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Previous Year Paper

(Civil)

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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 m^3 .
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
 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 $\frac{1}{4}$ th 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/m^3 , 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

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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 strength
2. Use of air-entrainment	B. Contains Sulphur which may cause
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 rules

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 $4 \text{ m} \times 4 \text{ m} \times 0.125 \text{ m}$ 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 $2/3 'l'$ 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 of width
b. Neutral axis lies in web	2. Compression is shared between flange and web
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 warning

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

