

OSSC JE

**Previous Year Paper
(Civil)**

19 Sept, 2025

Adda247

Test Prime

ALL EXAMS, ONE SUBSCRIPTION



1,00,000+
Mock Tests



**Personalised
Report Card**



**Unlimited
Re-Attempt**



600+
Exam Covered



25,000+ Previous
Year Papers



500%
Refund



ATTEMPT FREE MOCK NOW



Odisha Staff Selection Commission (OSSC)
Govt. of Odisha

| | |
|-------------------------|---------------------------------|
| Participant ID | |
| Participant Name | |
| Test Center Name | |
| Test Date | 19/09/2025 |
| Test Time | 9:00 AM - 12:00 PM |
| Subject | Main Exam Junior Engineer Civil |
| Application Photograph | |
| Registration Photograph | |

Section : Junior Engineer Civil

Q.1 Match the terms of item of work (List - I) with the corresponding unit of measurement (List - II), according to IS 1200.

| Item of work (List - I) | Unit of measurement (List - II) |
|----------------------------|---------------------------------|
| P. Plastering | A. Running metre |
| Q. Skirting | B. Cubic metre |
| R. Brickwork in foundation | C. Square metre |

- Ans
- ☒ 1. P-B, Q-A, R-C
 - ☒ 2. P-A, Q-C, R-B
 - ☒ 3. P-B, Q-C, R-A
 - ☒ 4. P-C, Q-A, R-B

Question Type : MCQ
Question ID : 4410091205211
Option 1 ID : 4410094754359
Option 2 ID : 4410094754362
Option 3 ID : 4410094754360
Option 4 ID : 4410094754361
Status : Answered
Chosen Option : 4

Q.2 Which of the following pair is correctly matched with the type of estimate and when it is required to be prepared?

- Ans
- ☒ 1. Detailed estimate - Feasibility assessment
 - ☒ 2. Repair and maintenance estimate – Change in design from original proposal
 - ☒ 3. Supplementary estimate – Maintain the structure after completion of project
 - ☒ 4. Revised estimate – Material deviation from original proposal

Question Type : MCQ
Question ID : 4410091205158
Option 1 ID : 4410094754150
Option 2 ID : 4410094754149
Option 3 ID : 4410094754148
Option 4 ID : 4410094754147
Status : Not Answered
Chosen Option : --

Q.3 What is the significance of the water-cement (W/C) ratio in concrete?

- Ans
- ☒ 1. It changes the type of sand required.
 - ☒ 2. It improves colour but weakens structure.
 - ☒ 3. It reduces the need for aggregates.
 - ☒ 4. It influences strength and workability.

Question Type : MCQ
Question ID : 4410091224858
Option 1 ID : 4410094832906
Option 2 ID : 4410094832905
Option 3 ID : 4410094832908
Option 4 ID : 4410094832907
Status : Answered
Chosen Option : 4

Q.4 Which of the following waterproofing materials does NOT decay with age and requires surface treatment with sand or scoring to provide a mortar key?

- Ans ☒ 1. Bitumen and pitch polymer
- ☒ 2. Mastic asphalt
- ☒ 3. Hessian based bitumen
- ☒ 4. Preformed DPC

Question Type : MCQ
Question ID : 4410091245941
Option 1 ID : 4410094917043
Option 2 ID : 4410094917042
Option 3 ID : 4410094917045
Option 4 ID : 4410094917044
Status : Not Answered
Chosen Option : --

Q.5 A short column under axial load with eccentricity will have:

- Ans ☒ 1. maximum combined stress on eccentric side and minimum on opposite side
- ☒ 2. zero stress across the entire section
- ☒ 3. minimum combined stress on eccentric side and maximum on opposite side
- ☒ 4. equal stress distribution across the section

Question Type : MCQ
Question ID : 4410091272429
Option 1 ID : 4410095021729
Option 2 ID : 4410095021730
Option 3 ID : 4410095021731
Option 4 ID : 4410095021728
Status : Not Answered
Chosen Option : --

Q.6 Match the items in List-I with their corresponding descriptions in List-II, and select the correct option.

| List-I (Column Type / Term) | |
|--------------------------------|--|
| A. Short Column (LSM) | 1. Designed considering slenderness ratio > 12 , but |
| B. Slender Column (LSM) | 2. Axial load carrying capacity is based on $P_u=0.4f_c$ |
| C. Working Stress Method (WSM) | 3. Permissible stress in brickwork and steel consid |
| D. Composite Column (RBW) | 4. Brickwork strengthened with vertical steel bars a |

- Ans ☒ 1. A-2, B-1, C-3, D-4
- ☒ 2. A-3, B-2, C-4, D-1
- ☒ 3. A-4, B-3, C-1, D-2
- ☒ 4. A-2, B-4, C-1, D-3

Question Type : MCQ
Question ID : 4410091203167
Option 1 ID : 4410094746201
Option 2 ID : 4410094746198
Option 3 ID : 4410094746199
Option 4 ID : 4410094746200
Status : Not Answered
Chosen Option : --

Q.7 A construction promoter plays a different role than a labour contractor. Which of the following best explains this distinction?

- Ans
- ☒ 1. Labour contractor invests capital while promoter only provides manpower
 - ☒ 2. Promoter provides site supervision while labor contractor arranges design
 - ☒ 3. Promoter initiates, finances, and manages project risks
 - ☒ 4. Labour contractor is responsible for statutory clearances and funding

Question Type : MCQ
Question ID : 4410091180511
Option 1 ID : 4410094656173
Option 2 ID : 4410094656172
Option 3 ID : 4410094656174
Option 4 ID : 4410094656175
Status : Answered
Chosen Option : 3

Q.8 A statement is given, followed by two conclusions numbered I and II. Identify which of the given conclusions logically follow(s) from the statements.

Statement:
Detailed estimate provides an exact breakdown of every element involved in the project, including labour, materials and overhead charges.

Conclusions:
I. Detailed estimate is used for multi-storey buildings, where the estimated cost is calculated by multiplying the building volume by a rate per m³.
II. Detailed estimate is the initial, approximate calculation of a project cost made with limited information.

- Ans
- ☒ 1. Both conclusions I and II follow
 - ☒ 2. Only conclusion I follows
 - ☒ 3. Neither conclusion I nor conclusion II follows
 - ☒ 4. Only conclusion II follows

Question Type : MCQ
Question ID : 4410091205341
Option 1 ID : 4410094754878
Option 2 ID : 4410094754875
Option 3 ID : 4410094754877
Option 4 ID : 4410094754876
Status : Answered
Chosen Option : 2

Q.9 For a cantilever beam subjected to a truly vertical point load at its free end, designed as per Limit state method the section at the fixed end is designed to resist which of the following? (Note: Consider that the beam is safe in slenderness limits.)

- Ans
- ☒ 1. Only factored bending moment
 - ☒ 2. Only factored shear force
 - ☒ 3. Both factored bending moment and factored shear force
 - ☒ 4. Only deflection

Question Type : MCQ
Question ID : 4410091204126
Option 1 ID : 4410094750005
Option 2 ID : 4410094750004
Option 3 ID : 4410094750006
Option 4 ID : 4410094750003
Status : Not Answered
Chosen Option : --

Q.10 Compute the annual depreciation of a newly constructed building, if the original cost of the building is ₹55,00,000 and the useful life of the building is 50 years. Assume the scrap value of the building is 12% of the original cost.

- Ans
- ☒ 1. ₹96,800
 - ☒ 2. ₹1,06,800
 - ☒ 3. ₹90,800
 - ☒ 4. ₹1,00,000

Question Type : MCQ
Question ID : 4410091207873
Option 1 ID : 4410094765013
Option 2 ID : 4410094765012
Option 3 ID : 4410094765011
Option 4 ID : 4410094765010
Status : Answered
Chosen Option : 1

Q.11 Read the given statements of statement and conclusion carefully and select the correct option.





Statement: House drainage is the system of pipes inside a building used for collecting wastewater.
Conclusion: It directly discharges untreated sewage into rivers.

- Ans
- ☒ 1. Statement is correct; conclusion is wrong.
 - ☒ 2. Statement is wrong; conclusion is correct.
 - ☒ 3. Both statement and conclusion are correct.
 - ☒ 4. Both statement and conclusion are wrong.

Question Type : MCQ
Question ID : 4410091259797
Option 1 ID : 4410094972078
Option 2 ID : 4410094972079
Option 3 ID : 4410094972080
Option 4 ID : 4410094972081
Status : Answered
Chosen Option : 3

Q.12 Match the irrigation term with its correct definition.

| List-I (Term) | List-II (Definition) |
|--------------------------------|--|
| a) Net irrigated area (NIA) | 1. Area irrigated at least once during the season |
| b) Gross irrigated area (GIA) | 2. Total area of crops grown including multiple cropping |
| c) Intensity of irrigation (I) | 3. Ratio of area irrigated to command area $\times 100$ |
| d) Cropping intensity (CI) | 4. Area actually sown and irrigated |

- Ans  1. a-4, b-3, c-1, d-2
-  2. a-4, b-1, c-3, d-2
-  3. a-2, b-4, c-1, d-3
-  4. a-3, b-4, c-1, d-2





Question Type : MCQ
Question ID : 4410091225546
Option 1 ID : 4410094835689
Option 2 ID : 4410094835690
Option 3 ID : 4410094835691
Option 4 ID : 4410094835688
Status : Answered
Chosen Option : 1

Q.13 Gully formation due to rainfall on an earthen dam occurs on the:

- Ans  1. downstream slope
-  2. upstream slope
-  3. foundation base
-  4. crest

Question Type : MCQ
Question ID : 4410091216776
Option 1 ID : 4410094800517
Option 2 ID : 4410094800516
Option 3 ID : 4410094800519
Option 4 ID : 4410094800518
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.14 Which type of water analysis is most essential for safeguarding public health and preventing outbreaks of cholera and typhoid?

- Ans  1. Physical analysis
-  2. Chemical analysis
-  3. Radiological analysis
-  4. Bacteriological analysis

Question Type : MCQ
Question ID : 4410091259709
Option 1 ID : 4410094971723
Option 2 ID : 4410094971724
Option 3 ID : 4410094971725
Option 4 ID : 4410094971722
Status : Answered
Chosen Option : 4

Q.15 In fluid mechanics, pressure head is defined as:

- Ans ☒ 1. the vertical height of a column of fluid that produces a given pressure
- ☒ 2. the loss of energy in a pipeline
- ☒ 3. the height from which water falls freely
- ☒ 4. the energy due to velocity of fluid

Question Type : MCQ
Question ID : 4410091213825
Option 1 ID : 4410094788701
Option 2 ID : 4410094788703
Option 3 ID : 4410094788704
Option 4 ID : 4410094788702
Status : Answered
Chosen Option : 1

Q.16 Read the given statement and conclusions carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statement.

Statement:
Convective precipitation occurs due to local heating of air near the ground.

Conclusions:
I. It usually results in short-duration, intense rainfall.
II. It often causes thunderstorms in hot and humid climates.

- Ans ☒ 1. Only conclusion II follows.
- ☒ 2. Only conclusion I follows.
- ☒ 3. Both conclusions I and II follow.
- ☒ 4. Neither conclusion I nor II follows.

Question Type : MCQ
Question ID : 4410091225385
Option 1 ID : 4410094835046
Option 2 ID : 4410094835045
Option 3 ID : 4410094835047
Option 4 ID : 4410094835048
Status : Answered
Chosen Option : 3

Q.17 Which of the following is NOT a safety device or equipment for cranes as per IS 13367-1 (1992)?

- Ans ☒ 1. Emergency Lighting System
- ☒ 2. Anemometer
- ☒ 3. Automatic Safe Load Indicator
- ☒ 4. Load Radius Indicator

Question Type : MCQ
Question ID : 4410091246048
Option 1 ID : 4410094917473
Option 2 ID : 4410094917472
Option 3 ID : 4410094917470
Option 4 ID : 4410094917471
Status : Answered
Chosen Option : 2

Q.18 A statement is given followed by two conclusions. Identify which of the given conclusions is/are correct based on the following statement.

Statement:
Consultants are responsible for implementing quality assurance procedures in construction projects.

Conclusions:
I. Quality assurance ensures that materials and workmanship meet the required standards.
II. Consultants are only responsible for structural design, not for quality monitoring.

- Ans ☒ 1. Both conclusions I and II are correct.
- ☒ 2. Only conclusion II is correct.
- ☒ 3. Neither conclusion I nor II is correct.
- ☒ 4. Only conclusion I is correct.

Question Type : MCQ
Question ID : 4410091182948
Option 1 ID : 4410094665851
Option 2 ID : 4410094665850
Option 3 ID : 4410094665852
Option 4 ID : 4410094665849
Status : Answered
Chosen Option : 4

Q.19 In a vertical single column manometer, the orientation of the column is kept:

- Ans ☒ 1. horizontal
- ☒ 2. bent in a loop
- ☒ 3. exactly vertical to improve sensitivity
- ☒ 4. inclined at a certain angle

Question Type : MCQ
Question ID : 4410091213790
Option 1 ID : 4410094788568
Option 2 ID : 4410094788569
Option 3 ID : 4410094788567
Option 4 ID : 4410094788566
Status : Answered
Chosen Option : 3

Q.20 Match the items in Column A with those in Column B.

- Column A Column B
A. Aeration 1. Removes bacteria and ensures safety of water
B. Sedimentation 2. Addition of alum to form flocs
C. Coagulation–Flocculation 3. Settling of suspended particles
D. Disinfection 4. Removes dissolved gases and oxidisable impurities

- Ans ☒ 1. A-1, B-2, C-3, D-4
☒ 2. A-2, B-4, C-1, D-3
☒ 3. A-4, B-3, C-2, D-1
☒ 4. A-3, B-1, C-4, D-2

Question Type : MCQ
Question ID : 4410091259830
Option 1 ID : 4410094972203
Option 2 ID : 4410094972204
Option 3 ID : 4410094972202
Option 4 ID : 4410094972205
Status : Answered
Chosen Option : 3

Q.21 Read the given statement of assertion (A) followed by the statement reason (R), and select the most appropriate option.

- (A): The plinth area of the building and the plinth area rate is required to calculate the approximate plinth area estimate of the building.
(R): In the plinth area rate estimate method the plinth area of the building should be calculated by taking external dimension of the plinth excluding the open areas and multiplied with the plinth area rate to derive the accurate cost.

- Ans ☒ 1. Both A and R are true, and R is the correct explanation of A.
☒ 2. A is true, but R is false.
☒ 3. A is false, but R is true.
☒ 4. Both A and R are true, but R is not the correct explanation of A.

Question Type : MCQ
Question ID : 4410091205297
Option 1 ID : 4410094754699
Option 2 ID : 4410094754701
Option 3 ID : 4410094754702
Option 4 ID : 4410094754700
Status : Answered
Chosen Option : 1

Q.22 Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R).

A. Rolled fill earth dams are less safe against seepage compared to hydraulic fill dams.
R. In rolled fill dams, soil is compacted mechanically, reducing voids and permeability.

- Ans
- ☒ 1. Both A and R are true, but R is not the correct explanation of A.
 - ☒ 2. Both A and R are true, and R is the correct explanation of A.
 - ☒ 3. A is true, R is false.
 - ☒ 4. A is false, R is true.

Question Type : MCQ
Question ID : 4410091225427
Option 1 ID : 4410094835213
Option 2 ID : 4410094835212
Option 3 ID : 4410094835214
Option 4 ID : 4410094835215
Status : Not Answered
Chosen Option : --

Q.23 A statement is given followed by a conclusion. Select the correct option based on the logical relationship between the statement and the conclusion.

Statement: In RCC construction, lintels are provided above openings such as doors and windows to transfer loads to the surrounding walls.
Conclusion: Provision of lintels over openings prevent direct load coming on the frame of the door or window.

- Ans
- ☒ 1. Both the statement and the conclusion are true, and the conclusion is the correct explanation of the statement.
 - ☒ 2. The statement is true, but the conclusion is false.
 - ☒ 3. Both the statement and the conclusion are true, but the conclusion is not the correct explanation of the statement.
 - ☒ 4. The statement is false, but the conclusion is true.

Question Type : MCQ
Question ID : 4410091203174
Option 1 ID : 4410094746226
Option 2 ID : 4410094746228
Option 3 ID : 4410094746227
Option 4 ID : 4410094746229
Status : Answered
Chosen Option : 1

Q.24 Which of the following is NOT a mounting option for tower cranes as per IS 13367-1 (1992)?

- Ans
- ☒ 1. Overhead runway
 - ☒ 2. Rails or wheels
 - ☒ 3. Crawler tracks
 - ☒ 4. Fixed base

Question Type : MCQ
Question ID : 4410091198519
Option 1 ID : 4410094727923
Option 2 ID : 4410094727922
Option 3 ID : 4410094727921
Option 4 ID : 4410094727920
Status : Not Answered
Chosen Option : --

Q.25 Delegation of authority in a construction organisation is guided by which classical principle of management?

- Ans ☒ 1. Scalar chain
- ☐ 2. Unity of direction
- ☐ 3. Division of work and authority
- ☐ 4. Unity of command

Question Type : MCQ
Question ID : 4410091180521
Option 1 ID : 4410094656213
Option 2 ID : 4410094656212
Option 3 ID : 4410094656215
Option 4 ID : 4410094656214
Status : Answered
Chosen Option : 3

Q.26 When the eccentricity of a point load exceeds the permissible limit (middle third/quarter rule), the stress diagram:

- Ans ☐ 1. becomes curved instead of straight
- ☐ 2. remains rectangular without any change
- ☐ 3. becomes triangular but stays compressive
- ☒ 4. shows compression on one side and tension on the other

Question Type : MCQ
Question ID : 4410091272436
Option 1 ID : 4410095021759
Option 2 ID : 4410095021758
Option 3 ID : 4410095021756
Option 4 ID : 4410095021757
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.27 A structural consultant charges 1.5% of the total project cost. If the project cost is ₹85 lakhs, then what is the consultant's fee?

- Ans ☐ 1. ₹1,00,000
- ☐ 2. ₹85,000
- ☐ 3. ₹1,50,000
- ☒ 4. ₹1,27,500

Question Type : MCQ
Question ID : 4410091182868
Option 1 ID : 4410094665532
Option 2 ID : 4410094665530
Option 3 ID : 4410094665531
Option 4 ID : 4410094665529
Status : Answered
Chosen Option : 4

Q.28 In this question, a statement is given followed by two conclusions numbered I and II. Identify which of the given conclusions is/are true based on the given statement.

Statement: A sample brick, when dropped from 1.5 m height, does not break and emits a ringing sound.

Conclusion I: The brick is strong and well-burnt.

Conclusion II: The brick has a water absorption capacity more than 25%.

- Ans ☒ 1. Only II is correct.
- ☒ 2. Only I is correct.
- ☒ 3. Both I and II are correct.
- ☒ 4. Neither I nor II is correct.

Question Type : MCQ
Question ID : 4410091182489
Option 1 ID : 4410094663994
Option 2 ID : 4410094663993
Option 3 ID : 4410094663995
Option 4 ID : 4410094663996
Status : Answered
Chosen Option : 3

Q.29 By introducing fixity at both the ends of a simply supported beam:

- Ans ☒ 1. the fixed end moments are developed at the two ends
- ☒ 2. the slope values at $\frac{1}{4}$ of span can be made zero
- ☒ 3. the beam becomes weak and more unstable
- ☒ 4. the beam deflection at the mid span can be increased

Question Type : MCQ
Question ID : 441009355456
Option 1 ID : 4410091387924
Option 2 ID : 4410091387923
Option 3 ID : 4410091387925
Option 4 ID : 4410091387922
Status : Answered
Chosen Option : 2

Q.30 Which type of error is minimised by keeping the backsight and foresight distances approximately equal in levelling?

- Ans ☒ 1. Magnetic declination
- ☒ 2. Parallax error
- ☒ 3. Collimation error
- ☒ 4. Staff graduation error

Question Type : MCQ
Question ID : 441009269490
Option 1 ID : 4410091047157
Option 2 ID : 4410091047154
Option 3 ID : 4410091047156
Option 4 ID : 4410091047155
Status : Answered
Chosen Option : 2

Q.31 For correct functioning of a theodolite, the horizontal axis and the line of collimation should maintain which geometric relationship?

- Ans
- ☒ 1. Parallel
 - ☒ 2. Skewed at a fixed offset
 - ☒ 3. Perpendicular
 - ☒ 4. Coinciding

Question Type : MCQ
Question ID : 4410091209968
Option 1 ID : 4410094773366
Option 2 ID : 4410094773369
Option 3 ID : 4410094773367
Option 4 ID : 4410094773368
Status : Answered
Chosen Option : 2

Q.32 Read the given statements of Assertion (A) and Reason (R) carefully and select the correct option.

(A): COD test takes more time compared to BOD test.
(R): BOD test is carried out for 5 days at 20°C.

- Ans
- ☒ 1. Both A and R are true, but R is not the correct explanation of A
 - ☒ 2. Both A and R are true, and R is the correct explanation of A
 - ☒ 3. A is false, but R is true
 - ☒ 4. A is true, but R is false

Question Type : MCQ
Question ID : 4410091259815
Option 1 ID : 4410094972147
Option 2 ID : 4410094972146
Option 3 ID : 4410094972149
Option 4 ID : 4410094972148
Status : Answered
Chosen Option : 2

Q.33 A core wall is provided in an earthen dam to:

- Ans
- ☒ 1. reduce seepage through the dam
 - ☒ 2. reduce earthquake effects
 - ☒ 3. provide drainage to the foundation
 - ☒ 4. increase the storage capacity

Question Type : MCQ
Question ID : 4410091213882
Option 1 ID : 4410094788929
Option 2 ID : 4410094788932
Option 3 ID : 4410094788931
Option 4 ID : 4410094788930
Status : Answered
Chosen Option : 3

Q.34 If the water-cement ratio is 0.5 and cement content is 400 kg/m³, compute water content with and without a water-reducing admixture that saves 15% water.

- Ans
- ☒ 1. Without admixture = 100 litres; With admixture = 70 litres
 - ☒ 2. Without admixture = 400 litres; With admixture = 340 litres
 - ☒ 3. Without admixture = 300 litres; With admixture = 240 litres
 - ☒ 4. Without admixture = 200 litres; With admixture = 170 litres

Question Type : MCQ

Question ID : 4410091243293

Option 1 ID : 4410094906491

Option 2 ID : 4410094906488

Option 3 ID : 4410094906489

Option 4 ID : 4410094906490

Status : Answered

Chosen Option : 3

Q.35 An RBMV (Rail Bound Maintenance Vehicle) is designed to carry rails. Each rail segment is 13 metres long and has a linear weight of 60 kg/m. The weight of one 13-metre rail is approximately 780 kg. If the RBMV carries two such rails, what is the total weight of the load?

- Ans
- ☒ 1. 2,000 kg
 - ☒ 2. 1,280 kg
 - ☒ 3. 1,560 kg
 - ☒ 4. 1,040 kg

Question Type : MCQ

Question ID : 4410091242449

Option 1 ID : 4410094903155

Option 2 ID : 4410094903153

Option 3 ID : 4410094903154

Option 4 ID : 4410094903152

Status : Answered

Chosen Option : 3

Q.36 If h is the height of loosely filled sand in a test container, and h' is the height of the same amount of sand submerged in water in the same container, then the percentage of bulking of the sand due to moisture shall be calculated with which of the following formulas?

- Ans
- ☒ 1. $\left(\frac{h' - h}{h'} \right) \times 100$
 - ☒ 2. $\left(\frac{h' - h}{h} \right) \times 100$
 - ☒ 3. $\left(\frac{h - h'}{h'} \right) \times 100$
 - ☒ 4. $\left(\frac{h + h'}{h} \right) \times 100$

Question Type : MCQ

Question ID : 4410091206862

Option 1 ID : 4410094760985

Option 2 ID : 4410094760984

Option 3 ID : 4410094760983

Option 4 ID : 4410094760982

Status : Answered

Chosen Option : 1

Q.37 Closing error of a traverse is ascertained by determining the summation of ____.

- Ans
- ☒ 1. fore bearings and back bearings
 - ☒ 2. included angle and deflection angles
 - ☒ 3. magnetic dip and declinations
 - ☒ 4. latitudes and departures

Question Type : MCQ
Question ID : 44100945837
Option 1 ID : 441009182545
Option 2 ID : 441009182547
Option 3 ID : 441009182546
Option 4 ID : 441009182544
Status : Answered
Chosen Option : 2

Q.38 Silt carried by canals mainly consists of:

- Ans
- ☒ 1. fine soil particles carried by water
 - ☒ 2. large boulders
 - ☒ 3. chemical impurities
 - ☒ 4. organic matter in water

Question Type : MCQ
Question ID : 4410091216813
Option 1 ID : 4410094800661
Option 2 ID : 4410094800660
Option 3 ID : 4410094800663
Option 4 ID : 4410094800662
Status : Answered
Chosen Option : 1

Q.39 Match the following ingredients and methods of light weight concrete (List I) with their limitations (List II).

| Ingredients and methods of light weight concrete (List I) | Limitations (List II) |
|---|---|
| 1. Use of light-weight aggregate | A. Improves the workability, and tends to increase strength |
| 2. Use of air-entrainment | B. Contains Sulphur which may cause corrosion |
| 3. Mixing of light weight concrete | C. Produces a harsh mix |
| 4. Use of clinker or cinder as aggregate | D. Difficulties in applying the normal curing methods |

- Ans ☒ 1. 1-C, 2-A, 3-D, 4-B
- ☒ 2. 1-B, 2-C, 3-D, 4-A
- ☒ 3. 1-A, 2-B, 3-C, 4-D
- ☒ 4. 1-D, 2-A, 3-B, 4-C

Question Type : MCQ
Question ID : 4410091234769
Option 1 ID : 4410094872823
Option 2 ID : 4410094872822
Option 3 ID : 4410094872821
Option 4 ID : 4410094872824
Status : Answered
Chosen Option : 1

Q.40 Read the given statements of Assertion (A) and Reason (R) carefully and select the correct option.

Assertion (A): Expansion joints in concrete structures are continuous, unobstructed slots filled with compressible materials such as bitumen-impregnated fiberboard, cork, cellular rubber, or polyethylene foam to permit thermal or moisture expansion.
Reason (R): The compressible filler absorbs expansion and contraction movements, preventing stress build-up and avoiding cracks or spalling in adjoining concrete parts.

- Ans ☒ 1. Both (A) and (R) are true, but (R) is not the correct explanation of (A)
- ☒ 2. (A) is true, but (R) is false
- ☒ 3. (A) is false, but (R) is true
- ☒ 4. Both (A) and (R) are true, and (R) is the correct explanation of (A)

Question Type : MCQ
Question ID : 4410091243298
Option 1 ID : 4410094906509
Option 2 ID : 4410094906510
Option 3 ID : 4410094906511
Option 4 ID : 4410094906508
Status : Answered
Chosen Option : 4

Q.41 The reaction time recommended by IRC:66-1976 for SSD design on rural highways is:

- Ans ☒ 1. 1.5 seconds
☒ 2. 2.0 seconds
☒ 3. 3.0 seconds
☒ 4. 2.5 seconds

Question Type : MCQ
Question ID : 4410091242386
Option 1 ID : 4410094902900
Option 2 ID : 4410094902901
Option 3 ID : 4410094902903
Option 4 ID : 4410094902902
Status : Not Answered
Chosen Option : --

Q.42 A simply supported Warren truss of 10 m span carries a UDL of 10 kN/m on its top chord. The reactions at supports (assume pin and roller supports) at left and right are _____ respectively.

- Ans ☒ 1. 30 kN and 20 kN
☒ 2. 50 kN and 50 kN
☒ 3. 25 kN and 25 kN
☒ 4. 40 kN and 10 kN

Question Type : MCQ
Question ID : 4410091272741
Option 1 ID : 4410095022977
Option 2 ID : 4410095022979
Option 3 ID : 4410095022976
Option 4 ID : 4410095022978
Status : Not Answered
Chosen Option : --

Q.43 Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R).

A. Delays in construction projects can significantly increase the total project cost.
R. Project delays result in higher indirect costs such as site overheads and equipment rentals.

- Ans ☒ 1. Both A and R are true, and R is the correct explanation of A.
☒ 2. A is true, but R is false.
☒ 3. Both A and R are true, but R is not the correct explanation of A.
☒ 4. A is false, but R is true.

Question Type : MCQ
Question ID : 4410091182984
Option 1 ID : 4410094665993
Option 2 ID : 4410094665995
Option 3 ID : 4410094665994
Option 4 ID : 4410094665996
Status : Answered
Chosen Option : 1

Q.44 Which of the following components of a construction contract clearly defines materials, workmanship, and quality standards to be followed?

- Ans ☒ 1. General conditions
- ☒ 2. Specifications
- ☒ 3. Tender notice
- ☒ 4. Bill of quantities

Question Type : MCQ
Question ID : 4410091180503
Option 1 ID : 4410094656140
Option 2 ID : 4410094656141
Option 3 ID : 4410094656143
Option 4 ID : 4410094656142
Status : Answered
Chosen Option : 1

Q.45 A concrete slab measuring 4 m × 4 m × 0.125 m is to be compacted using a needle vibrator. If the effective compaction radius(*r*) of the needle is 0.3 m, and the compaction radius is $r\sqrt{2}$, what is the minimum number of insertions required to ensure complete compaction of the slab?

- Ans ☒ 1. 121
- ☒ 2. 81
- ☒ 3. 100
- ☒ 4. 144

Question Type : MCQ
Question ID : 4410091234516
Option 1 ID : 4410094871816
Option 2 ID : 4410094871814
Option 3 ID : 4410094871815
Option 4 ID : 4410094871817
Status : Not Answered
Chosen Option : --

Q.46 Engineers and surveyors can map and inventory roadways, pipelines, etc. using _____ of GIS.

- Ans ☒ 1. LIS
- ☒ 2. AM or FM
- ☒ 3. GIS – T
- ☒ 4. GIS – L

Question Type : MCQ
Question ID : 44100945710
Option 1 ID : 441009182029
Option 2 ID : 441009182032
Option 3 ID : 441009182030
Option 4 ID : 441009182031
Status : Not Answered
Chosen Option : --

Q.47 The prepared flat surface on which ballast, sleepers and rails are laid is called:

- Ans
- ☒ 1. embankment
 - ☒ 2. subgrade
 - ☒ 3. formation
 - ☒ 4. cutting

Question Type : MCQ
Question ID : 4410091242341
Option 1 ID : 4410094902720
Option 2 ID : 4410094902722
Option 3 ID : 4410094902723
Option 4 ID : 4410094902721
Status : Answered
Chosen Option : 2

Q.48 Read the given statements of Assertion (A) and Reason (R) carefully and select the correct option.

Assertion (A): It is not advisable to use immersion vibrators for layer thickness greater than 600 mm.

Reason (R): For effective consolidation, the depth of concrete layer should be between $\frac{2}{3}$ 'l' to 'l' (where l is the needle length), since excessive thickness reduces vibration effectiveness and causes poor compaction at the top layers.

- Ans
- ☒ 1. A is true, but R is false.
 - ☒ 2. Both A and R are true, and R is the correct explanation of A.
 - ☒ 3. Both A and R are true, but R is not the correct explanation of A.
 - ☒ 4. A is false, but R is true.

Question Type : MCQ
Question ID : 4410091243817
Option 1 ID : 4410094908561
Option 2 ID : 4410094908559
Option 3 ID : 4410094908560
Option 4 ID : 4410094908562
Status : Answered
Chosen Option : 2

Q.49 Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R).

A. Submersible pumps are highly efficient for lifting water from deep wells.
R. The pump is located above ground, which reduces friction losses.

- Ans
- ☒ 1. A is true, R is false.
 - ☒ 2. Both A and R are true, and R is the correct explanation of A.
 - ☒ 3. A is false, R is true.
 - ☒ 4. Both A and R are true, but R is not the correct explanation of A.

Question Type : MCQ
Question ID : 4410091225414
Option 1 ID : 4410094835162
Option 2 ID : 4410094835160
Option 3 ID : 4410094835163
Option 4 ID : 4410094835161
Status : Answered
Chosen Option : 2

Q.50 What is the main function of geotextiles when used in road and highway construction?

- Ans
- ☒ 1. Act as structural members in bridges
 - ☒ 2. Serve as insulation against heat
 - ☒ 3. Prevent intermixing of subgrade and base materials
 - ☒ 4. Provide decorative surface finish

Question Type : MCQ
Question ID : 4410091180292
Option 1 ID : 4410094655292
Option 2 ID : 4410094655293
Option 3 ID : 4410094655294
Option 4 ID : 4410094655295
Status : Answered
Chosen Option : 3

Q.51 Match the contour properties with their descriptions.

Property Description
P) Close contours 1) Represent steep slopes
Q) Wide contours 2) Indicate gentle slopes
R) Concentric contours 3) Represent hills or depressions
S) Broken contours 4) Show abrupt changes in ground

- Ans
- ☒ 1. P-3, Q-2, R-1, S-4
 - ☒ 2. P-1, Q-3, R-4, S-2
 - ☒ 3. P-2, Q-1, R-3, S-4
 - ☒ 4. P-1, Q-2, R-3, S-4

Question Type : MCQ
Question ID : 44100966078
Option 1 ID : 441009263265
Option 2 ID : 441009263264
Option 3 ID : 441009263263
Option 4 ID : 441009263262
Status : Answered
Chosen Option : 3

Q.52 Which of the following is a reserved money that is set aside gradually to meet a future expenses towards the property for the replacement of the structure at the end of its useful life?

- Ans
- ☒ 1. Sinking fund
 - ☒ 2. Salvage value
 - ☒ 3. Annuity
 - ☒ 4. Rateable value

Question Type : MCQ
Question ID : 4410091207888
Option 1 ID : 4410094765073
Option 2 ID : 4410094765070
Option 3 ID : 4410094765071
Option 4 ID : 4410094765072
Status : Not Answered
Chosen Option : --

Q.53 For the safe design of horizontal curves, what controls the rate of change of centrifugal acceleration?

- Ans
- ☐ 1. Gradient compensation
 - ☐ 2. Extra widening of pavement
 - ☒ 3. The length of the curve transition
 - ☐ 4. Camber reduction

Question Type : MCQ
Question ID : 4410091242397
Option 1 ID : 4410094902946
Option 2 ID : 4410094902945
Option 3 ID : 4410094902944
Option 4 ID : 4410094902947
Status : Answered
Chosen Option : 3

Q.54 Match the controlling factors of highway alignment (List I) with their influence/alignment (List II):

| List I (Factors) | List II (Influence on Alignment) |
|----------------------|--|
| P. Obligatory points | A. Gradient, sight distance and radius of curve determine alignment feasibility |
| Q. Traffic | B. Should pass through towns, bridges, mountain passes or avoid religious places |
| R. Geometric design | C. Based on O–D survey, alignment should follow desired traffic flow patterns |
| S. Economy | D. Alignment should minimise overall construction, maintenance and vehicle costs |

- Ans
- ☐ 1. P-D, Q-A, R-C, S-B
 - ☐ 2. P-B, Q-D, R-A, S-C
 - ☐ 3. P-C, Q-B, R-D, S-A
 - ☒ 4. P-B, Q-C, R-A, S-D

Question Type : MCQ
Question ID : 4410091242497
Option 1 ID : 4410094903346
Option 2 ID : 4410094903347
Option 3 ID : 4410094903345
Option 4 ID : 4410094903344
Status : Answered
Chosen Option : 4

Q.55 Read the given statements of Assertion (A) and Reason (R) carefully and select the correct option.

(A): A rammer compacts soil through a combination of impact and vibration, making it suitable for cohesive and semi-cohesive soils.

(R): The machine delivers high-impact force (100–250 blows per minute) via a gasoline or diesel engine powering a piston with one set of springs, causing particles to move and densify upon rebound from the soft surface below.

- Ans ☒ 1. A is true, but R is false.
- ☐ 2. Both A and R are true, but R is not the correct explanation of A.
- ☐ 3. A is false, but R is true.
- ☐ 4. Both A and R are true, and R is the correct explanation of A.

Question Type : MCQ
Question ID : 4410091197414
Option 1 ID : 4410094723589
Option 2 ID : 4410094723588
Option 3 ID : 4410094723590
Option 4 ID : 4410094723587
Status : Answered
Chosen Option : 4

Q.56 Match the items in List-I with the items in List-II.

| List-I (Safety Measure) | List-II (Purpose / Action) |
|----------------------------------|--|
| A. Safety Training | 1. Educates workers on hazard prevention |
| B. Personal Protective Equipment | 2. Minimises injury from falling objects |
| C. Scaffolding Inspection | 3. Prevents accidents due to structural failure |
| D. Emergency Medical Facility | 4. Provides immediate treatment during accidents |

- Ans ☐ 1. A-4, B-2, C-1, D-3
- ☐ 2. A-2, B-1, C-3, D-4
- ☒ 3. A-1, B-2, C-3, D-4
- ☐ 4. A-1, B-2, C-4, D-3

Question Type : MCQ
Question ID : 4410091183085
Option 1 ID : 4410094666396
Option 2 ID : 4410094666395
Option 3 ID : 4410094666394
Option 4 ID : 4410094666393
Status : Answered
Chosen Option : 3

Q.57 A statement is given followed by two conclusions. Identify which of the given conclusions logically follow(s) from the statement.

Statement:
Manometers give precise static pressure readings.

Conclusions:
I. Small pressure differences are difficult to measure accurately.
II. A sloping tube manometer can improve sensitivity.

- Ans ☒ 1. Only conclusion I follows.
☒ 2. Both conclusions I and II follow.
☒ 3. Neither conclusion I nor II follows.
☒ 4. Only conclusion II follows.

Question Type : MCQ
Question ID : 4410091225326
Option 1 ID : 4410094834813
Option 2 ID : 4410094834815
Option 3 ID : 4410094834816
Option 4 ID : 4410094834814
Status : Not Answered
Chosen Option : --

Q.58 Between isohyets of 20 mm and 40 mm, the enclosed area is 100 km². What is the mean rainfall in this zone?

- Ans ☒ 1. 30 mm
☒ 2. 40 mm
☒ 3. 20 mm
☒ 4. 60 mm

Question Type : MCQ
Question ID : 4410091225291
Option 1 ID : 4410094834674
Option 2 ID : 4410094834675
Option 3 ID : 4410094834673
Option 4 ID : 4410094834676
Status : Answered
Chosen Option : 1

Q.59 Select the option that is related to the third term in the same way as the second term is related to the first term.

Collector Street : Distributes traffic between local and arterial roads :: Local Street : ?

- Ans ☒ 1. Provides direct access to abutting properties, caters to local traffic
☒ 2. Prohibits entry of motorised vehicles, only NMT permitted
☒ 3. Designed for high-speed city mobility with no parking allowed
☒ 4. Full access control, grade-separated intersections

Question Type : MCQ
Question ID : 4410091242551
Option 1 ID : 4410094903562
Option 2 ID : 4410094903561
Option 3 ID : 4410094903563
Option 4 ID : 4410094903560
Status : Answered
Chosen Option : 1

Q.60 Match the following Conventional Tunneling machines with their methods.

Tunneling machines Tunneling methods

- 1. Jack hammers/Drilling jumbo A. Suited for any type of tunnel cross sections
- 2. Tunnel boring machines B. Handling/erection of steel sets.
- 3. Excavation by road header C. Drill holes for blasting, rock bolting
- 4. Lifting equipment D. Excavate circular cross sections with a rotating cutter

- Ans ☒ 1. 1-B, 2-C, 3-D, 4-A
- ☒ 2. 1-C, 2-D, 3-A, 4-B
- ☒ 3. 1-A, 2-B, 3-C, 4-D
- ☒ 4. 1-D, 2-A, 3-B, 4-C

Question Type : MCQ
Question ID : 4410091198431
Option 1 ID : 4410094727612
Option 2 ID : 4410094727613
Option 3 ID : 4410094727611
Option 4 ID : 4410094727614
Status : Answered
Chosen Option : 2

Q.61 A fixed beam with span 4 m carries a point load of 40 kN at mid-span. Calculate the magnitude of fixed end moments.

- Ans ☒ 1. 40 kNm each
- ☒ 2. 10 kNm each
- ☒ 3. 30 kNm each
- ☒ 4. 20 kNm each

Question Type : MCQ
Question ID : 4410091272643
Option 1 ID : 4410095022583
Option 2 ID : 4410095022580
Option 3 ID : 4410095022582
Option 4 ID : 4410095022581
Status : Answered
Chosen Option : 2

Q.62 A mono-pitch portal frame is _____.

- Ans ☒ 1. suitable for spans more than 50 m
- ☒ 2. symmetrical in geometry
- ☒ 3. un-symmetrical in geometry
- ☒ 4. a frame with zero traverse gradient

Question Type : MCQ
Question ID : 441009355445
Option 1 ID : 4410091387880
Option 2 ID : 4410091387878
Option 3 ID : 4410091387879
Option 4 ID : 4410091387881
Status : Answered
Chosen Option : 1

Q.63 What is the minimum free residual chlorine recommended at the consumer end of the water distribution system?

- Ans
- ☒ 1. 0.05 mg/L
 - ☒ 2. 1.0 mg/L
 - ☒ 3. 2.0 mg/L
 - ☒ 4. 0.2 mg/L

Question Type : MCQ
Question ID : 4410091259731
Option 1 ID : 4410094971810
Option 2 ID : 4410094971812
Option 3 ID : 4410094971813
Option 4 ID : 4410094971811
Status : Answered
Chosen Option : 2





Q.64 The main advantage of an oxidation ditch over the conventional activated sludge process is:

- Ans
- ☒ 1. smaller land requirement
 - ☒ 2. lower energy consumption
 - ☒ 3. no nuisance due to mosquito breeding
 - ☒ 4. continuous aeration and mixing in a closed channel

Question Type : MCQ
Question ID : 4410091259757
Option 1 ID : 4410094971912
Option 2 ID : 4410094971910
Option 3 ID : 4410094971913
Option 4 ID : 4410094971911
Status : Answered
Chosen Option : 4





Q.65 Match the following columns regarding the design of a RCC T-beam.

| Column A – Case | Column B – Descr |
|------------------------------------|--|
| a. Neutral axis lies within flange | 1. Section behaves like rectangular beam o width |
| b. Neutral axis lies in web | 2. Compression is shared betweenflange a |
| c. Over-reinforced T-beam in LSM | 3. Concrete crushes before steel yields→ b |
| d. Under-reinforced T-beam in LSM | 4. Steel yields first → ductile failure with wa |

- Ans  1. a-4, b-3, c-2, d-1
-  2. a-1, b-4, c-2, d-3
-  3. a-1, b-2, c-3, d-4
-  4. a-2, b-4, c-3, d-1

Question Type : MCQ
Question ID : 4410091202906
Option 1 ID : 4410094745158
Option 2 ID : 4410094745156
Option 3 ID : 4410094745159
Option 4 ID : 4410094745157
Status : Not Answered
Chosen Option : --

Q.66 When a gravity dam faces full water pressure, stress at its base:

- Ans  1. is parabolic due to water load
-  2. varies linearly with maximum compressive at toe and minimum tensile at heel
-  3. varies linearly with maximum compressive at heel and minimum tension at toe
-  4. is uniform across width

Question Type : MCQ
Question ID : 4410091272414
Option 1 ID : 4410095021671
Option 2 ID : 4410095021669
Option 3 ID : 4410095021670
Option 4 ID : 4410095021668
Status : Answered
Chosen Option : 2

Q.67 One of the main limitations of a bar chart in construction scheduling is the inability to represent which of the following?

- Ans ☒ 1. Start and finish dates of activities
- ☒ 2. Duration of each construction activity
- ☒ 3. Logical relationship or dependency between activities
- ☒ 4. Progress of individual activities

Question Type : MCQ
Question ID : 4410091180593
Option 1 ID : 4410094656500
Option 2 ID : 4410094656501
Option 3 ID : 4410094656502
Option 4 ID : 4410094656503
Status : Answered
Chosen Option : 3

Q.68 As per IS 1950-1962, for non-porous, homogeneous rigid partitions such as well-plastered solid brick masonry walls, every time the weight per unit area of the wall is doubled, the average increase in sound insulation is approximately:

- Ans ☒ 1. 2-3 dB
- ☒ 2. 10-12 dB
- ☒ 3. 4-5 dB
- ☒ 4. 7-8 dB

Question Type : MCQ
Question ID : 4410091245919
Option 1 ID : 4410094916954
Option 2 ID : 4410094916957
Option 3 ID : 4410094916955
Option 4 ID : 4410094916956
Status : Not Answered
Chosen Option : --

Q.69 Considering both life cycle cost and maintenance requirements, which of the following materials is the most economical for long-term use in urban building facades?

- Ans ☒ 1. Aluminium composite panels (ACP)
- ☒ 2. Natural stone cladding
- ☒ 3. Glass curtain wall
- ☒ 4. Cement fibre boards

Question Type : MCQ
Question ID : 4410091180225
Option 1 ID : 4410094655025
Option 2 ID : 4410094655024
Option 3 ID : 4410094655026
Option 4 ID : 4410094655027
Status : Answered
Chosen Option : 2

Q.70 The primary purpose of a grit chamber in sewage treatment is:

- Ans ☒ 1. to remove organic matter
- ☒ 2. to separate heavy inorganic particles
- ☒ 3. to reduce BOD
- ☒ 4. to disinfect sewage

Question Type : MCQ
Question ID : 4410091259750
Option 1 ID : 4410094971882
Option 2 ID : 4410094971885
Option 3 ID : 4410094971883
Option 4 ID : 4410094971884
Status : Answered
Chosen Option : 2

Q.71 In simple curves, the sharpness of a curve is designated either by its _____ or by its _____.

- Ans ☒ 1. degree of curvature; central angle
- ☒ 2. radius; degree of curvature
- ☒ 3. degree of curvature; deflection angle
- ☒ 4. radius; deflection angle

Question Type : MCQ
Question ID : 441009128542
Option 1 ID : 441009510786
Option 2 ID : 441009510783
Option 3 ID : 441009510785
Option 4 ID : 441009510784
Status : Answered
Chosen Option : 2

Q.72 A reconnaissance survey in highway alignment primarily helps in:

- Ans ☒ 1. finalising the pavement design thickness
- ☒ 2. identifying terrain type, slope stability, material sources and flood levels
- ☒ 3. calculating Net Present Value (NPV) of the project
- ☒ 4. establishing control points with GPS

Question Type : MCQ
Question ID : 4410091242403
Option 1 ID : 4410094902968
Option 2 ID : 4410094902969
Option 3 ID : 4410094902971
Option 4 ID : 4410094902970
Status : Answered
Chosen Option : 2

Q.73 The first railway line in India was opened in 1853 between:

- Ans ☒ 1. Bombay and Madras
- ☒ 2. Howrah and Raniganj
- ☒ 3. Delhi and Agra
- ☒ 4. Bombay and Thane

Question Type : MCQ
Question ID : 4410091242349
Option 1 ID : 4410094902752
Option 2 ID : 4410094902754
Option 3 ID : 4410094902755
Option 4 ID : 4410094902753
Status : Not Answered
Chosen Option : --

Q.74 What is a common construction-related use of Plaster of Paris (POP)?

- Ans ☒ 1. For waterproofing exterior walls
- ☒ 2. For ornamental mouldings and ceiling decorations
- ☒ 3. As a replacement for brick in structural walls
- ☒ 4. As a coarse aggregate in concrete

Question Type : MCQ
Question ID : 4410091180272
Option 1 ID : 4410094655214
Option 2 ID : 4410094655213
Option 3 ID : 4410094655215
Option 4 ID : 4410094655212
Status : Answered
Chosen Option : 2

Q.75 Read the given statement and conclusion, and select the correct option.

Statement: Retro-reflective road studs are installed to improve visibility at night and during adverse weather conditions.
Conclusion: Use of road studs eliminates the need for painted longitudinal markings.

- Ans ☒ 1. Statement is false, but Conclusion is true
- ☒ 2. Statement is true, but Conclusion is false
- ☒ 3. Both Statement and Conclusion are true, but Conclusion does not explain the Statement
- ☒ 4. Both Statement and Conclusion are true, and Conclusion correctly explains the Statement

Question Type : MCQ
Question ID : 4410091242740
Option 1 ID : 4410094904300
Option 2 ID : 4410094904299
Option 3 ID : 4410094904302
Option 4 ID : 4410094904301
Status : Answered
Chosen Option : 2

Q.76 If Biochemical Oxygen Demand (BOD) removal efficiency of an aerobic process is 90%, find the effluent sewage BOD, given that the influent sewage BOD is 200 mg/L.

- Ans ☒ 1. 25 mg/L
- ☒ 2. 20 mg/L
- ☒ 3. 30 mg/L
- ☒ 4. 10 mg/L

Question Type : MCQ
Question ID : 4410091259786
Option 1 ID : 4410094972036
Option 2 ID : 4410094972035
Option 3 ID : 4410094972037
Option 4 ID : 4410094972034
Status : Answered
Chosen Option : 2

Q.77 Match the items in List-I with the items in List-II.

| List-I | List-II |
|------------------------|---|
| A. Moulding | 1. Removal of excess water content |
| B. Drying | 2. Shaping clay into brick forms |
| C. Burning | 3. Heating bricks to gain hardness |
| D. Preparation of clay | 4. Removal of impurities and grinding of clay |

- Ans ☒ 1. A-2, B-4, C-1, D-3
- ☒ 2. A-2, B-1, C-3, D-4
- ☒ 3. A-1, B-2, C-3, D-4
- ☒ 4. A-4, B-2, C-1, D-3

Question Type : MCQ
Question ID : 4410091182682
Option 1 ID : 4410094664779
Option 2 ID : 4410094664777
Option 3 ID : 4410094664778
Option 4 ID : 4410094664780
Status : Answered
Chosen Option : 2

Q.78 The minimum percentage of longitudinal reinforcement in an RCC column should not be less than _____ of the gross cross-sectional area.

- Ans ☒ 1. 0.40%
- ☒ 2. 6.00%
- ☒ 3. 0.25%
- ☒ 4. 0.80%

Question Type : MCQ
Question ID : 4410091168358
Option 1 ID : 4410094607970
Option 2 ID : 4410094607971
Option 3 ID : 4410094607972
Option 4 ID : 4410094607969
Status : Not Answered
Chosen Option : --

Q.79 Which of the following information is required for the computation of the total quantity estimate?

- Ans ☒ 1. Layout
- ☒ 2. Detailed drawing
- ☒ 3. General description
- ☒ 4. Index plan

Question Type : MCQ
Question ID : 4410091207778
Option 1 ID : 4410094764644
Option 2 ID : 4410094764642
Option 3 ID : 4410094764645
Option 4 ID : 4410094764643
Status : Answered
Chosen Option : 2

Q.80 Match the surface tension terms with their correct definition or effect.

| List-I (Term) | List-II (Definition/Effect) |
|----------------------------------|---|
| a) Surface tension (σ) | 1. Angle formed by liquid surface with solid surface at contact |
| b) Capillarity | 2. Force acting along the liquid surface per unit length |
| c) Angle of contact (θ) | 3. Energy per unit area of the liquid surface |
| d) Surface energy | 4. Curvature of liquid surface in a narrow tube due to cohesive and adhesive forces |

- Ans ☒ 1. a-4, b-3, c-1, d-2
- ☒ 2. a-3, b-4, c-1, d-2
- ☒ 3. a-3, b-2, c-4, d-1
- ☒ 4. a-2, b-4, c-1, d-3

Question Type : MCQ
Question ID : 4410091225522
Option 1 ID : 4410094835593
Option 2 ID : 4410094835592
Option 3 ID : 4410094835595
Option 4 ID : 4410094835594
Status : Answered
Chosen Option : 4

Q.81 Dupuit's equation for an equivalent pipe is used to:

- Ans ☒ 1. replace a set of pipes in parallel with a single pipe of equivalent discharge capacity
- ☒ 2. measure velocity in pipes
- ☒ 3. replace a set of pipes in series with a single pipe of equivalent discharge capacity
- ☒ 4. convert open channel flow to pipe flow

Question Type : MCQ
Question ID : 4410091205214
Option 1 ID : 4410094754373
Option 2 ID : 4410094754374
Option 3 ID : 4410094754372
Option 4 ID : 4410094754371
Status : Answered
Chosen Option : 3

Q.82 According to Abrams’ Law, what is the relationship between the water-cement ratio and the compressive strength of concrete?

- Ans ☒ 1. Compressive strength decreases with higher water-cement ratio.
- ☐ 2. Lower water-cement ratio reduces strength.
- ☐ 3. Higher water-cement ratio increases strength.
- ☐ 4. Compressive strength is independent of water-cement ratio.

Question Type : MCQ
Question ID : 4410091224859
Option 1 ID : 4410094832912
Option 2 ID : 4410094832910
Option 3 ID : 4410094832909
Option 4 ID : 4410094832911
Status : Answered
Chosen Option : 1

Q.83 Find the most analogous relationship to the following pair.

Filtration : Slow Sand Filter :: Sedimentation : ____

- Ans ☐ 1. Disinfection
- ☐ 2. Coagulation
- ☒ 3. Plain Sedimentation
- ☐ 4. Rapid Sand Filter

Question Type : MCQ
Question ID : 4410091259849
Option 1 ID : 4410094972281
Option 2 ID : 4410094972280
Option 3 ID : 4410094972278
Option 4 ID : 4410094972279
Status : Answered
Chosen Option : 3

Q.84 In the case of uniform flow, which of the following holds true?

- Ans ☐ 1. Velocity and depth vary continuously.
- ☐ 2. Velocity changes but depth remains constant.
- ☒ 3. Velocity and depth remain constant along the length of the channel.
- ☐ 4. Depth changes but velocity remains constant.

Question Type : MCQ
Question ID : 4410091213752
Option 1 ID : 4410094788417
Option 2 ID : 4410094788414
Option 3 ID : 4410094788415
Option 4 ID : 4410094788416
Status : Answered
Chosen Option : 3

Q.85 According to the Moody diagram, for laminar flow with $Re = 1000$, the friction factor is:

- Ans
- ☒ 1. 0.001
 - ☒ 2. 0.020
 - ☒ 3. 0.082
 - ☒ 4. 0.064

Question Type : MCQ
Question ID : 4410091217058
Option 1 ID : 4410094801615
Option 2 ID : 4410094801614
Option 3 ID : 4410094801613
Option 4 ID : 4410094801612
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.86 Identify the plutonic rock from the given options.

- Ans
- ☒ 1. Basalt
 - ☒ 2. Trap
 - ☒ 3. Quartz
 - ☒ 4. Granite

Question Type : MCQ
Question ID : 44100945773
Option 1 ID : 441009182282
Option 2 ID : 441009182283
Option 3 ID : 441009182284
Option 4 ID : 441009182281
Status : Answered
Chosen Option : 2

Q.87 Given below is a statement followed by two possible reasons numbered I and II. Read the statement carefully and decide which of the two reasons explain(s) the information given in the statement.

Statement:
Low heat cement is used in mass concreting works such as dams, retaining walls, piers and bridge abutments.

Conclusions:
I. Low heat cement helps in reducing the risk of thermal cracking in mass concrete.
II. Low heat cement evolves more heat than ordinary Portland cement during hydration.

- Ans
- ☒ 1. Both the conclusions I and II follow.
 - ☒ 2. Only conclusion II follows.
 - ☒ 3. Neither conclusion I nor II follows.
 - ☒ 4. Only conclusion I follows.

Question Type : MCQ
Question ID : 4410091246347
Option 1 ID : 4410094918663
Option 2 ID : 4410094918662
Option 3 ID : 4410094918664
Option 4 ID : 4410094918661
Status : Answered
Chosen Option : 4

Q.88 In the design of RC structures, the permissible bond stress in plain bars (WSM) is _____.

- Ans ☒ 1. zero
- ☒ 2. equal to that of deformed bars
- ☒ 3. less than that of deformed bars
- ☒ 4. more than that of deformed bars

Question Type : MCQ
Question ID : 4410091206128
Option 1 ID : 4410094758041
Option 2 ID : 4410094758040
Option 3 ID : 4410094758038
Option 4 ID : 4410094758039
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.89 Which plane table method is used when the instrument is set up at a point whose location is not previously known on the map?

- Ans ☒ 1. Resection
- ☒ 2. Radiation
- ☒ 3. Intersection
- ☒ 4. Traversing

Question Type : MCQ
Question ID : 441009269494
Option 1 ID : 4410091047172
Option 2 ID : 4410091047170
Option 3 ID : 4410091047171
Option 4 ID : 4410091047173
Status : Answered
Chosen Option : 1

Q.90 Select the correct option to complete the pairs of pile types and their driving methods.

Steel tube piles: Drop hammer: Rotary bored piles: _____

- Ans ☒ 1. Diesel hammer
- ☒ 2. Auger and drilling bucket
- ☒ 3. Tremie pipe
- ☒ 4. Vibratory hammer

Question Type : MCQ
Question ID : 4410091201421
Option 1 ID : 4410094739469
Option 2 ID : 4410094739468
Option 3 ID : 4410094739471
Option 4 ID : 4410094739470
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.91 What is the key difference between all-in aggregates and single size aggregates used in construction?

- Ans
- ☒ 1. All-in aggregates consist only of coarse aggregates of uniform size
 - ☒ 2. Single size aggregates are used in lean concrete only
 - ☒ 3. Single size aggregates are a mixture of coarse and fine aggregates
 - ☒ 4. All-in aggregates are a mixture of coarse and fine aggregates

Question Type : MCQ
Question ID : 4410091180247
Option 1 ID : 4410094655112
Option 2 ID : 4410094655115
Option 3 ID : 4410094655113
Option 4 ID : 4410094655114
Status : Answered
Chosen Option : 3

Q.92 Compute the revised estimate for the reinforced cement concrete item of work of 150 m³. Due to inflation in material rate, the rate per cubic metre of reinforced cement concreting has increased from ₹4,500/m³ to ₹6,000/m³.

- Ans
- ☒ 1. ₹8,75,000
 - ☒ 2. ₹9,00,000
 - ☒ 3. ₹6,75,000
 - ☒ 4. ₹8,00,000

Question Type : MCQ
Question ID : 4410091205536
Option 1 ID : 4410094755677
Option 2 ID : 4410094755676
Option 3 ID : 4410094755675
Option 4 ID : 4410094755678
Status : Answered
Chosen Option : 2

Q.93 If an irrigation project is designed to provide an assured supply in 75 years out of 100, it is based on a:

- Ans
- ☒ 1. 75% dependable yield
 - ☒ 2. 25% dependable yield
 - ☒ 3. 95% dependable yield
 - ☒ 4. 55% dependable yield

Question Type : MCQ
Question ID : 4410091217020
Option 1 ID : 4410094801462
Option 2 ID : 4410094801460
Option 3 ID : 4410094801463
Option 4 ID : 4410094801461
Status : Answered
Chosen Option : 1

Q.94 A lead glass panel has a density of 4.2 g/cm^3 . What is the mass of a lead glass sheet measuring $1.2 \text{ m} \times 0.6 \text{ m} \times 1.0 \text{ cm}$?

- Ans
- ☒ 1. 12.00 kg
 - ☒ 2. 40.32 kg
 - ☒ 3. 30.24 kg
 - ☒ 4. 15.12 kg

Question Type : MCQ
Question ID : 4410091182408
Option 1 ID : 4410094663648
Option 2 ID : 4410094663647
Option 3 ID : 4410094663645
Option 4 ID : 4410094663646
Status : Answered
Chosen Option : 3

Q.95 A rectangular RC beam has width $b = 250 \text{ mm}$, effective depth $d = 400 \text{ mm}$, and factored shear $V_u = 60 \text{ kN}$. Calculate the nominal shear stress τ_v .

- Ans
- ☒ 1. 0.48 N/mm^2
 - ☒ 2. 0.30 N/mm^2
 - ☒ 3. 0.60 N/mm^2
 - ☒ 4. 0.90 N/mm^2

Question Type : MCQ
Question ID : 4410091224234
Option 1 ID : 4410094830396
Option 2 ID : 4410094830395
Option 3 ID : 4410094830397
Option 4 ID : 4410094830398
Status : Not Attempted and Marked For Review
Chosen Option : --

Q.96 The moment distribution method assumes all joints are_____.

- Ans
- ☒ 1. assumed to be fixed supports initially
 - ☒ 2. assumed to be free initially
 - ☒ 3. assumed to be hinged supports initially
 - ☒ 4. assumed to be rolled supports initially

Question Type : MCQ
Question ID : 4410091272658
Option 1 ID : 4410095022644
Option 2 ID : 4410095022645
Option 3 ID : 4410095022646
Option 4 ID : 4410095022647
Status : Not Answered
Chosen Option : --

Q.97 An axially loaded column is one where the load is applied at the ____.

- Ans
- ☒ 1. extreme edge of the cross section
 - ☒ 2. corner of mid-height of the column
 - ☒ 3. centroid of the cross-section
 - ☒ 4. point of maximum bending

Question Type : MCQ
Question ID : 4410091168328
Option 1 ID : 4410094607850
Option 2 ID : 4410094607849
Option 3 ID : 4410094607851
Option 4 ID : 4410094607852
Status : Answered
Chosen Option : 2

Q.98 The type of bond formed between ribbed steel and concrete due to their interlocking effect is called ____.

- Ans
- ☒ 1. adhesion bond
 - ☒ 2. chemical bond
 - ☒ 3. friction bond
 - ☒ 4. mechanical bond

Question Type : MCQ
Question ID : 4410091206599
Option 1 ID : 4410094759945
Option 2 ID : 4410094759944
Option 3 ID : 4410094759942
Option 4 ID : 4410094759943
Status : Answered
Chosen Option : 1

Q.99 Which of the following is the correct pair related to the application and classification of bricks?

- Ans
- ☒ 1. Fourth-class bricks – Decorative facing works
 - ☒ 2. First-class bricks – Load-bearing walls
 - ☒ 3. Second-class bricks – Paving of roads
 - ☒ 4. Third-class bricks – External exposed walls

Question Type : MCQ
Question ID : 4410091182707
Option 1 ID : 4410094664888
Option 2 ID : 4410094664885
Option 3 ID : 4410094664886
Option 4 ID : 4410094664887
Status : Answered
Chosen Option : 2

Q.10 The value of the dismantled building materials of a residential building is ₹1,50,000. Which of the following value of the building does it represent?

- Ans
- ☒ 1. Sinking fund
 - ☒ 2. Capital value
 - ☒ 3. Prime cost
 - ☒ 4. Scrap value

Question Type : MCQ

Question ID : 4410091207880

Option 1 ID : 4410094765039

Option 2 ID : 4410094765040

Option 3 ID : 4410094765041

Option 4 ID : 4410094765038

Status : Answered

Chosen Option : 4

