operates on a gas without phase change? Answers: Option Id :6306801569251 1 Stirling Cycle Option Id :6306801569252 Brayton Cycle 2 Brayton Cycle Option Id :6306801569253 Vapor Compression Cycle Option Id :6306801569254 Vapor Absorption Cycle | 1. Stirling cycle | Benefit to all |
| 49. | Question ID : 630680405210: A coil has an inductance of 4mH and a current change of 2A in 0.5 seconds. What is the induced voltage? Answers: Option Id :6306801580102 1 16V Option Id :6306801580103 2 8V Option Id :6306801580104 3 4V Option Id :6306801580105 4 2V | 1. 16V | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|----------------|
| 1 | 2 | 3 | 4 |
| 50. | Question ID : 630680405220: For an FHP motor with a rating of 0.75 kW, what is its power in horsepower? (1 kW = 1.34 HP) Answers: Option Id :6306801580142 1. I HP Option Id :6306801580143 2. 0.56 HP Option Id :6306801580144 3. 1.005 HP Option Id :6306801580145 4. 0.9 HP | 2. 0.56 HP | 3. 1.005 HP |
| 51. | Question ID : 630680405232: In a common-emitter NPN transistor configuration, if the base current is 20μA and the current gain (β) is 50, what is the collector current? Answers: Option Id :6306801580190 1. 1A Option Id :6306801580191 2. 0.02A Option Id :6306801580192 3. 1mA Option Id :6306801580193 4. 1.02A | 4. 1.02A | 3. 1mA |
| 52. | Question ID : 630680405237: If Q represents heat added to the system, W represents work done by the system, and ΔU represents the change in internal energy, the first law of thermodynamics can be expressed as: Answers: Option Id :6306801580210 1. $\Delta U = Q - W$ Option Id :6306801580211 2. $\Delta U + W = Q$ Option Id :6306801580212 3. $\Delta U = Q + W$ Option Id :6306801580213 4. $W = \Delta U + Q$ | Option Id :6306801580210 1. $\Delta U = Q - W$ | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|----------------|
| 1 | 2 | 3 | 4 |
| 53 | Question ID : 630680405275: Who among the following proposed the idea of "Survival of Fittest"? Answers: Option Id :6306801580362 1. Wallace Option Id :6306801580363 2. Lamarck Option Id :6306801580364 3. Suarez Option Id :6306801580365 4. Spencer | 4. spencer | Benefit to all |
| 54. | Question ID : 630680405277: Which of the following is NOT true about colloids? Answers: Option Id :6306801580370 1. It is a heterogeneous mixture Option Id :6306801580371 2. Particles can be seen through naked eyes Option Id :6306801580372 3. It shows tyndall effect Option Id :6306801580373 4. Particles settle down when left undisturbed | 2. Particles can be seen through naked eyes. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|---------------|
| 1 | 2 | 3 | 4 |
| 55. | Question ID : 630680405278: What would be resistance if length is halved and area is doubled? Answers: Option Id :6306801580374 1. Remains Same Option Id :6306801580375 2. Increase by 2 Option Id :6306801580376 3. Decrease by 2 Option Id :6306801580377 4. Quadrupled | 1. Remains Same | 4. Quadrupled |
| 56. | Question ID : 630680405297: Which of the following devices is used for Computer Aided Designing? Answers: Option Id :6306801580450 1. Light pen 0ption Id :6306801580451 2. Track ball Option Id :6306801580452 3. Digitising tablet 0ption Id :6306801580453 4. Joy stick | 4. Joy stick | 1. Light pen |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 57. | Question ID : 630680341299: Identify one of the effects of hot weather concreting? Answers: Option Id :6306801327629 1. Accelerated setting. Option Id :6306801327630 2. Increased tendency to crack. Option Id :6306801327631 3. Repeated freezing and thawing. Option Id :6306801327632 4. Stresses due to temperature differentials. | 1. Accelerated setting. | Benefit to all |
| 58. | Question ID : 630680341336: Which is NOT the requirement of operation for all IC engines? Answers: Option Id :6306801327777 1 The air is compressed initially. Option Id :6306801327778 2 The air and the fuel are mixed. Option Id :6306801327779 3 Air is drawn into the cylinder. Option Id :6306801327780 4 Which is NOT the requirement of operation for all IC engines? | 1. The air is compressed initially | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|--------------------|
| 1 | 2 | 3 | 4 |
| 59. | Question ID : 630680341374: Which of the following will be the value of $30.5120.2 =$? Answers: Option Id :6306801327929 1. 0.6 Option Id :6306801327930 2. 0.4 Option Id :6306801327931 3. 2 Option Id :6306801327932 4. 0.9 | 3.2 | Benefit to all |
| 60 | Question ID : 630680406436: Which single-phase motor is best suited for applications requiring frequent starting and stopping? Answers: Option Id :6306801584968 1. Capacitor start 0ption Id :6306801584969 2. Split phase 0ption Id :6306801584970 3. Universal motor 0ption Id :6306801584971 4. Shaded pole motor | 3. universal motor | 1. Capacitor start |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--------------|
| 1 | 2 | 3 | 4 |
| 61. | Question ID : 630680406476: Which pump casing consist of a chamber known as whirlpool chamber? Answers: Option Id :6306801585128 1. Diffuser Option Id :6306801585129 2. Volute Option Id :6306801585130 3. End-suction Option Id :6306801585131 4. Barrel | 1. Diffuser | 2. volute |
| 62. | Question ID : 630680406505: How is Khushi's grandmother's only daughter related to Khushi? Answers: Option Id :6306801585244 1. Grandmother Option Id :6306801585245 2. Father Option Id :6306801585246 3. Mother Option Id :6306801585247 4. Aunty | 3. Mother | 4. Aunty |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--------------------|
| 1 | 2 | 3 | 4 |
| 63. | Question ID : 630680406514: Core is a basic computation unit of the Answers: Option Id :6306801585280 1. ALU Option Id :6306801585281 2. Control Unit Option Id :6306801585282 3. CPU Option Id :6306801585283 4. VDU | 4. VDU | 3. CPU |
| 54. | Question ID : 630680406412: Which irrigation method is especially useful for saline soils, as it aids in flushing out excess salts from the upper soil layers? Answers: Option Id :6306801584872 1. Drip irrigation Option Id :6306801584873 2. Basin irrigation Option Id :6306801584874 3. Flooding Option Id :6306801584875 4. Sprinkling | 3. Flooding | 1. Drip irrigation |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|---|
| 1 | 2 | 3 | 4 |
| 65. | Question ID : 630680407676: If a pump adds energy to a fluid, which of the following will increase? Answers: Option Id :6306801589642 1. Viscosity head only Option Id :6306801589643 2. Pressure head only Option Id :6306801589644 3. Pressure head and kinetic head only Option Id :6306801589645 4. Viscosity, pressure and kinetic heads increases | 4. viscosity, pressure and kinetic heads increases | 3. pressure head and kinetic head only |
| 66. | Question ID : 630680408014: Identify an example of exogenous tress? Answers: Option Id :6306801590975 1. Beach Option Id :6306801590976 2. Cane Option Id :6306801590977 3. Palm Option Id :6306801590978 4. Bamboo | 1. beach | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 67. | Question ID : 630680408047: An RL circuit is connected to a 230V, 50Hz supply. If the resistance is 10 ohms and the phase angle is 45°, the inductive reactance XL is approximately: Answers: Option Id :6306801591107 1 14.14 ohms Option Id :6306801591108 2 10 ohms Option Id :6306801591109 3 7.07 ohms Option Id :6306801591110 4 20 ohms | 1. 14.14 ohms | 2. 10 ohms |
| 68 | Question ID : 630680408048: If an RC circuit has a resistance of 8 ohms and a capacitor of 20 µF, and it is connected to a 50Hz supply, the capacitive reactance XC is: Answers: Option Id :6306801591111 1 159.15 ohms Option Id :6306801591112 2 200 ohms Option Id :6306801591113 3 141.47 ohms Option Id :6306801591114 4 50 ohms | 3. 141.47 ohms | 1. 159.15 ohms |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------|-----------------|
| 1 | 2 | 3 | 4 |
| 69. | Question ID : 630680408064: If the resistance in a resistance welding process is doubled while the current remains the same, the heat produced: Answers: Option Id :6306801591175 1 Remains the same Option Id :6306801591176 2 Gets doubled Option Id :6306801591177 3 Gets halved Option Id :6306801591178 4 Gets quadrupled | 4. Gets quadrupled | 2. Gets doubled |
| 70. | Question ID : 630680408103: Who among the following is a correctly matched pair? Answers: Option Id :6306801591331 1. Deepika Kumari - Hockey Option Id :6306801591332 2. Premlata Agrawal - Mountaineer Option Id :6306801591333 3. Laxmi Padiya - Boxer Option Id :6306801591334 4. Nikki Pradhan - Cricket | 3. Laxmi Padiya - Boxer | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|----------------|
| 1 | 2 | 3 | 4 |
| 71. | Question ID : 630680348797: Which of the following is an application of JFET? Answers: Option Id :6306801357477 1. Demodulator Option Id :6306801357478 2. Clipping circuits Option Id :6306801357479 3. Buffer amplifier 3. Option Id :6306801357480 4. Switching circuits | 3. Buffer amplifier | Benefit to all |
| 72. | Question ID : 630680348808: Identify the fourth process of Carnot cycle? Answers: Option Id :6306801357521 Isothermal compression of mixture of vapour and liquid. Option Id :6306801357522 Isentropic expansion of the steam in the turbine. Option Id :6306801357523 Isothermal heat rejection in the condenser. Option Id :6306801357524 Jsothermal heat addition. | 1. Isothermal compression of mixture of vapour and liquid. | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 73. | Question ID : 630680362846: Reservation of seats for Scheduled Castes and Scheduled Tribes in the House of the People has been given as per whic article of Indian Constitution? Answers: Option Id :6306801413137 1 Article 332 Option Id :6306801413138 2 Article 331 Option Id :6306801413139 3 Article 330 Option Id :6306801413140 4 Article 329 | 1. Article 332 | 3. Article 330 |
| 74. | Question ID : 630680362853: The symbiotic relation between algae and fungus is known as? Answers: Option Id :6306801413165 1 Symbiotism Option Id :6306801413166 2 Helotism Option Id :6306801413167 3 Lichenology Option Id :6306801413168 4 Virology | 2. Helotism | 3. Lichenology |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 75. | Question ID : 630680363498: Which type of flow is also known as viscous flow? Answers: Option Id :6306801415737 1. Turbulent flow Option Id :6306801415738 2. Uniform flow Option Id :6306801415739 3. Laminar flow Option Id :6306801415740 4. Steady flow | 2.Uniform Flow | 3. Laminar flow |
| 76. | Question ID : 630680363501: Identify an example of modern method of irrigation? Answers: Option Id :6306801415749 Chain pump Option Id :6306801415750 Lever irrigation system Option Id :6306801415751 3 Sprinkler system Option Id :6306801415752 4 Pulley system | 4. Pulley System | 3. Sprinkler System |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 77. | Question ID : 630680363538: Identify one of the induction electric heating? Answers: Option Id :6306801415897 Direct core type induction heating Option Id :6306801415898 Indirect resistance induction heating Option Id :6306801415899 Direct resistance induction heating Option Id :6306801415900 Coreless type induction heating 4. | 1. Direct core Type induction heating | Benefit to all |
| 78. | Question ID : 630680363545: A gas has constant pressure in a system. There is a loss of 55 J of heat in the surroundings around the system. 445 J of work is done on the system. Calculate the system's internal energy. Answers: Option Id :6306801415925 1 500 J Option Id :6306801415926 2 490 J Option Id :6306801415927 3 440 J Option Id :6306801415928 4 390 J | 2. 490 J | 1. 500 J |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|-------------------------|----------------------|
| 1 | 2 | 3 | 4 |
| 79. | Question ID : 630680363564: The venturi meter works on the principle of: Answers: Option Id :6306801416001 1. Momentum principle Option Id :6306801416002 2. Continuity equation Option Id :6306801416003 3. Bernoulli's equation Option Id :6306801416004 4. Archimedes principle | 3. Bernoulli's equation | Benefit to all |
| 80. | Question ID : 630680363602: During the operations of computers works with the data is done by which of the following device? Answers: Option Id :6306801416153 Output Device Option Id :6306801416154 Input Device Option Id :6306801416155 Processing Device Option Id :6306801416156 Ammory Device | 2. Input Device | 3. Processing Device |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|-------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 81. | Question ID : 630680390101: Ω . is the S.I. unit ofAnswers:Option Id :63068015208621.Electric resistivityOption Id :63068015208632.InductanceOption Id :63068015208643.ConductanceOption Id :63068015208654.Capacitance | 1. Electric resistivity | Benefit to all |
| 82. | Question ID : 630680390102: $ \begin{array}{c} $ | 2.4 V | 3. 5V |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|---|
| 1 | 2 | 3 | 4 |
| 83. | Question ID : 630680390113: What is the advantage of synchronous motor? Answers: Option Id :6306801520910 1. They operate in good condition even at overload. Option Id :6306801520911 2. These motors have a hunt less tendency. Option Id :6306801520912 3. They don't need collector rings and brushes. Option Id :6306801520913 4. Electro-magnetic power varies linearly with voltage. | 3.They don't need collector rings and brushes | 1.They operate in good condition even at overload. |
| 84. | Question ID : 630680390116: Which of the following characteristic of fuse element is high? Answers: Option Id :6306801520922 1. Conductivity 0ption Id :6306801520923 2. Melting point 0ption Id :6306801520924 3. Ohmic loss 0ption Id :6306801520925 4. Cost | 2. Melting point | 1.Conductivity |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|----------------------|------------------------|
| 1 | 2 | 3 | 4 |
| 85. | Question ID : 630680390147: Venturi meter measures the rate of flow of liquid through pipes obeying Answers: Option Id :6306801521046 1. Bernoulli's equation Option Id :6306801521047 2. Continuity equation Option Id :6306801521048 3. Momentum principle Option Id :6306801521049 4. Archimedes principle | 3.Momentum principle | 1.Bernoulli's equation |
| 86 | Question ID : 630680390180: Find out the correct mirror image of the word REST out of the following options given in the box REST T239 KE21 IS38 A B C D Answers: Option Id :6306801521178 1 A Option Id :6306801521179 2 B Option Id :6306801521180 3 C | 3.C x below? | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|----------------------|--------------------|
| 1 | 2 | 3 | 4 |
| 87. | Question ID : 630680390187: Which among the following is Correct? Answers: Option Id :6306801521206 1 1 nibble = 4 bits Option Id :6306801521207 2 1 nibble = 4 bytes Option Id :6306801521208 3 1 byte = 5 bit Option Id :6306801521209 4 1 terabyte = 1000 Gigabyte | 1. 1nibble = 4bits | Benefit to all |
| 88. | Question ID : 630680394015: What is called to the ability of a material to resist the action of high temperature without any appreciable deformation and substantial loss of strength? Answers: Option Id :6306801536350 1. Weathering permeability Option Id :6306801536351 Question Id :6306801536352 3. Forest resistance Option Id :6306801536353 Question Id :6306801536353 4. Fire resistance | 3. Forest resistance | 4. Fire resistance |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|------------------|
| 1 | 2 | 3 | 4 |
| | Question ID : 630680394035: Which is one of the unit processes employed for adequate preliminary treatment to an industrial wastewater? Answers: Option Id :6306801536430 1. Reduction Option Id :6306801536431 2. Sedimentation Option Id :6306801536432 3. Drying Option Id :6306801536433 4. Adsorption | 1. Reduction | 2. Sedimentation |
| | Question ID : 630680394046: i i j j j j j j j j j j j j j j j j j j | 1.3mA | 23 Ma |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------------|-------------------|
| 1 | 2 | 3 | 4 |
| 91. | Question ID : 630680394056: What is the application of capacitor start induction motor? Answers: Option Id :6306801536514 1. Printing machines Option Id :6306801536515 2. Small pump Option Id :6306801536516 3. Ceiling fan Option Id :6306801536517 4. Refrigerator | 1. Printing machines | Benefit to all |
| 92. | Question ID : 630680394070: Name the point after which material will break? Answers: Option Id :6306801536570 1. Elastic point Option Id :6306801536571 2. Yield point Option Id :6306801536572 3. Fracture point Option Id :6306801536573 4. Ultimate stress point | 4. Ultimate stress point | 3. Fracture point |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|---|
| 1 | 2 | 3 | 4 |
| 93. | Question ID : 630680394109: If a trait A exists in 20% population and trait B exists in 60% population in asexual reproduction. Which trait is like to have arisen earlier? Answers: Option Id :6306801536726 1 A Option Id :6306801536727 B 2 B Option Id :6306801536728 B 3 Both at same time Option Id :6306801536729 No conclusion based on given data | 2. B | Benefit to all |
| 94. | Question ID : 630680341157: Which of the following statement is true for book value? Answers: Option Id :6306801327061 1. Book value is applicable for any type of property. Option Id :6306801327062 Option Id :6306801327062 2. The value cannot be constant but there is a gradual fall. Option Id :6306801327063 This depends on forces of demand and supply, etc. 0ption Id :6306801327064 Book value is considered for valuation. | 2. The value cannot be constant but there is a gradual fall. | 4. Book value is considered for valuation. |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 95. | Question ID : 630680341256: A bus traveling at a speed of 100 km per hour travels in hours, if the bus travels at a speed of 25% more, then in what time it will complete the journey? Answers: Option Id :6306801327457 1 3 hour Option Id :6306801327458 2 2 hour Option Id :6306801327459 3 4 hour Option Id :6306801327460 4 236 hour | 2. hour | Benefit to all |
| 1. | Subject: Agricultural Engineering Question ID : 630680356920: The engineers are concerned with the forces acting on a tillage implement because of Answers: Option Id :6306801389681 1. Minimum power requirement Option Id :6306801389682 | 4. The determination of best shape and adjustment of tools | Benefit to all |
| | Option Id :6306801389683 3. Design for adequate strength and flexibility | | |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 2. | Question ID : 630680356931: Which of the following function is not expected from agricultural tire? Answers: Option Id :6306801389725 1. Support the vehicle and associated loads at some high level of ground pressure Option Id :6306801389726 2. 2. Absorb shock loads and cushion the vehicle against major surface irregularities Option Id :6306801389727 3. 3. Resist the abrasive action of the various surfaces on which it is expected to operate Option Id :6306801389728 4. 4. Provide for steering and directional variability | 3. Resist the abrasive action of the various surface on which it is expected to operate | Benefit to all |
| 3. | Question ID : 630680356935: Manufacturing of HMT tractors started in the year Answers: Option Id :6306801389741 1. 1965 Option Id :6306801389742 2. 1968 Option Id :6306801389743 3. 1971 Option Id :6306801389744 4. 1975 | 3. 1971 | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 4. | Question ID : 630680356946: What is one of the advantages of Tidal energy? Answers: Option Id :6306801389785 1. Low initial costs Option Id :6306801389786 2. Huge modification in coastal environment Option Id :6306801389787 3. Re-use is attractive Option Id :6306801389788 4. Capable of exploiting tides for maximum efficiency | 4. Capable of exploiting tides for maximum efficiency | Benefit to all |
| | Subject: Automobile engineering | | |
| 1. | Question ID : 630680369999: Which of the following devices primarily produces alternating current (AC) when functioning? Answers: Option Id :6306801441389 1. Regulator Option Id :6306801441390 2. Generator Option Id :6306801441391 3. Starting motor Option Id :6306801441392 4. Alternator | 2. Generator | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|-------------------|
| 1 | 2 | 3 | 4 |
| 2. | Question ID : 630680369974: In a piston and connecting rod assembly, which feature ensures the maintenance of proper alignment between the piston pin and the crankshaft, preventing side-to-side movement? Answers: Option Id : 6306801441289 1 Wrist pin clips Option Id : 6306801441290 Piston rings 2 Piston rings Option Id : 6306801441291 Rod bearings 3 Rod bearings Option Id : 6306801441292 Gudgeon pin | 3. Rod bearings | 1.Wrist pin clips |
| 1. | Question ID : 630680391933: Identify one of the stratified rocks? Answers: Option Id :6306801528106 1. Marble Option Id :6306801528107 2. Sandstone Option Id :6306801528108 3. Basalt Option Id :6306801528109 4. Granite | 3. Basalt | 2. Sandstone |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------|------------------------|
| 1 | 2 | 3 | 4 |
| 2. | Question ID : 630680391939: The crushing strength of second class of bricks should not be less than Answers: Option Id :6306801528130 1. 4 N/mm² Option Id :6306801528131 2. 7 N/mm² Option Id :6306801528132 3. 10 N/mm² Option Id :6306801528133 4. 13 N/mm² | 1. 4 N/mm ² | 2. 7 N/mm ² |
| 3. | Question ID : 630680392026: Maximum quantity of water required with each kg cement for M10 concrete should be Answers: Option Id :6306801528478 1. 60 litres Option Id :6306801528479 2. 45 litres Option Id :6306801528480 3. 34 litres Option Id :6306801528481 4. 32 litres | 3. 34 liters | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 4. | Question ID : 630680392027: Identify the concrete mix preferably used for long span arches and highly loaded columns? Answers: Option Id :6306801528482 1. 1 : 5 : 9 Option Id :6306801528483 2. 1 : 3 : 6 Option Id :6306801528484 3. 1 : 7 : 14 Option Id :6306801528485 4. 1 : 4 : 8 | 4. 1:4:8 | Benefit to all |
| 5. | Question ID : 630680392029: What should be the maximum total quantity of dry aggregates by mass per kg of cement required, to be taken as the sum of the individual masses of fine and coarse aggregates for M15 grade concrete? Answers: Option Id :6306801528490 1. 800 kg Option Id :6306801528491 2. 625 kg Option Id :6306801528492 3. 480 kg Option Id :6306801528493 4. 330 kg | 4. 330 kg | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 6. | Question ID : 630680392049: What is the maximum shear stress in beams for M20 Grade of concrete? Answers: Option Id :6306801528570 1. 2.0 Option Id :6306801528571 2. 2.5 Option Id :6306801528572 3. 2.8 Option Id :6306801528573 4. 3.1 | 2. 2.5 | 3. 2.8 |
| 7. | Question ID : 630680392419: The specific gravity of good building stone should not be less than Answers: Option Id :6306801530022 1. 2.0 Option Id :6306801530023 2. 3.0 Option Id :6306801530024 3. 7.0 Option Id :6306801530025 4. 9.0 | 2. 3.0 | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 8. | Question ID : 630680392430: What should be the minimum gradient for 300 diameter sewer of building drainage when flowing half-full? Answers: Option Id :6306801530066 1. 1 in 195 Option Id :6306801530067 2. 1 in 145 Option Id :6306801530068 3. 1 in 100 Option Id :6306801530069 4. 1 in 57 | 1. 1 in 1995 | Benefit to all |
| 9. | Question ID : 630680392433: How much charges in the schedule of rates for road works has been considered for overheads like mobilization/demobilization of resources, financing expenditure, traffic management during construction etc? Answers: Option Id :6306801530078 1. 1.5% Option Id :6306801530079 2. 5% Option Id :6306801530080 3. 10% Option Id :6306801530081 4. 20% | 4. 20% | 3. 10% |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------|-------------------|
| 1 | 2 | 3 | 4 |
| 10. | Question ID : 630680392442: Identify the original rock which transform into dolomite? Answers: Option Id :6306801530114 1. Marble Option Id :6306801530115 2. Sandstone Option Id :6306801530116 3. Mudstone Option Id :6306801530117 4. Dolomite | 1. Marble | Benefit to all |
| 11. | Question ID : 630680392443: Weight of the fluid Volume of the fluid What defines the above ratio? Answers: Option Id :6306801530118 1. Mass density Option Id :6306801530119 2. Specific Gravity Option Id :6306801530120 3. Weight density Option Id :6306801530121 4. Specific volume | 2. Specific Gravity | 3. Weight Density |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------|--------------------------------------|
| 1 | 2 | 3 | 4 |
| 12. | Question ID : 630680392489: Which of the following water treatment process is preferably used to remove suspended impurities as silt, clay etc? Answers: Option Id :6306801530302 1. Plain sedimentation Option Id :6306801530303 2. 2. Filtration Option Id :6306801530304 3. 3. Sedimentation with coagulation Option Id :6306801530305 4. Disinfection Disinfection | 1. Plain Sedimentation | 3. Sedimentation with coagulation |
| 13. | Question ID : 630680392508: Maximum quantity of water required with each kg cement for M20 concrete should be Answers: Option Id :6306801530378 1. 25 litres Option Id :6306801530379 2. 30 litres Option Id :6306801530380 3. 34 litres Option Id :6306801530381 4. 42 litres | 2. 30 Litres | Benefit to all |
| 14. | Question ID : 630680392511: What should be the maximum total quantity of dry aggregates by mass per kg of cement required, to be taken as the sum of the individual masses of fine and coarse aggregates for M5 grade concrete? Answers: Option Id :6306801530390 1. 800 kg Option Id :6306801530391 2. 625 kg Option Id :6306801530392 3. 480 kg Option Id :6306801530393 4. 330 kg | 1. 800 kg | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|--|
| 1 | 2 | 3 | 4 |
| 15. | Question ID : 630680393364: Which property of construction materials is associated with their ability to transmit light without significant absorption or scattering? Answers: Option Id :6306801533782 1. Density Option Id :6306801533783 2. Opacity Option Id :6306801533784 3. Porosity Option Id :6306801533785 4. Refractivity | 2. Opacity | Benefit to all |
| 16. | Question ID : 630680393389: How is the "horizontal equivalent" of a contour interval typically determined in leveling surveys? Answers: Option Id :6306801533882 1. By using a total station Option Id :6306801533883 Option Id :6306801533883 2. By measuring the slope of the land Option Id :6306801533884 Option Id :6306801533884 3. By calculating the area between contour lines Option Id :6306801533885 Option Id :6306801533885 4. By multiplying the contour interval by a scale factor | 4. By multiplying the contour interval by a scale factor | 2. By measuring the slope of the land |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------------------|----------------------------|
| 1 | 2 | 3 | 4 |
| 17. | Question ID : 630680393391: | 1. High precision and accuracy | 3. Low cost and simplicity |
| | What are the primary advantages of using a Dumpy level in leveling surveys? | | |
| | Answers: Option Id :6306801533890 1. High precision and accuracy | | |
| | Option Id :6306801533891 2. Lightweight and portable | | |
| | Option Id :6306801533892 3. Low cost and simplicity | | |
| | Option Id :6306801533893 4. Quick measurements | | |
| 18. | Question ID : 630680393404: | 1. Silty clay | Benefit to all |
| | According to the BIS classification, what does "SC" stand for? | | |
| | Answers: Option Id :6306801533942 1. Silty clay | | |
| | Option Id :6306801533943 2. Sandy clay | | |
| | Option Id :6306801533944 3. Soil consistency | | |
| | Option Id :6306801533945 4. Soil colour | | |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|----------------------------------|--|
| 1 | 2 | 3 | 4 |
| 19. | Question ID : 630680393456:In the moment distribution method, what is the purpose of distributing moments?Answers:Option Id :63068015341501.To calculate support reactionsOption Id :63068015341512.To redistribute applied loadsOption Id :63068015341523.To determine the maximum deflectionOption Id :63068015341534.To analyze the behavior of a structure | 2. To redistribute applied loads | 4. To analyze the behavior of a structure |
| 20. | Question ID : 630680393468: What is a significant advantage of using ready mix concrete in construction projects? Answers: Option Id :6306801534198 1. Lower cost compared to on-site mixing Option Id :6306801534199 Option Id :6306801534199 2. Enhanced workability Option Id :6306801534200 3. 3. Extended curing time Option Id :6306801534201 4. | 2 . Enhanced workability | 4 . Higher control over mix proportions |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|----------------|
| 1 | 2 | 3 | 4 |
| 21. | Question ID : 630680393469: In hot weather concreting, what measures can be taken to reduce the adverse effects of high temperatures? Answers: Option Id :6306801534202 1. Use of cold aggregates Option Id :6306801534203 2. Adding more water to the mix Option Id :6306801534204 3. Using rapid-setting cement Option Id :6306801534205 4. Employing shading and curing methods | 4 . Employing shading and curing methods | Benefit to all |
| 22. | Question ID : 630680393492: What is the primary factor that determines the thermal conductivity of a construction material? Answers: Option Id :6306801534294 1. Color of the material Option Id :6306801534295 2. Density of the material Option Id :6306801534296 3. Moisture content of the material Option Id :6306801534297 4. Surface finish of the material | 2. Density of the material | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|--|
| 1 | 2 | 3 | 4 |
| 23. | Question ID : 630680393493:What is the primary purpose of overhead costs in rate analysis?Answers:Option Id :63068015342981.To determine the project's profitabilityOption Id :63068015342992.To cover administrative expensesOption Id :63068015343003.To account for miscellaneous project expensesOption Id :63068015343014.To calculate the total project cost | 3. To acccount for miscellaneous project expenses | 2. To cover administrative expenses |
| 24. | Question ID : 630680393513:What is a potential disadvantage of using a Dumpy level for leveling?Answers:Option Id :63068015343781.It is difficult to transport.Option Id :63068015343792.It is sensitive to vibrations.Option Id :63068015343803.It requires a skilled operator.Option Id :63068015343814.It cannot be used for measuring vertical angles. | 2. It is sensitive to vibrations | Benefit to all |
| 25. | Question ID : 630680393526: The pressure at a point in a fluid at rest is determined by which of the following factors? Answers: Option Id :6306801534430 1. Viscosity of the fluid Option Id :6306801534431 Option Id :6306801534431 2. Depth of the point below the surface Option Id :6306801534432 Temperature of the fluid 0ption Id :6306801534433 Density of the fluid | 2. Depth of the point below the surface | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|----------------|
| 1 | 2 | 3 | 4 |
| 26. | Question ID : 630680393527: What is the total pressure on a submerged surface in a fluid due to hydrostatic pressure? Answers: Option Id :6306801534434 1. It is equal to the atmospheric pressure. | 3. It is the sum of the pressure at the surface and the pressure at the centroid | Benefit to all |
| | Option Id :6306801534435 2. It depends on the shape of the surface. | | |
| | Option Id :6306801534436 3. It is the sum of the pressure at the surface and the pressure at the centroid. Option Id :6306801534437 4. It is always zero. | | |
| 27. | Question ID : 630680393539: | 4. Axial failure | Benefit to all |
| | What type of failure is of primary concern in the design of axially loaded RCC columns? | | |
| | Answers: Option Id :6306801534482 1. Shear failure | | |
| | Option Id :6306801534483 2. Torsional failure | | |
| | Option Id :6306801534484 3. Buckling failure | | |
| | Option Id :6306801534485 4. Axial failure | | |
| 28. | Question ID : 630680393568: Which air pollutant is a colorless gas with a pungent odor and can cause respiratory irritation? Answers: Option Id :6306801534598 1. Carbon monoxide (CO) | 2. Sulfur dioxide (SO ₂) | Benefit to all |
| | Option Id :6306801534599 2. Sulfur dioxide (SO ₂) Option Id :6306801534600 3. Nitrogen dioxide (NO ₂) | | |
| | Option Id :6306801534601 4. Ammonia (NH ₃) | | |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|---|
| 1 | 2 | 3 | 4 |
| 29. | Question ID : 630680393570: Which of the following factors can lead to eccentric loading in dams? Answers: Option Id :6306801534606 1. Uniform water pressure | 2. Uneven sediment deposition | Benefit to all |
| | Option Id :6306801534607 2. Uneven sediment deposition Option Id :6306801534608 3. Temperature changes Option Id :6306801534609 4. Earthquake forces | | |
| 30. | Question ID : 630680393583: The standard consistency test for cement determines the amount of water required to achieve a standard consistency paste, which is defined as having a penetration of: Answers: Option Id :6306801534658 1. 10 mm Option Id :6306801534659 2. 2. 20 mm Option Id :6306801534660 3. 3. 30 mm Option Id :6306801534661 4. 40 mm | 2. 20mm | Benefit to all |
| 31. | Question ID : 630680393606: What is the key difference between toughness and hardness in the context of aggregates? Answers: Option Id :6306801534750 1. Toughness measures resistance to wear by abrasion, while hardness measures resistance to failure by impact. Option Id :6306801534751 2. 2. Toughness measures resistance to deformation, while hardness measures resistance to failure by abrasion. Option Id :6306801534752 3. 3. Toughness measures the weight loss on abrasion, while hardness measures the weight loss on impact. Option Id :6306801534752 3. 4. Toughness and hardness are interchangeable terms, referring to the same property of aggregates. | 1. Toughness measures resistance to wear by abrasion, while hardness measures resistance to failure by impact. | 2. Toughness measures resistance to deformation, while hardness measures resistance to failure by abrasion. |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|-----------------------|
| 1 | 2 | 3 | 4 |
| 32. | Question ID : 630680393616: You have a wall that is 6 meters long, 3 meters high, and 25 cm thick. The rate for brickwork is Rs. 350.00 per cubic meter, and for plastering, it is Rs. 12.00 per square meter. What is the total cost of brickwork and plastering for this wall? Answers: Option Id :6306801534790 1. Rs. 1,500.00 Option Id :6306801534791 2. Rs. 1,260.00 Option Id :6306801534792 3. Rs. 1,260.00 Option Id :6306801534792 4. Rs. 1,650.00 | 4. Rs 1,650.00 | Benefit to all |
| 33. | Question ID : 630680393617: In which of the following construction estimation methods are lengths and breadths of the masonry walls at plinth level taken for calculating quantities? Answers: Option Id :6306801534794 1. Bay Method Option Id :6306801534795 2. Service Unit Method Option Id :6306801534796 3. Crossing Method Option Id :6306801534797 4. Centre Line Method | 3. Crossing Method | 4. Centre Line Method |
| 34. | Question ID : 630680393623: In geodetic surveying, which of the following statements is NOT true? Answers: Option Id :6306801534818 1. The earth surface is considered as Curved Surface. Option Id :6306801534819 Option Id :6306801534820 2. The angle of triangle are considered as plain angles Option Id :6306801534820 The line joining any two stations is considered as spherical Option Id :6306801534821 Qarried out for a small area < 250 km ² | 4. Carried out for a small area <250 km ² | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--------------------|
| 1 | 2 | 3 | 4 |
| 35. | Question ID : 630680393630: Which of the following are advantages of using a Dumpy Level in surveying? A) Simple construction with fewer movable parts. B) Requires many adjustments for accurate measurements. C) Loses its adjustments quickly due to lack of rigidity. D) High optical power. Answers: Option Id :6306801534846 1. A & C only Option Id :6306801534847 2. A, B & C only Option Id :6306801534848 3. B, C & D only Option Id :6306801534849 4. A, B, C and D | 4. A,B,C and D | Benefit to all |
| 36. | Question ID : 630680393633: Which physical property of soil primarily affects aeration and root penetration? Answers: Option Id :6306801534858 1. Soil texture Option Id :6306801534859 2. Soil color Option Id :6306801534860 3. Soil structure Option Id :6306801534861 4. Soil pH | 1. Soil texture | 3 . Soil structure |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|-----------------|
| 1 | 2 | 3 | 4 |
| 37. | Question ID : 630680393644: In a hydraulic system, there are two pistons with areas A1 = 0.5 m ² and A2 = 0.1 m ² . A force of 120 N is applied to the piston with area A1. What is the force (F2) on the other end? | 1. 28.8 N | Benefit to all |
| | Answers: Option Id :6306801534902 1. 28.8 N Option Id :6306801534903 2. 36.5 N | | |
| | Option Id :6306801534904 3. 24.8 N | | |
| | Option Id :6306801534905 4. 120 N | | |
| 38. | Question ID : 630680393672: | 1. Narrow Bridge | 4 . Road Bridge |
| | What does below Warning Traffic signs sign indicates : | | |
| | Answers: Option Id :6306801535014 1. Narrow Bridge Option Id :6306801535015 2. Cycle Crossing Option Id :6306801535016 3. Cattle | | |
| | Option Id :6306801535017 4. Road Wideness | | |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|--|
| 1 | 2 | 3 | 4 |
| 39. | Question ID : 630680393673: What substances should NOT be present in water used for construction to ensure the quality of concrete? Answers: Option Id :6306801535018 1. Dissolved salts Option Id :6306801535019 2. Sugar molasses, or gur and their derivatives Option Id :6306801535020 3. Organic substances Option Id :6306801535021 4. Minerals | 2. Sugar molasses, or gur and their derivatives | Benefit to all |
| 40. | Question ID : 630680393690: What does the term 'distribution factor' in the moment distribution method refer to? Answers: Option Id :6306801535086 1. The ratio of stiffness to length of the member Option Id :6306801535087 Option Id :6306801535088 2. The factor by which moments are distributed at joints Option Id :6306801535088 The ratio of moment to stiffness 0ption Id :6306801535089 The factor that considers material properties | 1. The ratio of stiffness to length of the member | 2. The factor by which moments are distributed at joints |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 41. | Question ID : 630680393731: For building works, what is the threshold coefficient of hardness below which stones should not be used? Answers: Option Id :6306801535250 1. Less than 10 Option Id :6306801535251 2. Less than 14 Option Id :6306801535252 3. Less than 17 Option Id :6306801535253 4. Less than 7 | 2. Less than 14 | Benefit to all |
| 42. | Question ID : 630680393738: You have a wall that is 5 meters long, 2.5 meters high, and 20 cm thick. The rate for brickwork is Rs. 280.00 per cubic meter, and for plastering, it is Rs. 10.00 per square meter. What is the total cost of brickwork and plastering for this wall? Answers: Option Id :6306801535278 1. Rs. 1,300.00 Option Id :6306801535279 2. Rs. 1,260.00 Option Id :6306801535280 3. Rs. 1,140.00 Option Id :6306801535281 4. Rs. 1,450.00 | 3. Rs. 1,140.00 | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 43. | Question ID : 630680393743: You are tasked with calculating the quantity of earthwork required for the construction of an approach road with the following specifications: • Length of the road (L) = 800 meters • Width of the formation (B) = 12 meters • Height of the embankment (d) = 75 centimeters (0.75 meters) • Side slope (S) = 1:3 What is the quantity of earthwork (in cubic meters) needed for this approach road construction? Answers: Option Id :6306801535298 1. 2,880.8 cubic meters Option Id :6306801535299 2. 7,349.1 cubic meters Option Id :6306801535300 3. 2,700.4 cubic meters Option Id :6306801535301 4. 3,120.2 cubic meters | 2. 7.349.1 cubic meter | Benefit to all |
| 44. | Question ID : 630680393764: Which type of equipment is typically used for compacting crushed rock and gravelly sand? Answers: Option Id :6306801535382 1. Sheep-foot roller Option Id :6306801535383 2. Vibratory roller Option Id :6306801535384 3. Pneumatic tyred roller Option Id :6306801535385 4. Smooth wheel roller | 4. Smooth wheel roller | 2. Vibratory roller |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|---|
| 1 | 2 | 3 | 4 |
| 45. | Question ID : 630680393766: If a person goes 6 meters deep into water, what is the pressure difference they experience, assuming the density of water is 800 kg/m³ and gravitational acceleration is 9.8 m/s²? Answers: Option Id :6306801535390 1. 46,800 N/m² Option Id :6306801535391 2. 58,800 N/m² Option Id :6306801535392 3. 47,800 N/m² Option Id :6306801535393 4. 59,800 N/m² | 3. 47.800 N/m ² | Benefit to all |
| 46. | Question ID : 630680393779: How is net irrigation requirement calculated? Answers: Option Id :6306801535442 1. It is the total irrigation requirement minus application losses Option Id :6306801535443 . 2. It is the difference between field capacity and soil moisture content in the root zone Option Id :6306801535444 . 3. It is the same as gross irrigation requirement Option Id :6306801535445 . 4. It is the water requirement for optimal crop growth | 2. It is the difference between field capacity and soil moisture content in the root zone | 1 . It is the total irrigation requirement minus application losses |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|------------------------------------|--|
| 1 | 2 | 3 | 4 |
| 47. | Question ID : 630680393784: What is the value of the silt factor 'f' when the mean particle size of silt is 0.12 mm according to Gerald Lacey's formula? Answers: Option Id :6306801535462 1. 0.3464 Option Id :6306801535463 2. 1.76 Option Id :6306801535464 3. 0.6092 Option Id :6306801535465 4. 0.2121 | 3. 0.6092 | Benefit to all |
| 48. | Question ID : 630680393788: Which classification system is based on both particle size and plasticity characteristics and is specifically meant for use in road construction? Answers: Option Id :6306801535478 1. Textural Classification Option Id :6306801535479 Option Id :6306801535480 2. PRA System of Classification Option Id :6306801535480 Option Id :6306801535481 4. Indian Standard Soil Classification System | 2. PRA System of Classification | 3. Unified Soil Classification System |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| 49. | Question ID : 630680393793: What is the minimum depth of ballast required for a broad gauge railway track? Answers: Option Id :6306801535498 1. 100 mm Option Id :6306801535499 2. 150 mm Option Id :6306801535500 3. 200 mm Option Id :6306801535501 4. 250 mm | 4. 250 mm | 3. 200 mm |
| 50. | Question ID : 630680393795: Which of the following substances should not be present in construction water? Answers: Option Id :6306801535506 1. Sugar Option Id :6306801535507 2. Organic substances Option Id :6306801535508 3. Dissolved salts Option Id :6306801535509 4. Minerals | 1. Sugar | 2. Organic substances |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--|
| 1 | 2 | 3 | 4 |
| 51. | Question ID : 630680393843: In axially loaded columns, the clear cover for ties should not be less than Answers: Option Id :6306801535698 1. Diameter of the tie Option Id :6306801535699 2. Diameter of the longitudinal bar Option Id :6306801535700 3. 25 mm Option Id :6306801535701 4. 50 mm | 3. 25 mm | 2. Diameter of the longitudinal bar |
| 52. | Question ID : 630680398652: Which of the following is the axis about which the telescope rotates in a vertical plane? Answers: Option Id :6306801554610 1. Horizontal axis Option Id :6306801554611 2. Vertical axis Option Id :6306801554612 3. Line of sight Option Id :6306801554613 4. Trunnion axis | 4. Trunnion axis | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---------------------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 53. | Question ID : 630680398658: The particle size for fine sand ranges between: Answers: Option Id :6306801554634 1. 4.75 mm - 2.0 mm IS sieve Option Id :6306801554635 2. 2.0 mm - 425 micron IS sieve Option Id :6306801554636 3. 425 micron - 65 micron IS sieve Option Id :6306801554637 4. 65 microns to 0.02 micron IS sieve | 3. 425 micron – 65 micron IS sieve | Benefit to all |
| 54. | Question ID : 630680398692: Which type of joint allows for both horizontal and vertical movement in a concrete pavement? Answers: Option Id :6306801554770 1. Expansion joint Option Id :6306801554771 2. Construction joint Option Id :6306801554772 3. Isolation joint Option Id :6306801554773 4. Contraction joint | 1. Expansion joint | Benefit to all |
| 55. | Question ID : 630680398653: If a 30-meter chain is found to be 10 cm too long during a check, how much error will it introduce over a distance of 300 meters? Answers: Option Id :6306801554614 1. 1 cm Option Id :6306801554615 2. 1 meter Option Id :6306801554616 3. 10 cm Option Id :6306801554617 4. 100 cm | 2. 1 meter | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------|----------------|
| 1 | 2 | 3 | 4 |
| 56. | Question ID : 630680398694: Which type of rail is designed with an inverted T-shape, providing better lateral stability? Answers: Option Id :6306801554778 1. Vignoles rail Option Id :6306801554779 2. Bull-headed rail Option Id :6306801554780 3. Flat-footed rail Option Id :6306801554781 4. Double-headed rail | 3. Flat-footed rail | Benefit to all |
| 57. | Question ID : 630680398718: Which grade of OPC is commonly used for general civil construction works like buildings and pavements? Answers: Option Id :6306801554874 1. 33 Grade Option Id :6306801554875 2. 43 Grade Option Id :6306801554876 3. 53 Grade Option Id :6306801554877 4. 23 Grade | 1. 33 Grade | 2. 43 Grade |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|-------------------------|---------------|
| 1 | 2 | 3 | 4 |
| 58. | Question ID : 630680398721: According to the Indian Standard, cold weather concreting is carried out when the ambient temperature is likely to fall below? Answers: Option Id :6306801554886 1. 5°C Option Id :6306801554887 2. 10°C Option Id :6306801554888 3. 15°C Option Id :6306801554888 4. 20°C | 2.10°c | 1. 5°c |
| 59. | Question ID : 630680398729: Euler's formula is used for calculating the critical buckling load for: Answers: Option Id :6306801554918 1. Short column Option Id :6306801554919 2. Intermediate column Option Id :6306801554920 3. Long column Option Id :6306801554921 4. Beams | 2 . Intermediate column | 3 Long column |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|--------------------------------|
| 1 | 2 | 3 | 4 |
| 60. | Question ID : 630680398731:In the design of a steel beam, which factor represents the partial safety factor for loadings?Answers:Option Id :63068015549261. Y_{m0} Option Id :63068015549272. Y_{m1} Option Id :63068015549283.1.1Option Id :63068015549294.1.5 | 4.1.5 | Benefit to all |
| 61. | Question ID : 630680398796: Gypsum is added to cement clinker during its grinding to? Answers: Option Id :6306801555186 1. Improve workability Option Id :6306801555187 2. Increase the strength Option Id :6306801555188 3. Control the rate of setting Option Id :6306801555189 4. Adding gypsum to cement is un-practical | 4. Adding gypsum to cement is un - practical | 3. Control the rate of setting |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--------------------|
| 1 | 2 | 3 | 4 |
| 62. | Question ID : 630680398816: In chain surveying, which chain is made of steel wires and is divided into links? Answers: Option Id :6306801555266 1. Invar chain Option Id :6306801555267 2. Engineer's chain Option Id :6306801555268 3. Gunter's chain Option Id :6306801555269 4. Metallic band chain | 3. Gunter's chain | Benefit to all |
| 63. | Question ID : 630680398836: What property describes a fluid's resistance to increase in length or volume? Answers: Option Id :6306801555346 1. Compressibility Option Id :6306801555347 2. Viscosity Option Id :6306801555348 3. Elasticity Option Id :6306801555349 4. Surface tension | 3. Elasticity | 1. Compressibility |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|------------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 64. | Question ID : 630680398864: Which type of rail requires 'chairs' to be fixed to the sleepers? Answers: Option Id :6306801555458 1. Grooved rail Option Id :6306801555459 2. Flat-footed rail Option Id :6306801555460 3. Bull-headed rail Option Id :6306801555461 4. Double-headed rail | 3. Bull-headed rail | Benefit to all |
| 65. | Question ID : 630680401417: Which of the following additives is used to increase the workability of fresh concrete without increasing water content? Answers: Option Id :6306801565454 1. Accelerating admixtures Option Id :6306801565455 2. Water-reducing admixtures Option Id :6306801565456 3. Air-entraining agents Option Id :6306801565457 4. Retarding admixtures | 2. Water-reducing admixtures | Benefit to all |
| 66. | Question ID : 630680401464: In a reciprocating pump, the component that prevents the backflow of the liquid is known as: Answers: Option Id :6306801565642 1. Suction valve Option Id :6306801565643 2. Diffuser Option Id :6306801565644 3. Impeller Option Id :6306801565645 4. Delivery valve | 4. Delivery valve | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 67. | Question ID : 630680401468: Precipitation that begins as snow but melts into raindrops before reaching the ground is called: Answers: Option Id :6306801565658 1. Virga | 4. Sleet | 1.Virga |
| | Option Id :6306801565659 2. Drizzle Option Id :6306801565660 | | |
| | 3. Freezing rain Option Id :6306801565661 4. Sleet | | |
| 68. | Question ID : 630680401473: Which type of canal is constructed at the top of a ridge or watershed, distributing water on both sides? Answers: Option Id :6306801565678 1. Watershed canal Option Id :6306801565679 2. Ridge canal Option Id :6306801565680 3. Side-slope canal Option Id :6306801565681 4. Contour canal | 2. Ridge canal | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 69. | Question ID : 630680401508: Which truss design typically consists of diagonal members that slope towards the center and are slanted in both directions? Answers: Option Id :6306801565818 1. K Truss Option Id :6306801565819 2. Pratt Truss Option Id :6306801565820 3. Howe Truss Option Id :6306801565821 4. Warren Truss | 4. Warren Truss | Benefit to all |
| 70. | Question ID : 630680401509: Which grade OPC is cannot be used where higher-grade concrete above M20 is required? Answers: Option Id :6306801565822 1. 23 Grade Option Id :6306801565823 2. 33 Grade Option Id :6306801565824 3. 43 Grade Option Id :6306801565825 4. 53 Grade | 2. 33 Grade | 1. 23 Grade |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|-------------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 71. | Question ID : 630680401532: Which of the following is not a method for designing RCC beams as per IS 456:2000? Answers: Option Id :6306801565914 1. Ultimate load method Option Id :6306801565915 2. Empirical method Option Id :6306801565916 3. Limit state method Option Id :6306801565917 4. Working stress method | 1. Ultimate load method | 2. Empirical method |
| 72. | Question ID : 630680401537: Bricks that are overburnt during manufacturing are generally used for? Answers: Option Id :6306801565934 1. Ornamental works Option Id :6306801565935 2. Landfilling Option Id :6306801565936 3. Facework Option Id :6306801565937 4. Paving | 2. Landfilling | 4. Paving |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 73. | Question ID : 630680401541: Figure-out the ingredient, which in excess causes cement to become unsound? Answers: Option Id :6306801565950 1. Alkalies Option Id :6306801565951 2. Sulphur Option Id :6306801565952 3. Magnesia Option Id :6306801565953 4. Alumina | 2. Sulphur | Benefit to all |
| 74. | Question ID : 630680401556: If a drawing uses an engineer's scale of 1:100, how long on the drawing would a 300-meter road be represented? Answers: Option Id :6306801566010 1. 3 centimeters Option Id :6306801566011 2. 3 meters Option Id :6306801566012 3. 30 centimeters Option Id :6306801566013 4. 30 meters | 1. 3 centimeters | 2. 3 meters |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|-----------------|
| 1 | 2 | 3 | 4 |
| 75. | Question ID : 630680401559: | 3. 1.5 revolutions | 2. 1 revolution |
| | A total station in civil engineering measures an angle to be 360°. This angle is equivalent to how many revolutions? | | |
| | Answers: Option Id :6306801566022 1. Half revolution | | |
| | Option Id :6306801566023 2. 1 revolution | | |
| | Option Id :6306801566024 3. 1.5 revolutions | | |
| | Option Id :6306801566025 4. 2 revolutions | | |
| 76. | Question ID : 630680401628: | 3. Howe Truss | Benefit to all |
| | Which truss type uses vertical members for compression and diagonal members to respond to tension? | | |
| | Answers: Option Id :6306801566298 1. Fan Truss | | |
| | Option Id :6306801566299 2. Half-Scissor Truss | | |
| | Option Id :6306801566300 3. Howe Truss | | |
| | Option Id :6306801566301 4. North Light Truss | | |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|--|
| 1 | 2 | 3 | 4 |
| 77. | Question ID : 630680401629: Which grade of OPC is suitable for all general constructions particularly for high strength concrete work? Answers: Option Id :6306801566302 1. 33 Grade Option Id :6306801566303 2. 43 Grade Option Id :6306801566304 3. 53 Grade Option Id :6306801566305 4. 23 Grade | 4. 23 Grade | 2. 43 Grade |
| 78. | Question ID : 630680401642: The design strength of a steel member is obtained by: Answers: Option Id :6306801566354 1. Multiplying the yield strength by the partial safety factor Option Id :6306801566355 Option Id :6306801566355 2. Multiplying the ultimate strength by the partial safety factor Option Id :6306801566356 Option Id :6306801566356 3. Dividing the ultimate strength by the partial safety factor Option Id :6306801566357 Option Id :6306801566357 4. Dividing the yield strength by the partial safety factor | 4. Dividing the yield strength by the partial safety factor | 3. Dividing the ultimate strength by the partial safety factor |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 79. | Question ID : 630680401644: Identify the maximum deflection for live vertical load for cantilever beam? Answers: Option Id :6306801566362 1. Span/180 Option Id :6306801566363 2. Span/150 Option Id :6306801566364 3. Span/120 Option Id :6306801566365 4. Span/500 | 3. Span/120 | Benefit to all |
| 80. | Question ID : 630680401652: Which of the following is used to determine the mean strength of concrete in RCC? Answers: Option Id :6306801566394 1. f_{cm} Option Id :6306801566395 2. f_{ck} Option Id :6306801566396 3. f_{cd} Option Id :6306801566397 4. f_{cb} | 1. fcm | 2. <i>fck</i> |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|--------------------------|
| 1 | 2 | 3 | 4 |
| 81. | Question ID : 630680409484: Which component of cement gives it resistance to sulphate attack? Answers: Option Id :6306801596765 1. Tri-calcium aluminate Option Id :6306801596766 2. Di-calcium silicate Option Id :6306801596767 3. Tri-calcium silicate Option Id :6306801596768 4. Tetra-calcium alumino-ferrite | 2. Di-calcium silicate | 1. Tri-calcium aluminate |
| 82. | Question ID : 630680409517: How does the viscosity of a fluid affect its flow behavior? Answers: Option Id :6306801596897 1. Higher viscosity increases flow rate Option Id :6306801596898 2. Lower viscosity increases flow rate Option Id :6306801596899 3. Viscosity does not affect flow behavior Option Id :6306801596900 4. Viscosity is inversely proportional to flow rate | 2. Lower viscosity increases flow rate | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|--|
| 1 | 2 | 3 | 4 |
| 83. | Question ID : 630680409522: In a reciprocating pump, what is the function of the suction valve? Answers: Option Id :6306801596917 1. To regulate pump speed Option Id :6306801596918 2. To control discharge pressure Option Id :6306801596919 3. To allow fluid entry during suction Option Id :6306801596920 4. To prevent fluid backflow | 3. To allow fluid entry during suction | Benefit to all |
| 84. | Question ID : 630680409549: In a branched water distribution system, what is the primary challenge faced due to its design? Answers: Option Id :6306801597025 1. Ensuring uniform flow rate in all branches Option Id :6306801597026 Option Id :6306801597026 2. Achieving self-cleansing velocity throughout the network Option Id :6306801597027 Providing water at a uniform temperature in all branches Option Id :6306801597028 Mitigating effects of water hammer in primary branches | 2. Achieving self-cleansing velocity throughout the network | 1. Ensuring uniform flow rate in all branches |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|--|
| 1 | 2 | 3 | 4 |
| 85. | Question ID : 630680409572: What is the typical range for the water-cement ratio in high-strength concrete? Answers: Option Id :6306801597117 1. 0.20-0.30 Option Id :6306801597118 2. 0.35-0.45 Option Id :6306801597119 3. 0.50-0.60 Option Id :6306801597120 4. 0.65-0.75 | 1. 0.20-0.30 | 2. 0.35-0.45 |
| 86. | Question ID : 630680409589: In the Working Stress Method (WSM) of design for RCC beams, the modular ratio (m) is introduced to: Answers: Option Id :6306801597185 1. Modify the moment of inertia of the transformed section Option Id :6306801597186 Option Id :6306801597187 2. Equate the strength of steel and concrete Option Id :6306801597187 Option Id :6306801597188 4. Address the serviceability concerns of the structure | 3. Calculate the ultimate load- carrying capacity | 1. Modify the moment of inertia of the transformed section |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 87. | Question ID : 630680409592: What role does the partial safety factors play in the Limit State Method For RCC Design? Answers: Option Id :6306801597197 1. It accounts for material strength Option Id :6306801597198 Option Id :6306801597198 2. It considers load uncertainties Option Id :6306801597199 It address construction errors Option Id :6306801597200 It adjusts for temperature variations | 2. It considers load uncertanities | Benefit to all |
| 88. | Question ID : 630680389429: In the design of formwork, the deviation from specified dimension of cross section of columns and beams should be Answers: Option Id :6306801518174 112 mm, +6 mm Option Id :6306801518175 2. +12 mm, -6 mm Option Id :6306801518176 3. +8 mm, -4 mm Option Id :6306801518177 48 mm, +4 mm | 2. +12mm, -6mm | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|-------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 89. | Question ID : 630680389435: In case of dimension measurement of RCC, no deduction shall be made for ends of dissimilar materials upto cross-section. Answers: Option Id :6306801518198 1. 200 m ² Option Id :6306801518199 2. 300 m ² Option Id :6306801518200 3. 500 m ² Option Id :6306801518201 4. 750 m ² | 3. 500 m ² | Benefit to all |
| 90. | Question ID : 630680389480: Which of the following is a tertiary system as per suggestions of Lucknow Roads Development Plan? Answers: Option Id :6306801518378 1. Village roads Option Id :6306801518379 2. State highways Option Id :6306801518380 3. Major district roads Option Id :6306801518381 4. Other district roads | 4. Other district roads | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 91. | Question ID : 630680389511: Which grade OPC is usually not recommended where high grade of concrete i.e., M20 and above is required? Answers: Option Id :6306801518502 1. 23 Grade OPC Option Id :6306801518503 2. 33 Grade OPC Option Id :6306801518504 3. 43 Grade OPC Option Id :6306801518505 4. 53 Grade OPC | 2. 33 Grade OPC | Benefit to all |
| 92. | Question ID : 630680389513: Maximum quantity of water required with each kg cement for M15 Grade concrete should be Answers: Option Id :6306801518510 1. 32 litres Option Id :6306801518511 2. 34 litres Option Id :6306801518512 3. 39 litres Option Id :6306801518513 4. 45 litres | 1.32 litres | Benefit to all |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 93. | Question ID : 630680389515: What should be the maximum total quantity of dry aggregates by mass per kg of cement required, to be taken as the sum of the individual masses of fine and coarse aggregates for M20 grade concrete? Answers: Option Id :6306801518518 1. 480 kg Option Id :6306801518519 2. 330 kg Option Id :6306801518520 3. 250 kg Option Id :6306801518521 4. 170 kg | 3. 250 kg | Benefit to all |
| 94. | Question ID : 630680392121: Identify the igneous rock with silica content of 46-60 %? Answers: Option Id :6306801528830 1. Granite Option Id :6306801528831 2. Syenite Option Id :6306801528832 3. Gabbro Option Id :6306801528833 4. Peridotite | 1. Granite | 3 . Gabbro |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 95. | Question ID : 630680392196: Maximum quantity of water required with each kg cement for M7.5 Grade concrete should be Answers: Option Id :6306801529130 1. 32 litres Option Id :6306801529131 2. 34 litres Option Id :6306801529132 3. 39 litres Option Id :6306801529133 4. 45 litres | 4. 45 litres | Benefit to all |
| 96. | Question ID : 630680392199: What should be the maximum total quantity of dry aggregates by mass per kg of cement required, to be taken as the sum of the individual masses of fine and coarse aggregates for M10 grade concrete? Answers: Option Id :6306801529142 1. 480 kg Option Id :6306801529143 2. 330 kg Option Id :6306801529144 3. 250 kg Option Id :6306801529145 4. 170 kg | 1. 480 kg | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 97. | Question ID : 630680392218: Which buckling class of compression member is NOT associated to rolled I-section about y-y axis? Answers: Option Id :6306801529218 1. a Option Id :6306801529219 2. b Option Id :6306801529220 3. c Option Id :6306801529221 4. e | 1. a | Benefit to all |
| | Subject: Diploma ITI in Electrical | | |
| 1. | Question ID : 630680414181: What should be the desired minimum depth from ground surface to the top of cable for high voltage cables with 3.3 kV to 11 kV rating? Answers: Option Id :6306801615579 1. 0.6 m Option Id :6306801615580 2. 0.9 m Option Id :6306801615581 3. 1.1 m Option Id :6306801615582 4. 0.75 m | 1.0.6m | 2. 0.9m |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|---|----------------------------|
| 1 | 2 | 3 | 4 |
| 2. | Question ID : 630680414189: In a parallel circuit with two identical resistors, if one branch becomes a short circuit: Answers: Option Id :6306801615611 1 The total current will decrease. Option Id :6306801615612 Option Id :6306801615612 2 The total resistance will double. Option Id :6306801615613 The total resistance of the circuit will decrease. Option Id :6306801615614 Option Id :6306801615614 4 Voltage drop across the short-circuited path becomes zero. | 3. The total resistance of the circuit will decrease | Benefit to all |
| 3. | Question ID : 630680414249: Which of the following instruments have a non-linear scale? Answers: Option Id :6306801615851 1 PMMC instruments Option Id :6306801615852 2 Moving Iron instruments Option Id :6306801615853 3 Both PMMC and Moving Iron instruments Option Id :6306801615854 Neither PMMC nor Moving Iron instruments 4 | 1. PMMC instruments | 2. Moving Iron Instruments |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---------------------------|------------------|
| 1 | 2 | 3 | 4 |
| 4. | Question ID : 630680414024: In a balanced three-phase system, the phase difference between consecutive phase voltages is: Answers: Option Id :6306801614951 1. 60° Option Id :6306801614952 2. 90° Option Id :6306801614953 3. 120° Option Id :6306801614954 4. 180° | 1. 60° | 3. 120° |
| 5. | Question ID : 630680414105: Which among the following district of Jharkhand is largest producer of Uranium in the state? Answers: Option Id :6306801615275 1. Koderma Option Id :6306801615276 2. Chatra Option Id :6306801615277 3. West Singhbhum Option Id :6306801615278 4. East Singhbhum | 3. West Singhbhum | 4 East Singhbhum |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 6. | Question ID : 630680414137: Which of the following is not an example of Operating system? Answers: Option Id :6306801615403 1. Macintosh Option Id :6306801615404 2. Ubuntu Option Id :6306801615405 3. Windows Option Id :6306801615406 4. iOS | 4 iOS | Benefit to all |
| 7. | Question ID : 630680414139: Basic Input Output System (BIOS) is stored in which of the following types of memory? Answers: Option Id :6306801615411 1 RAM Option Id :6306801615412 2 ROM Option Id :6306801615413 3 Cache memory Option Id :6306801615414 4 Primary memory | 1.RAM | 2. ROM |

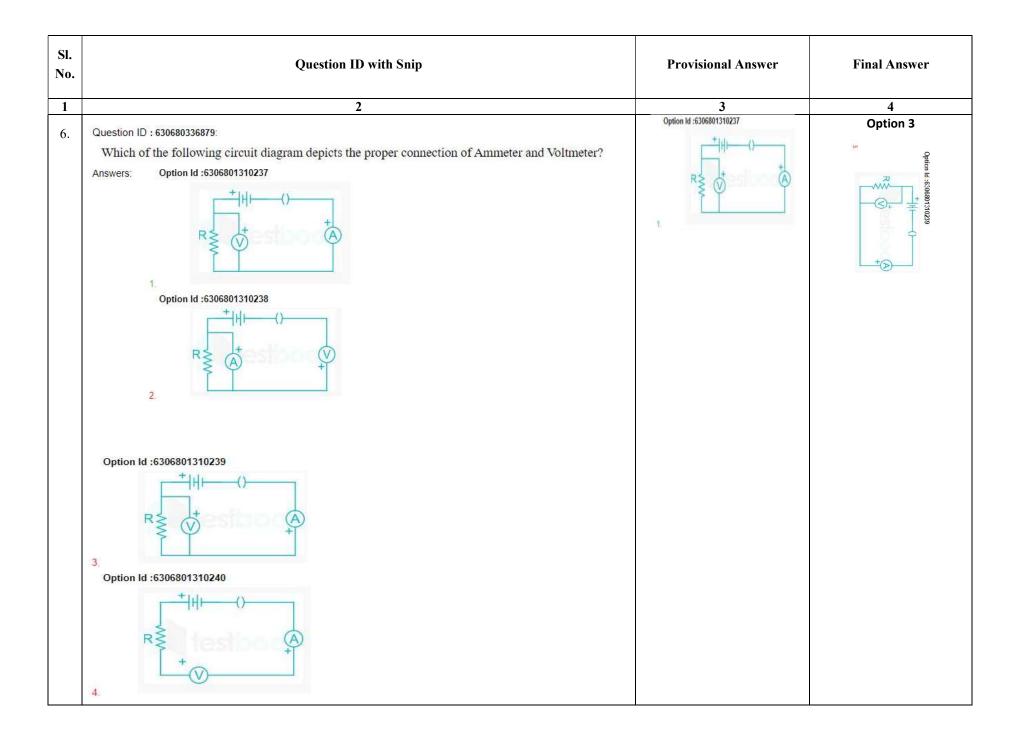
| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|--------------|
| 1 | 2 | 3 | 4 |
| 8. | Question ID : 630680420886: In which connection is the phase current equal to the line current? 1. Star 2. Delta Answers: Option Id :6306801641881 1. Only 1 Option Id :6306801641882 2. Only 2 Option Id :6306801641883 3. Both 1 & 2 Option Id :6306801641884 4. Neither 1 nor 2 | 2. Only 2 | 1. Only 1 |
| 9. | Question ID : 630680421022: Which tool is best for marking on metallic surfaces like conduits? Answers: Option Id :6306801642550 1. Eraser Option Id :6306801642551 2. Marker Option Id :6306801642552 3. Scriber Option Id :6306801642553 4. Crayon | 2. Marker | 3. Scriber |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------------|----------------------|
| 1 | 2 | 3 | 4 |
| 10. | Question ID : 630680421051: Kirchhoff's current law (KVL) is based on the principle of Answers: Option Id :6306801642666 1. Conservation of charge Option Id :6306801642667 2. Conservation of momentum Option Id :6306801642668 3. Conservation of energy Option Id :6306801642669 4. Ohm's law | 1 Conservation of charge | Benefit to all |
| 11. | Question ID : 630680421090: Identify one of the primary cells? Answers: Option Id :6306801642822 1. lead-acid accumulator Option Id :6306801642823 2. Silver-oxide cell Option Id :6306801642824 3. Nickel-cadmium cell Option Id :6306801642825 4. Nickel metal hydride cell | 1. Lead acid accumulator | 2. Silver Oxide Cell |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| | Subject: Electrical Engineering | | |
| 1. | Question ID : 630680336644: Find the current through 9Ω resistor. $5\Omega - 9V$ $2\Omega - 2\Omega -$ | 4. 0 A | Benefit to all |
| 2. | 4 O A Question ID : 630680336649: Which of the following is/are true for three wattmeter method? I. Wattmeter is connected between a phase and neutral. II. Balanced and unbalanced load can be measured by using three watt meters. Answers: Option Id :6306801309317 1 Volton Id :6306801309318 2 II. Only Option Id :6306801309318 2 II Only Option Id :6306801309319 3 3 Both I & II Option Id :6306801309320 4 | 1. I Only | 3. Both I & II |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--------------------|---------------------|
| 1 | 2 | 3 | 4 |
| 3. | Question ID : 630680336656: Calculate the phase angle when the Inductive reactance is 40 Ohm the Capacitive reactance is 30 Ohm and the resistance is 15 Ohm in a series RLC circuit. | 3. 88.490 | Benefit to all |
| | Answers: Option Id :6306801309345 1. 84.490 Option Id :6306801309346 0.000 | | |
| | 2. 8.8490 Option Id :6306801309347 3 88.490 | | |
| | Option Id :6306801309348 4. 1.8490 | | |
| 1. | Question ID : 630680336669: | 3. 5.14 ~ 5 pole | 4. 6 pole |
| | 3 Phase induction motor runs at 1400 at no load and 690 rpm at full load when connected to 60 HZ 3 -phase line. | | |
| | calculate the number of pole the motor | | |
| | Answers: Option Id :6306801309397 1 3 pole Option Id :6306801309398 | | |
| | $4.10 \sim 4$ pole | | |
| | Option Id :6306801309399 3. 5.14 ~ 5 pole | | |
| | Option Id :6306801309400 <u>4</u> 6 pole | | |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 5. | Question ID : 630680336868: | 2. I,II & IV only | Benefit to all |
| | The static characteristics in a measurement system are: I. Drift II. Sensitivity III. Speed of response Reproducibility | | |
| | Answers: Option Id :6306801310193 I, II & III only | | |
| | Option ld :6306801310194 2. I, II & IV only | | |
| | Option Id :6306801310195 3. I, II, III, IV | | |
| | Option ld :6306801310196 4. II, III & IV only | | |



| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|----------------|
| 1 | 2 | 3 | 4 |
| 7. | Question ID : 630680336881: Which of the following is not a characteristic of a Yoke in a DC Generator? 1. it provides a path of high reluctance for magnetic flux. 2. it provides mechanical support to the poles. 3. cast iron or cast steel are the preferred choice of material. Answers: Option Id : 6306801310245 1 and 2 Option Id : 6306801310246 1 and 3 Option Id : 6306801310247 2 and 3 Option Id : 6306801310248 1, 2 and 3 | 3. 2 and 3 | Benefit to all |
| 8. | Question ID : 630680336959: Charge through a conductor depends upon time given by a equation $Q = 3t^2 + 2t + 1$. Here Q is in coulombs and t is inn seconds. Then current through the conductor for first 2 seconds is Answers: Option Id :6306801310557 1. 14 A Option Id :6306801310558 2. 8.5 A Option Id :6306801310559 3. 8 A Option Id :6306801310560 4. 7 A | 3. 8 A | 1. 14 A |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|-----------------------------|------------------------------|
| 1 | 2 | 3 | 4 |
| 9. | Question ID : 630680336960:A parallel plate capacitor is constructed by placing identical plates having area 2 cm² 8.8 mm apar plates is filled with a dielectric of constant 5. If capacitor is connected across a battery having emf stored by the capacitor is approximately,Answers:Option Id :6306801310561 1. 40 x 10^{-14} J | 3. 80 x 10 ⁻¹⁴ J | 4. 800 x 10 ⁻¹⁴ J |
| 10. | Question ID : 630680336961: A carbon resistor is printed with Red, Black and Gold strips. Then its maximum resistance can be, Answers: Option Id :6306801310565 1. 2.4 ohm Option Id :6306801310566 2. 2.1 ohm Option Id :6306801310567 3. 2 ohm Option Id :6306801310568 4. 21 ohm | 1. 2.4 ohm | 4. 21 ohm |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--------------------|--------------|
| 1 | 2 | 3 | 4 |
| 11. | Question ID : 630680336968: For the given circuit current drawn from the battery is, $ \begin{array}{c} 6 \Omega \\ \hline 0 2 0 \\ \hline 0 \\ \hline 0 0$ | 4. 3 A | 2. 6.5 A |
| 12. | Question ID : 630680336976: A straight wire is carrying a steady current of magnitude 2 A as shown in the figure. Then magnetic field induction at a point 7 cm away from the wire is, $2 A = \frac{1}{37^2 - P}$ Answers: Option Id :6306801310625 $1 = \frac{3}{4} \mu T$ Option Id :6306801310627 $3 = 2 \mu T$ Option Id :6306801310628 $4 = \frac{5}{7} \mu T$ | 2. 4µT | 4. 5.7 μΤ |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|--|
| 1 | 2 | 3 | 4 |
| 13. | Question ID : 630680336977: Which of the following statement is incorrect regarding inductance of a solenoid? Answers: Option Id :6306801310629 1 It is directly proportional to area of cross section Option Id :6306801310630 0ption Id :6306801310630 2 It is directly proportional to its length Option Id :6306801310631 0ption Id :6306801310631 3 It is directly proportional to number of turns Option Id :6306801310632 1 4 It is directly proportional to its volume | 3. It is directly proportional to number of turns | 2 . It is directly proportional to its length |
| 14. | Question ID : 630680336983: In a parallel L-C-R circuit resistor has resistance ohm, inductor has inductance 1 mH and capacitor has capacitance 10 uF. Then value of angular frequency for which the admittance will be minimum is, Answers: Option Id :6306801310653 1 100 rad/s Option Id :6306801310654 2 60 rad/s Option Id :6306801310655 3 40 rad/s Option Id :6306801310656 4 10 rad/s | 2 . 60 rad/s | Benefit to all |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|----------------------------|----------------|
| 1 | 2 | 3 | 4 |
| 15. | Question ID : 630680336986: A choke coil has resistance 20 ohm and inductance 16 mH. It is connected to a capacitor having capacitance 250 pF. Then impedance of the circuit at resonance is, Answers: Option Id :6306801310665 1 3.2 MΩ Option Id :6306801310666 2 2.8 MΩ Option Id :6306801310667 3 4.1 MΩ Option Id :6306801310668 4 1.6 MΩ | 1. 3.2 ΜΩ | Benefit to all |
| 16. | Question ID : 630680336993: In the commutation process which one is reversed? Answers: Option Id :6306801310693 Voltage Option Id :6306801310694 Current Option Id :6306801310695 Both current & Voltage Option Id :6306801310696 Neither current nor voltage | 3 . Both current & Voltage | 2. Current |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|--|
| 1 | 2 | 3 | 4 |
| 17. | Question ID : 630680337015: Efficiency and ripple factor for a half wave rectifier is Answers: Option Id :6306801310781 1 81.2%, 1.21 Option Id :6306801310782 2 40.66%, 0.42 Option Id :6306801310783 3 81.2%, 0.482 Option Id :6306801310784 4 40.6%, 1.21 | 3. 81.2%, 0.482 | 4. 40.6%, 1.21 |
| 18. | Question ID : 630680337023: A body is radiating energy in form of visible light. It is observed that the radiation is mixture of yellow and orange which is easily differentiable. Then, Answers: Option Id :6306801310813 1 Corresponding wavelength can be 430 nm 0ption Id :6306801310814 Corresponding wavelength can be 580 nm 2 Corresponding wavelength can be 630 nm 0ption Id :6306801310815 Corresponding wavelength can be 630 nm 3 Corresponding wavelength can be 630 nm 4 Corresponding wavelength can be 690 nm | 1. Corresponding wavelength can be 430 nm | 2. Corresponding wavelength can be 580 nm |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|----------------------|-------------------|
| 1 | 2 | 3 | 4 |
| 19. | Question ID : 630680337032: A process is done in which a metal gets deposited over other metal in presence of aqueous solution of metal salt. The main principle behind it it, Answers: Option Id :6306801310849 1. Galvanization Option Id :6306801310850 2. Hydrolysis Option Id :6306801310851 3. Neutralization Option Id :6306801310852 4. Oxidation | 2 . Hydrolysis | 4 . Oxidation |
| 20. | Question ID : 630680337035: Earthing provides a path to ground. Answers: Option Id :6306801310861 1. Low Resistance Option Id :6306801310862 2 High Resistance Option Id :6306801310863 3 Medium Resistance Option Id :6306801310864 4 Zero Resistance | 3. Medium Resistance | 1. Low Resistance |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|----------------------|---------------------------|
| 1 | 2 | 3 | 4 |
| 21. | Question ID : 630680337036: Which of the following is not a type/method of earthing? Answers: Option Id :6306801310865 1 Pipe Earthing Option Id :6306801310866 2 Funnel Earthing Option Id :6306801310867 3 Plate Earthing Option Id :6306801310868 4 Rod Earthing | 1. Pipe Earthing | 2. Funnel Earthing |
| 22. | Question ID : 630680337045: Regarding a synchronous motor following statements are made. a. Synchronous motors are self starting b. Synchronous motors maintain constant speed while running from no load to full load c. Synchronous motors can run over leading, lagging or even zero power factor. d. In a three phase synchronous motor torque first increases and then become constant when speed changes from no load to full load. Answers: Option Id :6306801310901 1. Only d is correct Option Id :6306801310902 2 2 Both b and d are correct Option Id :6306801310903 3 3. b, c and d are correct Option Id :6306801310904 4 4. Only b is correct | 4. Only b is correct | 3. b, c and d are correct |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|--|---|
| 1 | 2 | 3 | 4 |
| 23. | Question ID : 630680337071:A straight infinite conductor carries current I in a medium of permeability μ . Then r units away from itAnswers:Option Id :6306801311005Magnetic flux density is $\frac{\mu l}{2\pi r}$ Option Id :6306801311006Magnetic flux density is $\frac{\mu l}{4\pi r}$ Option Id :6306801311007Magnetic flux density is $\frac{\mu l}{4\pi r}$ Option Id :6306801311007Magnetic flux density is $\frac{\mu l}{8\pi r}$ Option Id :6306801311008Magnetic flux density is $\frac{\mu l}{8\pi r}$ Option Id :6306801311008Magnetic flux density is $\frac{\mu l}{\pi r}$ Adgnetic flux density is $\frac{\mu l}{\pi r}$ | Option Id :6306801311007 Magnetic flux density is μl 3 | option Id :6X6501311005 Magnetic flux density is $\frac{\mu l}{2\pi r}$ |
| 24. | Question ID : 630680337073: A transmission line is formed by two conductors placed L units apart. Both the conductors are iden is d. Then, Answers: Option Id :6306801311013 Its capacitance is $\frac{\pi \varepsilon_0}{\ln(\frac{L}{d})}$ 1 Option Id :6306801311014 Its capacitance is $\frac{\pi \varepsilon_0}{\ln(\frac{L}{d})}$ 2 Option Id :6306801311015 Its capacitance is $\frac{\pi \varepsilon_0}{\ln(\frac{L}{d}) + 0.69}$ 3 Option Id :6306801311016 Its capacitance is $\frac{\pi \varepsilon_0}{\ln(\frac{L}{d}) - 0.69}$ 4 | Option Id :6306801311015 Its capacitance is $\frac{\pi \varepsilon_0}{ln(\frac{L}{d})+0.69}$ 3. | option Id :6306801311013 Its capacitance is $\frac{\pi \varepsilon_2}{\ln(\frac{L}{d})}$ |

| Sl. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|--|--|--|
| 1 | 2 | 3 | 4 |
| 25. | Question ID : 630680382226: Find the value of R if I is 3 A. $ \begin{array}{c} $ | 2. 10Ω | Benefit to all |
| 26. | Option Id :6306801489822 4 12Ω Question ID : 630680382284: A synchronous motor is connected to an infinite bus and operating at a leading power factor. If the excitation is increased, what will happen to the power factor and armature current? Answers: Option Id :6306801490051 1. Power factor increases, armature current decreases Option Id :6306801490052 Power factor increases, armature current increases Option Id :6306801490053 Power factor decreases, armature current decreases Option Id :6306801490054 Power factor decreases, armature current increases | 2. Power factor increases, armature current increases | 1. Power factor increases, armature current decreases |

| SI. No. | Question ID with Snip | Provisional Answer | Final Answer |
|------------|---|---|--|
| 1 | 2 | 3 | 4 |
| 27. | Question ID : 630680382315:What is the effect of temperature on the forward voltage drop of a PN junction diode?Answers:Option Id : 63068014901751.The forward voltage drops decreases with increasing temperatureOption Id : 63068014901762.The forward voltage drop remains constant with changing temperatureOption Id : 63068014901773.The forward voltage drops increases with increasing temperatureOption Id : 63068014901784.The forward voltage drop becomes zero at high temperatures | 3. The forward voltage drops increases with increasing temperature. | 1. The forward voltage drops decreases with increasing temperature |
| | Subject: ITI Plumbing | | |
| 1. | Question ID : 630680420620: What will come in place of the question mark to make the following logically complete? 40, 41, 38, 39, 36, 37, 34, ? Answers: Option Id : 6306801640925 1 35, 32 Option Id : 6306801640926 2 32, 35 Option Id : 6306801640927 3 33, 30 Option Id : 6306801640928 4 30, 33 | 2. 32, 35 | 1. 35, 32 |

 स्तम्भ– 4 में जिन प्रश्नों के लिए Benefit to all अंकित है ऐसे प्रश्न रद्द प्रश्न हैं, जिसमें उस विषय की परीक्षा में सम्मिलित अभ्यर्थियों को पूर्ण अंक प्रदान किये जायेंगे।

3. उल्लेखनीय है कि औपबंधिक उत्तर कुँजी पर आपत्तियाँ अभ्यर्थियों के अपने Response Sheet पर आमंत्रित की गई थी जबकि विशेषज्ञ समिति से प्राप्त अनुशंसा के आलोक में Master Question Paper के आधार पर विषयवार अंतिम उत्तर प्रकाशित की गई है। अतः विशेषज्ञ समिति द्वारा अनुशंसित अंतिम उत्तर भिन्न–भिन्न अभ्यर्थी के Response Sheet के अन्तर्गत अलग–अलग विकल्प संख्या (1/2/3/4) में प्रदर्शित होगी।

 उपर्युक्त तालिका में अंकित प्रश्नों के अतिरिक्त उन विषयों के अन्तर्गत अन्य सभी प्रश्नों की अंतिम उत्तर कुंजी वही होगी जो औपबंधिक उत्तर कुंजी के माध्यम से संसूचित है।

> ह₀ / – परीक्षा नियंत्रक।