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OLIC JE (Civil)

**Previous Year Paper
21 June, 2023 Shift 1**





ODISHA LIFT IRRIGATION CORPORATION LIMITED

A Government of Odisha Undertaking

Participant ID	
Participant Name	
Test Center Name	
Test Date	21/06/2023
Test Time	9:00 AM - 12:00 PM
Subject	Junior Engineer (Civil)

Section : JUNIOR ENGINEER (CIVIL)

Q.1 Study the given statements with respect to properties of plastic and identify the correct answer.

Statement A: Thermoplastic can be remoulded, it is formed by the addition of polymerisation and has long chain molecule structures.

Statement B: Thermosetting can be remoulded, it is formed by the addition of polymerisation and has long chain molecule structures.

Ans 1. Statement B is correct but A is incorrect

2. Both the statements are incorrect

3. Statement A is correct but B is incorrect

4. Both the statements are correct



Question ID : 630680247020

Option 1 ID : 630680958360

Option 2 ID : 630680958362

Option 3 ID : 630680958359

Option 4 ID : 630680958361

Status : Answered

Chosen Option : 3

Q.2 As per the analysis of rates by Government of Odisha, the initial lead mentioned for earth work is within _____.

Ans 1. 30 m

2. 50 m

3. 15 m

4. 75 m

Question ID : 630680246884

Option 1 ID : 630680957817

Option 2 ID : 630680957818

Option 3 ID : 630680957815

Option 4 ID : 630680957816

Status : Answered

Chosen Option : 1

Q.3 Study the given statements with respect to planning and building standards set by Odisha development authorities and identify the correct answer.

Statement A: The applicant shall deposit a refundable non-earning security deposit if the type of structure is commercial and institutional buildings have 100 square meters built-up area or more.

Statement B: The security deposit mentioned in statement A shall be refunded to the applicants within 30 days from the date of issue of occupancy certificate.

Ans 1. Both the statements are incorrect

2. Statement B is correct but A is incorrect

3. Both the statements are correct

4. Statement A is correct but B is incorrect

Question ID : 630680246994

Option 1 ID : 630680958258

Option 2 ID : 630680958256

Option 3 ID : 630680958257

Option 4 ID : 630680958255

Status : Answered

Chosen Option : 4

Q.4 Which of the following activities must be completed immediately before the beginning of another activity?

Ans 1. Predecessor activity

2. Successor activity

3. Dummy activity

4. Concurrent activity

Question ID : 630680247009

Option 1 ID : 630680958315

Option 2 ID : 630680958316

Option 3 ID : 630680958318

Option 4 ID : 630680958317

Status : Answered

Chosen Option : 3

Q.5 The unit of measurement used for estimating quantity of expansion joint is ____.

Ans 1. numbers

2. running metre

3. cubic metres

4. square metres

Question ID : 630680246877

Option 1 ID : 630680957789

Option 2 ID : 630680957787

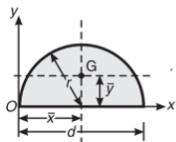
Option 3 ID : 630680957790

Option 4 ID : 630680957788

Status : Answered

Chosen Option : 2

Q.6 A semi-circular lamina with X and Y reference axes is shown in the figure. Calculate the value of ' \bar{Y} ', if the radius $r = 30$ mm.



Ans

- 1. $\frac{60}{\pi}$ mm
- 2. $\frac{40}{\pi}$ mm
- 3. $\frac{30}{\pi}$ mm
- 4. $\frac{120}{\pi}$ mm

Question ID : 630680246848

Option 1 ID : 630680957674

Option 2 ID : 630680957671

Option 3 ID : 630680957673

Option 4 ID : 630680957672

Status : Not Answered

Chosen Option : --

Q.7 Which of the following IS codes provides guidelines for wind load calculations on structures?

Ans

- 1. IS 875(Part 1):2015
- 2. IS 875(Part 2):2015
- 3. IS 875(Part 4):2015
- 4. IS 875(Part 3):2015



Question ID : 630680247015

Option 1 ID : 630680958339

Option 2 ID : 630680958340

Option 3 ID : 630680958342

Option 4 ID : 630680958341

Status : Answered

Chosen Option : 4

Q.8 Bureau of Indian Standards (BIS) has categorised the regions in India into _____ seismic zones.

Ans

- 1. 4
- 2. 7
- 3. 3
- 4. 15

Question ID : 630680247016

Option 1 ID : 630680958344

Option 2 ID : 630680958346

Option 3 ID : 630680958343

Option 4 ID : 630680958345

Status : Answered

Chosen Option : 1

Q.9 Which of the following stones is classified as sedimentary rock?

Ans 1. Laterite stone
 2. Kankar
 3. Marble
 4. Serpentine

Question ID : 630680246867

Option 1 ID : 630680957750

Option 2 ID : 630680957748

Option 3 ID : 630680957749

Option 4 ID : 630680957747

Status : **Answered**

Chosen Option : 1

Q.10 Identify the correct statement from the given options.

Ans 1. Sugarcane is an eight-month crop.
 2. Ratio of the area irrigated in Kharif season to the area irrigated in Rabi season is called as crop ratio.
 3. In India, the Kharif season spans mostly from July to October.
 4. Wheat is classified as a Kharif crop.

Question ID : 630680246919

Option 1 ID : 630680957957

Option 2 ID : 630680957955

Option 3 ID : 630680957958

Option 4 ID : 630680957956

Status : **Answered**

Chosen Option : 2

Q.11 Study the given statements with respect to type of brick bonds and identify the correct answer.

Statement A: Header bond Is considered to be stronger than English bond for the given thickness.

Statement B: In the double Flemish bond, each course presents the same appearance, both in front and back face.

Ans 1. Statement B is correct but A is incorrect
 2. Both the statements are correct
 3. Statement A is correct but B is incorrect
 4. Both the statements are incorrect

Question ID : 630680246874

Option 1 ID : 630680957776

Option 2 ID : 630680957777

Option 3 ID : 630680957775

Option 4 ID : 630680957778

Status : **Answered**

Chosen Option : 2

Q.12 As per IS 875(part2): 1987, the imposed floor load on corridors of a dwelling house is _____.

Ans 1. 1.5 kN/m²
 2. 1.8 kN/m²
 3. 2 kN/m²
 4. 3 kN/m²

Question ID : 630680246899
Option 1 ID : 630680957876
Option 2 ID : 630680957878
Option 3 ID : 630680957877
Option 4 ID : 630680957875
Status : **Answered**
Chosen Option : 2

Q.13 Primary treatment of wastewater includes _____.

Ans 1. sludge stabilisation
 2. sedimentation tank
 3. biological decomposition
 4. screens, grit chamber, skimming tank

Question ID : 630680246977
Option 1 ID : 630680958190
Option 2 ID : 630680958188
Option 3 ID : 630680958189
Option 4 ID : 630680958187
Status : **Not Answered**
Chosen Option : --

Q.14 As per CPHEEO, 2013, the minimum width of manhole should NOT be less than _____.

Ans 1. internal diameter of the sewer pipe plus 250 mm benching on both the sides
 2. internal diameter of the sewer pipe plus 150 mm benching on both the sides
 3. internal diameter of the sewer pipe plus 200 mm benching on both the sides
 4. internal diameter of the sewer pipe plus 300 mm benching on both the sides

Question ID : 630680246978
Option 1 ID : 630680958193
Option 2 ID : 630680958191
Option 3 ID : 630680958192
Option 4 ID : 630680958194
Status : **Answered**
Chosen Option : 4

Q.15 In the design of a two-way slab, the flexural reinforcement required in a shorter span is found to be $400 \text{ mm}^2/\text{m}$. Calculate the required spacing, if 10 mm diameter steel bars are to be used.

Ans 1. $40.5\pi \text{ mm}$
 2. $68.5\pi \text{ mm}$
 3. $62.5\pi \text{ mm}$
 4. $16\pi \text{ mm}$

Question ID : 630680246900

Option 1 ID : 630680957881

Option 2 ID : 630680957882

Option 3 ID : 630680957880

Option 4 ID : 630680957879

Status : Not Answered

Chosen Option : --

Q.16 Which of the following empirical formulas is suggested by "Dicken" to estimate flood discharge (Q)? Where, 'A' is catchment area and 'C' is flood coefficient.

Ans 1. $Q = AC^{1/2}$
 2. $Q = AC^{1/3}$
 3. $Q = CA^{3/4}$
 4. $Q = CA^{2/3}$

Question ID : 630680246917

Option 1 ID : 630680957950

Option 2 ID : 630680957949

Option 3 ID : 630680957948

Option 4 ID : 630680957947

Status : Answered

Chosen Option : 3

Q.17 _____ is an ill effect of deforestation.

Ans 1. Positive effect on productivity
 2. Decrement in greenhouse gas
 3. Land erosion and landslides
 4. High per capita forestland

Question ID : 630680246889

Option 1 ID : 630680957835

Option 2 ID : 630680957838

Option 3 ID : 630680957836

Option 4 ID : 630680957837

Status : Answered

Chosen Option : 3

Q.18 Which of the following is NOT a threat to biodiversity?

Ans 1. Afforestation
 2. Habitats loss
 3. Poaching of wild life
 4. Man wild life conflict

Question ID : 630680246893

Option 1 ID : 630680957851

Option 2 ID : 630680957854

Option 3 ID : 630680957852

Option 4 ID : 630680957853

Status : **Not Answered**

Chosen Option : --

Q.19 Identify the INCORRECT statement with respect to methods of booking and reducing the elevation of points by observed staff readings.

Ans 1. Addition of fore sight staff reading with the elevation of bench marks provides height of the instrument.
 2. The difference of level between consecutive points is found by comparing staff readings on the two points for same setting of the instrument is taken in rise and fall method.
 3. Height of instrument method is more rapid, less tedious and simple when compared to rise and fall method.
 4. Sum of rise minus sum of fall shall be equal to last reduced level minus first reduced level to have no errors.

Question ID : 630680246934

Option 1 ID : 630680958018

Option 2 ID : 630680958016

Option 3 ID : 630680958015

Option 4 ID : 630680958017

Status : **Answered**

Chosen Option : 1

Q.20 Identify the INCORRECT statement with respect to continuity equation used to understand kinematics of flow.

Ans 1. For a fluid flowing through the pipe at all the cross-sections, the quantity of fluid is constant.
 2. The continuity equation is based on the principle of conservation of mass.
 3. Continuity equation is not applicable to incompressible fluids.
 4. Continuity equation is applicable to compressible fluids.

Question ID : 630680246912

Option 1 ID : 630680957928

Option 2 ID : 630680957927

Option 3 ID : 630680957930

Option 4 ID : 630680957929

Status : **Answered**

Chosen Option : 4

Q.21 A partially saturated soil is said to be a _____.

Ans 1. one-phase system

2. two-phase system with soil and water

3. three-phase system with soil, water and air

4. two-phase system with soil and air

Question ID : 630680246863

Option 1 ID : 630680957731

Option 2 ID : 630680957732

Option 3 ID : 630680957734

Option 4 ID : 630680957733

Status : Answered

Chosen Option : 3

Q.22 Identify the correct statement with respect to door and its components in a residential building.

Ans 1. Height of door is normally kept 3.5 m.

2. The length of horn is normally kept 10 to 15 mm.

3. The uppermost horizontal part of the door is called as sill.

4.

The recess made inside the door frame to receive the door shutter is called rebate.

Question ID : 630680246875

Option 1 ID : 630680957779

Option 2 ID : 630680957780

Option 3 ID : 630680957782

Option 4 ID : 630680957781

Status : Answered

Chosen Option : 2

Q.23 Which of the following IS codes deals with "code of practice for use of steel tubes in general building construction"?

Ans 1. IS :806-1968 (Reaffirmed 2008)

2. IS :2386-1968 (Reaffirmed 2008)

3. IS :752-1968 (Reaffirmed 2008)

4. IS :800-1968 (Reaffirmed 2008)

Question ID : 630680246966

Option 1 ID : 630680958143

Option 2 ID : 630680958146

Option 3 ID : 630680958145

Option 4 ID : 630680958144

Status : Answered

Chosen Option : 4

Q.24 As per Odisha Works Department, what is the technical sanction limit given to a Chief Engineer, to accord administrative approval to projects of original works?

Ans 1. 25 lakh
 2. 19.5 lakh
 3. 10 lakh
 4. 2.75 lakh

Question ID : 630680246993

Option 1 ID : 630680958254

Option 2 ID : 630680958251

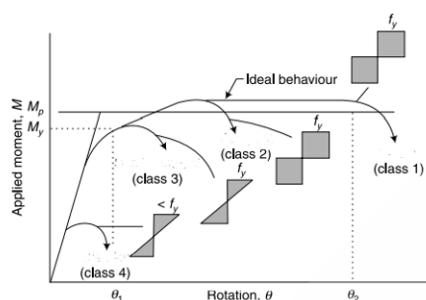
Option 3 ID : 630680958253

Option 4 ID : 630680958252

Status : Answered

Chosen Option : 1

Q.25 Moment rotation behaviour of the four classes of cross-sections which are necessary for limit state design of steel beams is shown in the figure. Class 1 section is also called _____.



Ans 1. Compact section
 2. Semi compact section
 3. Slender section
 4. Plastic section

Question ID : 630680246962

Option 1 ID : 630680958129

Option 2 ID : 630680958128

Option 3 ID : 630680958130

Option 4 ID : 630680958127

Status : Answered

Chosen Option : 4

Q.26 The direction of a line 'CD' is found to be $243^{\circ}30'$ in whole circle bearing system. The converted direction of same line in quadrantal bearing system is _____.

Ans 1. S $43^{\circ}30'$ W
 2. N $243^{\circ}30'$ E
 3. N $116^{\circ}30'$ W
 4. S $63^{\circ}30'$ W

Question ID : 630680246931

Option 1 ID : 630680958005

Option 2 ID : 630680958006

Option 3 ID : 630680958003

Option 4 ID : 630680958004

Status : Answered

Chosen Option : 4

Q.27 Total station measures _____.

Ans 1. horizontal angle, vertical angle and slope distance only
 2. horizontal angle only
 3. horizontal angle, vertical angle, slope distance and area
 4. vertical angle and slope distance only

Question ID : 630680247006

Option 1 ID : 630680958305

Option 2 ID : 630680958303

Option 3 ID : 630680958306

Option 4 ID : 630680958304

Status : Answered

Chosen Option : 3

Q.28 Study the given statements with respect to diversion head works constructed at the head of the canal and identify the correct answer.

Statement A: If a major part or the entire ponding of water is achieved by a raised crest and a smaller part or nil part of it is achieved by the shutters, then this barrier is called a barrage.

Statement B: If a major part or the entire ponding of water is achieved by a raised crest and a smaller part or nil part of it is achieved by the shutters, then this barrier is called a weir.

Ans 1. Statement A is correct but B is incorrect
 2. Statement B is correct but A is incorrect
 3. Both the statements are correct
 4. Both the statements are incorrect

Question ID : 630680246925

Option 1 ID : 630680957979

Option 2 ID : 630680957980

Option 3 ID : 630680957981

Option 4 ID : 630680957982

Status : Answered

Chosen Option : 1

Q.29 Study the given statements with respect to type of switches on railways and identify the correct answer.

Statement A: Stud switches are no more in use on Indian railways.

Statement B: Split switches consist of a pair of stock rails and a pair of tongue rails.

Ans 1. Statement A is correct but B is incorrect
 2. Both the statements are correct
 3. Both the statements are incorrect
 4. Statement B is correct but A is incorrect

Question ID : 630680246972

Option 1 ID : 630680958167

Option 2 ID : 630680958169

Option 3 ID : 630680958170

Option 4 ID : 630680958168

Status : Answered

Chosen Option : 2

Q.30 What is the maximum acceptable and permissible (in absence of alternate source) limit of chloride (in mg/l) for drinking water, respectively, as per latest revised, updated and amended code IS: 10500?

Ans 1. 5000 mg/l and 15000 mg/l
 2. 100 mg/l and 500 mg/l
 3. 250 mg/l and 1000 mg/l
 4. 500 mg/l and 10000 mg/l

Question ID : 630680246991
Option 1 ID : 630680958246
Option 2 ID : 630680958243
Option 3 ID : 630680958244
Option 4 ID : 630680958245
Status : Answered
Chosen Option : 3

Q.31 The atmospheric pressure head of mercury is _____.

Ans 1. 760 mm
 2. 1013 mm
 3. 450 mm
 4. 500 mm

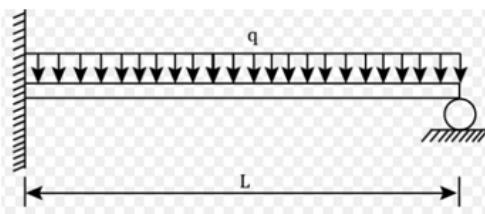
Question ID : 630680246910
Option 1 ID : 630680957920
Option 2 ID : 630680957922
Option 3 ID : 630680957921
Option 4 ID : 630680957919
Status : Answered
Chosen Option : 1

Q.32 The aggregates impact value should NOT exceed _____ for aggregates to be used in wearing course of pavement.

Ans 1. 15%
 2. 45%
 3. 60%
 4. 30%

Question ID : 630680246946
Option 1 ID : 630680958063
Option 2 ID : 630680958066
Option 3 ID : 630680958065
Option 4 ID : 630680958064
Status : Answered
Chosen Option : 4

Q.33 Identify the type of beam by referring to the type of supports shown in the figure.



Ans

- 1. Propped cantilever beam
- 2. Inverted beam
- 3. Fixed beam
- 4. Cantilever beam

Question ID : 630680246853
Option 1 ID : 630680957693
Option 2 ID : 630680957694
Option 3 ID : 630680957692
Option 4 ID : 630680957691
Status : Answered
Chosen Option : 1

Q.34 Which of the following type of chains is 66 feet long and consist of 100 links, each link being 0.6 foot long?

Ans

- 1. Metric chain
- 2. Engineer's chain
- 3. Gunter's chain
- 4. Revenue chain



Question ID : 630680246927
Option 1 ID : 630680957989
Option 2 ID : 630680957990
Option 3 ID : 630680957988
Option 4 ID : 630680957987
Status : Answered
Chosen Option : 3

Q.35 Study the given statements with respect to coefficient of runoff used for flood estimation and identify the correct answer.

Statement A: Coefficient of runoff depends on the nature of catchment surface.

Statement B: Coefficient of runoff depends on surface slope and rainfall intensity.

Ans

- 1. Statement B is correct but A is incorrect
- 2. Both the statements are incorrect
- 3. Statement A is correct but B is incorrect
- 4. Both the statements are correct

Question ID : 630680246920
Option 1 ID : 630680957960
Option 2 ID : 630680957962
Option 3 ID : 630680957959
Option 4 ID : 630680957961
Status : Answered
Chosen Option : 4

Q.36 According to IS-3025 (2006), the indicator used while calculating COD (Chemical Oxygen Demand) experimentally is _____.

Ans 1. starch
 2. ferroin
 3. silver nitrate
 4. ethylenediaminetetraacetic acid (edta)

Question ID : 630680246979
Option 1 ID : 630680958195
Option 2 ID : 630680958196
Option 3 ID : 630680958198
Option 4 ID : 630680958197
Status : **Answered**
Chosen Option : 4

Q.37 Dead end pipe system for water supply is suitable _____.

Ans 1. for cities with rectangular layout
 2. for cities where pipes to be laid radially
 3. for old towns and cities
 4. where it can be supplied to any point from two directions

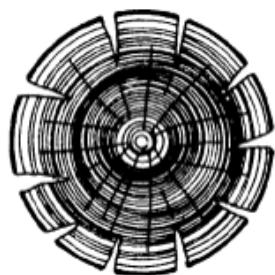
Question ID : 630680246983
Option 1 ID : 630680958212
Option 2 ID : 630680958213
Option 3 ID : 630680958211
Option 4 ID : 630680958214
Status : **Answered**
Chosen Option : 3

Q.38 As per Odisha works department, what is the technical sanction limit is given to a Superintendent Engineer (SE), to accord technical sanction to detailed, revised or supplementary estimates for original and repair subject to the condition that fresh administrative approval is sought if the detailed, revised or supplementary estimates exceed the original by 10% or more?

Ans 1. 19.5 lakh
 2. 25 lakh
 3. 2.75 lakh
 4. 10 lakh

Question ID : 630680246996
Option 1 ID : 630680958263
Option 2 ID : 630680958266
Option 3 ID : 630680958264
Option 4 ID : 630680958265
Status : **Answered**
Chosen Option : 4

Q.39 Identify the type of defect in timber shown in the figure.



Ans

- 1. Rind galls
- 2. Knots
- 3. Shakes
- 4. Twisted fibres

Question ID : 630680246870

Option 1 ID : 630680957759

Option 2 ID : 630680957761

Option 3 ID : 630680957760

Option 4 ID : 630680957762

Status : Answered

Chosen Option : 1

Q.40 In a reinforced cement concrete structure, a deformed bar of diameter 20 mm confirming to IS-1786 is subjected to tension, calculate its development length to be provided. Take design bond stress in limit state method for 20 mm plain bar subjected to tension as 1.5 N/mm² and grade of steel Fe415.

Ans

- 1. 752.18 mm
- 2. 1383.33 mm
- 3. 864.58 mm
- 4. 1203.5 mm

Question ID : 630680246903

Option 1 ID : 630680957892

Option 2 ID : 630680957893

Option 3 ID : 630680957891

Option 4 ID : 630680957894

Status : Not Answered

Chosen Option : --

Q.41 Which of the following is NOT a type of prefabricated construction system?

Ans

- 1. Partial prefabricated open system
- 2. Large panel prefabricated system
- 3. Open prefabricated system
- 4. Granular prefabricated system

Question ID : 630680247024

Option 1 ID : 630680958376

Option 2 ID : 630680958377

Option 3 ID : 630680958375

Option 4 ID : 630680958378

Status : Answered

Chosen Option : 4

Q.42 Identify the INCORRECT statement with respect to effects of waterlogging on agricultural land.

Ans 1. Water logging leads to growth of wild flora.

2. Soil temperature reduces due to water logging.

3.

Water logging leads to accumulation of alkali salts on the soil surface.

4. Water logging increases the activity of soil bacteria.

Question ID : 630680246923

Option 1 ID : 630680957973

Option 2 ID : 630680957972

Option 3 ID : 630680957974

Option 4 ID : 630680957971

Status : **Answered**

Chosen Option : 2

Q.43 Identify the INCORRECT statement with respect to shear strength of bolts.

Ans 1.

Shear capacity reduction factor for packing plates is applied, when the packing plates are more than 6 mm in thickness.

2.

Shear capacity reduction factor for long joint is applied when the length of joint exceeds 15 times the nominal diameter of bolt.

3.

Shear capacity reduction factor for large grip lengths is applied if the total thickness of connected plates exceeds three times the nominal diameter of bolt.

4.

The shearing strength of a bolt can be maximum in double shear.

Question ID : 630680246959

Option 1 ID : 630680958118

Option 2 ID : 630680958116

Option 3 ID : 630680958117

Option 4 ID : 630680958115

Status : **Answered**

Chosen Option : 3

Q.44 As per IS standards, the percentage of passing through 150 μm IS Sieve shall NOT be greater than _____ for crushed stone sands.

Ans 1. 5%

2. 10%

3. 20%

4. 15%

Question ID : 630680247021

Option 1 ID : 630680958363

Option 2 ID : 630680958364

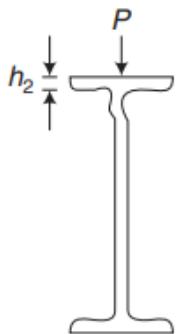
Option 3 ID : 630680958366

Option 4 ID : 630680958365

Status : **Answered**

Chosen Option : 1

Q.45 Identify the type of beam failure shown in the figure.



Ans

- 1. Failure by web kinks
- 2. Failure by web crippling
- 3. Failure by flexure
- 4. Failure by web buckling

Question ID : 630680246964

Option 1 ID : 630680958137

Option 2 ID : 630680958135

Option 3 ID : 630680958138

Option 4 ID : 630680958136

Status : Answered

Chosen Option : 4

Q.46 Which of the following IS standards specifies requirements for a quality management system, when an organisation needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements?

Ans

- 1. ISO 18000:2015
- 2. ISO 9001:2015
- 3. ISO 14001:2015
- 4. ISO 10500:2015

Question ID : 630680246954

Option 1 ID : 630680958097

Option 2 ID : 630680958096

Option 3 ID : 630680958095

Option 4 ID : 630680958098

Status : Not Answered

Chosen Option : --

Q.47 Identify the INCORRECT statement with respect to prefabrication construction.

Ans 1.

Prefabrication construction requires extra reinforcement to take care of handling and erection stresses.

2.

Standardisation is one of the design principles of prefabricated systems.

3. Structures that are used repeatedly, can be standardised.

4.

Panelised prefabrication is often referred to as modular prefabrication.

Question ID : 630680247023

Option 1 ID : 630680958372

Option 2 ID : 630680958373

Option 3 ID : 630680958374

Option 4 ID : 630680958371

Status : Answered

Chosen Option : 1

Q.48 In a triaxial compression test, the ratio of length to the diameter of the soil specimen is kept as _____.

Ans 1. 2.5 to 3

2. 1 to 1.5

3. 2 to 2.5

4. 2

Question ID : 630680246861

Option 1 ID : 630680957725

Option 2 ID : 630680957723

Option 3 ID : 630680957724

Option 4 ID : 630680957726

Status : Answered

Chosen Option : 3

Q.49 "Malgudi Days", a collection of short stories by RK Narayan is an example of _____ type of intellectual property.

Ans 1. trade mark

2. geographical indication

3. copyright

4. patent

Question ID : 630680246956

Option 1 ID : 630680958104

Option 2 ID : 630680958106

Option 3 ID : 630680958105

Option 4 ID : 630680958103

Status : Answered

Chosen Option : 3

Q.50 The highest level of the ground water table should be kept well below the level of subgrade, preferably by at least _____.

Ans 1. 1.2 m
 2. 0.5 m
 3. 2.0 m
 4. 2.4 m

Question ID : 630680246944
Option 1 ID : 630680958056
Option 2 ID : 630680958055
Option 3 ID : 630680958057
Option 4 ID : 630680958058
Status : Answered
Chosen Option : 1

Q.51 Study the given statements with respect to pressure exerted on an immersed surface and identify the correct answer.

Statement A: Centre of pressure lies below the centre of gravity of the vertical faces.

Statement B: The distance of centre of pressure from free surface of liquid depends on the density of the liquid.

Ans 1. Both the statements are incorrect
 2. Statement B is correct but A is incorrect
 3. Statement A is correct but B is incorrect
 4. Both the statements are correct

Question ID : 630680246911
Option 1 ID : 630680957926
Option 2 ID : 630680957924
Option 3 ID : 630680957923
Option 4 ID : 630680957925
Status : Answered
Chosen Option : 3

Q.52 Magnetic bearing of a line XY is $S\ 30^\circ\ 30' E$. Calculate its true bearing, if the magnetic declination at that place is $2^\circ\ 30' E$.

Ans 1. $S\ 28^\circ\ 00' E$
 2. $S\ 33^\circ\ 00' E$
 3. $S\ 30^\circ\ 30' E$
 4. $S\ 35^\circ\ 30' E$

Question ID : 630680246930
Option 1 ID : 630680958001
Option 2 ID : 630680958000
Option 3 ID : 630680957999
Option 4 ID : 630680958002
Status : Answered
Chosen Option : 1

Q.53 In traverse surveying, the direction of a survey line 'PQ' of length 90 m measured in whole circle bearing system is found to be $60^{\circ}00'$. Calculate the latitude of the survey line.

Ans 1. 90 m
 2. 77.94 m
 3. 63.33 m
 4. 45 m

Question ID : 630680246929
Option 1 ID : 630680957995
Option 2 ID : 630680957998
Option 3 ID : 630680957997
Option 4 ID : 630680957996
Status : Answered
Chosen Option : 4

Q.54 Which of the following is NOT a water borne disease?

Ans 1. Asthma
 2. Dysentery
 3. Cholera
 4. Typhoid

Question ID : 630680246896
Option 1 ID : 630680957866
Option 2 ID : 630680957865
Option 3 ID : 630680957863
Option 4 ID : 630680957864
Status : Answered
Chosen Option : 1

Q.55 The approximate specific gravity value of a soil constituent 'Kaolinite' is _____.

Ans 1. 1.65
 2. 5.62
 3. 2.64
 4. 3.15

Question ID : 630680246859
Option 1 ID : 630680957717
Option 2 ID : 630680957716
Option 3 ID : 630680957715
Option 4 ID : 630680957718
Status : Answered
Chosen Option : 2

Q.56 Identify the correct statement with respect to different components of a building.

Ans 1.

Stretcher bond is considered to be stronger than English bond for the given thickness.

2. Partition walls should be designed to carry the roof loads.

3.

Thermal insulation efficiency of cavity walls is better than that of solid walls for the given thickness.

4.

Lintel beams are built between sub structure and super structure of a building, so that load is distributed uniformly.

Question ID : 630680246872

Option 1 ID : 630680957770

Option 2 ID : 630680957767

Option 3 ID : 630680957769

Option 4 ID : 630680957768

Status : Answered

Chosen Option : 1

Q.57 Which of the following expressions is correct to calculate the focal length (f) of a lens, if 'p' is the distance between the object and the lens (object distance), and 'i' is the distance between the image and the lens (image distance).

Ans

1. $f = \frac{p * i}{2(p + i)}$

2. $f = \frac{p * i}{p + i}$

3. $f = \frac{p + i}{p * i}$

4. $f = \frac{2p * i}{p + i}$

Question ID : 630680247000

Option 1 ID : 630680958281

Option 2 ID : 630680958280

Option 3 ID : 630680958279

Option 4 ID : 630680958282

Status : Not Answered

Chosen Option : --

Q.58 The nominal muster roll is also called _____.

Ans

1. Form 8

2. Form 27

3. Form 21

4. Form 32

Question ID : 630680246995

Option 1 ID : 630680958260

Option 2 ID : 630680958261

Option 3 ID : 630680958259

Option 4 ID : 630680958262

Status : Answered

Chosen Option : 3

Q.59 Which of the following is a disadvantage of separate sewerage system?

Ans 1.

This system may be less costly as only sanitary sewage is transported in closed conduit.

2.

The quantity to be treated at sewage treatment plant is small, resulting in economy of treatment.

3.

This system will require maintenance of two sets of pipelines and hence maintenance cost is more.

4.

When pumping is required during disposal, this system is economical due to less flow.

Question ID : 630680246981

Option 1 ID : 630680958204

Option 2 ID : 630680958203

Option 3 ID : 630680958205

Option 4 ID : 630680958206

Status : Answered

Chosen Option : 3

Q.60 The limiting percentage of tension reinforcement for a singly reinforced beam sections shall be _____ if Fe 415 steel is used.

Ans 1. $0.0320 f_{ck}$

2. $0.0820 f_{ck}$

3. $0.0150 f_{ck}$

4. $0.0480 f_{ck}$

Question ID : 630680246901

Option 1 ID : 630680957885

Option 2 ID : 630680957883

Option 3 ID : 630680957886

Option 4 ID : 630680957884

Status : Answered

Chosen Option : 4

Q.61 As mentioned in schedule of rate by the Government of Odisha Works Department, the stones filled in a box heap of size _____ to be measured as $1 m^3$.

Ans 1. $1.6 m \times 1.6 m \times 0.44$ mis

2. $1.5 m \times 1.5 m \times 0.44$ mis

3. $1.3 m \times 1.3 m \times 0.48$ mis

4. $1.2 m \times 1.2 m \times 0.46$ mis

Question ID : 630680246882

Option 1 ID : 630680957810

Option 2 ID : 630680957808

Option 3 ID : 630680957809

Option 4 ID : 630680957807

Status : Answered

Chosen Option : 2

Q.62 Which valve is used for manually controlling the flow of water in domestic water supply?

Ans 1. Non-return valve
 2. Check valve
 3. Globe valve
 4. Pressure relief valve

Question ID : 630680246985

Option 1 ID : 630680958220

Option 2 ID : 630680958221

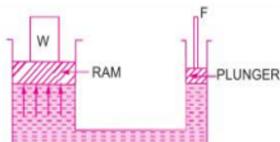
Option 3 ID : 630680958219

Option 4 ID : 630680958222

Status : Answered

Chosen Option : 2

Q.63 A hydraulic press has a ram of cross-section area 40×40 cm and a plunger of cross-section area 4×4 cm, as shown in the figure. Find the force 'F' required to lift the weight. 'W' = 40 kN.



Ans 1. 400 N
 2. 40,000 N
 3. 40 N
 4. 4 N

Question ID : 630680246909

Option 1 ID : 630680957917

Option 2 ID : 630680957915

Option 3 ID : 630680957916

Option 4 ID : 630680957918

Status : Answered

Chosen Option : 2

Q.64 Identify the INCORRECT statement with respect to different types of pipe flow.

Ans 1. The type of flow in which the fluid particles move along a well-defined streamline or paths, such that all the streamlines are straight and parallel to each other is known as laminar flow.
 2. The fluid characteristics like velocity, density, and pressure at a point do not change with time in case of steady flow.
 3. The flow in a circular pipe is categorised as laminar, when the Reynolds number for the flow is more than 4000.
 4. The velocity of the flow at any given time does not change with respect to space, in case of uniform flow.

Question ID : 630680246915

Option 1 ID : 630680957939

Option 2 ID : 630680957941

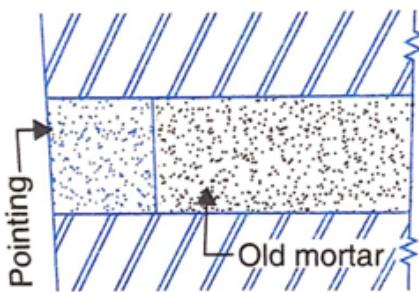
Option 3 ID : 630680957942

Option 4 ID : 630680957940

Status : Answered

Chosen Option : 3

Q.65 Identify the type of pointing shown in the figure.



Ans

- 1. Recessed pointing
- 2. Tuck pointing
- 3. Flush pointing
- 4. Beaded pointing

Question ID : 630680246876

Option 1 ID : 630680957783

Option 2 ID : 630680957786

Option 3 ID : 630680957784

Option 4 ID : 630680957785

Status : Answered

Chosen Option : 3

Q.66 As per IS standards, the width of broad gauge railway track shall be _____.

Ans

- 1. 1.575 m
- 2. 1.676 m
- 3. 1.767 m
- 4. 1.757 m

Question ID : 630680246968

Option 1 ID : 630680958153

Option 2 ID : 630680958151

Option 3 ID : 630680958152

Option 4 ID : 630680958154

Status : Answered

Chosen Option : 2

Q.67 Which of the following is not a classified mode of bearing capacity failure, when a footing fails due to insufficient bearing capacity of soil?

Ans

- 1. Local shear failure
- 2. General shear failure
- 3. Punching shear failure
- 4. Uniform shear failure

Question ID : 630680246866

Option 1 ID : 630680957744

Option 2 ID : 630680957743

Option 3 ID : 630680957745

Option 4 ID : 630680957746

Status : Answered

Chosen Option : 4

Q.68 Calculate the crippling load as per Euler's theory for long columns, if one end of a 5 m length column is fixed and other end is free. Take, E = modulus of elasticity of material used and I = Moment of inertia of beam section.

Ans 1. $1.50\pi^2EI$ kN

2. $0.01\pi^2EI$ kN

3. $0.25\pi^2EI$ kN

4. $0.025\pi^2EI$ kN

Question ID : 630680246855

Option 1 ID : 630680957702

Option 2 ID : 630680957700

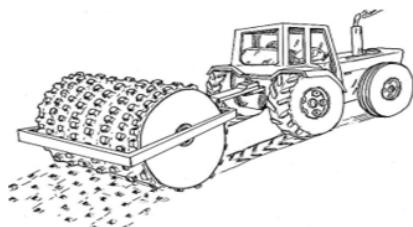
Option 3 ID : 630680957699

Option 4 ID : 630680957701

Status : Answered

Chosen Option : 2

Q.69 Identify the type of roller shown in the figure, which is used for compaction of subgrade soil.



Ans 1. Smooth wheel roller

2. Frogged roller

3. Pneumatic tyred roller

4. Sheep foot roller

Question ID : 630680246942

Option 1 ID : 630680958050

Option 2 ID : 630680958049

Option 3 ID : 630680958047

Option 4 ID : 630680958048

Status : Answered

Chosen Option : 4

Q.70 Identify the INCORRECT statement with respect to constituents used in the manufacture of plastic.

Ans 1.

Fillers are added up to 50 per cent of the moulding mixture to increase the hardness and tensile strength.

2.

Resin acts as binder for holding different constituents together.

3.

Plasticisers act as binders for holding different constituents together.

4.

Sodium bicarbonate and ammonium carbonates are added to produce porous articles.

Question ID : 630680247019

Option 1 ID : 630680958356

Option 2 ID : 630680958355

Option 3 ID : 630680958358

Option 4 ID : 630680958357

Status : Answered

Chosen Option : 3

Q.71 Study the given statements with respect to types of sections considered in working stress method (WSM) of design and identify the INCORRECT statement.

Ans 1.

The area of tension steel in an over reinforced concrete section is greater than that corresponding to balanced section.

2.

The area of tension steel in an under-reinforced concrete section is less than that corresponding to balanced section.

3.

The neutral axis depth factor (k_b) of a 'balanced (WSM)' section depends only on the permissible tensile stress in steel.

4.

The allowable moment capacity of a under reinforced concrete section is limited by the stress in concrete.

Question ID : 630680246897

Option 1 ID : 630680957868

Option 2 ID : 630680957869

Option 3 ID : 630680957870

Option 4 ID : 630680957867

Status : Answered

Chosen Option : 1

Q.72 Study the given statements and identify the correct answer.

Statement A: The elasticity for the demand of durable goods is less than unity.

Statement B: While drawing the demand curve the price of substitutes should not change.

Ans 1. Statement B is correct but A is incorrect

2. Both the statements are correct

3. Statement A is correct but B is incorrect

4. Both the statements are incorrect

Question ID : 630680246950

Option 1 ID : 630680958080

Option 2 ID : 630680958081

Option 3 ID : 630680958079

Option 4 ID : 630680958082

Status : Answered

Chosen Option : 3

Q.73 Study the given statements with respect to characteristic features used while plotting a contour plan and identify the correct answer.

Statement A: Contour lines can never be equally spaced.

Statement B: Contour lines of different elevations can cross each other in case of overhanging cliff.

Ans 1. Both the statements are correct

2. Both the statements are incorrect

3. Statement B is correct but A is incorrect

4. Statement A is correct but B is incorrect

Question ID : 630680246935

Option 1 ID : 630680958021

Option 2 ID : 630680958022

Option 3 ID : 630680958020

Option 4 ID : 630680958019

Status : Answered

Chosen Option : 3

Q.74 The modulus of elasticity of structural steel is _____.

Ans 1. $2 \times 10^2 \text{ kN/mm}^2$
 2. $2 \times 10^3 \text{ kN/mm}^2$
 3. $2 \times 10^4 \text{ kN/mm}^2$
 4. $2 \times 10^5 \text{ kN/mm}^2$

Question ID : 630680246957

Option 1 ID : 630680958107

Option 2 ID : 630680958108

Option 3 ID : 630680958109

Option 4 ID : 630680958110

Status : Answered

Chosen Option : 4

Q.75 As per IS:456:2000, the deflection including the effects of temperature, creep and shrinkage occurring after erection of partitions and the application of finishes of RC structures should NOT normally exceed _____.

Ans 1. Span/350 mm or 40 mm whichever is less
 2. Span/250 mm or 20 mm whichever is less
 3. Span/250 mm or 40 mm whichever is less
 4. Span/350 mm or 20 mm whichever is less

Question ID : 630680246905

Option 1 ID : 630680957901

Option 2 ID : 630680957899

Option 3 ID : 630680957902

Option 4 ID : 630680957900

Status : Answered

Chosen Option : 4

Q.76 Two plates are connected by means of a rivet shown in the figure. Identify the nature of stresses acting across the shank of rivet, at which both the plates touch each other tangentially.



Ans 1. Compressive stresses
 2. Shear stresses
 3. Bending stresses
 4. Tensile stresses

Question ID : 630680246849

Option 1 ID : 630680957676

Option 2 ID : 630680957677

Option 3 ID : 630680957678

Option 4 ID : 630680957675

Status : Answered

Chosen Option : 2

Q.77 The camera box of the photo theodolite can be rotated in the vertical axis of:

Ans 1. azimuth
 2. zenith
 3. horizon
 4. nadir

Question ID : 630680247005
Option 1 ID : 630680958302
Option 2 ID : 630680958299
Option 3 ID : 630680958300
Option 4 ID : 630680958301
Status : **Answered**
Chosen Option : 2

Q.78 According to IS 12269 : 2013, fineness of OPC-53 grade shall NOT be less than _____.

Ans 1. $225 \text{ m}^2/\text{kg}$
 2. $350 \text{ m}^2/\text{kg}$
 3. $280 \text{ m}^2/\text{kg}$
 4. $200 \text{ m}^2/\text{kg}$

Question ID : 630680246869
Option 1 ID : 630680957756
Option 2 ID : 630680957757
Option 3 ID : 630680957758
Option 4 ID : 630680957755
Status : **Answered**
Chosen Option : 1

Q.79 _____ settling does not change shape, size and specific gravity of particles with time.

Ans 1. Type IV
 2. Type III
 3. Type II
 4. Type I

Question ID : 630680246984
Option 1 ID : 630680958218
Option 2 ID : 630680958217
Option 3 ID : 630680958216
Option 4 ID : 630680958215
Status : **Answered**
Chosen Option : 2

Q.80 Calculate the minimum length of an overtaking zone along a highway if the calculated safe overtaking distance is 650 m.

Ans 1. 1950 m
 2. 2500 m
 3. 650 m
 4. 1300 m

Question ID : 630680246938
Option 1 ID : 630680958032
Option 2 ID : 630680958034
Option 3 ID : 630680958031
Option 4 ID : 630680958033
Status : **Answered**
Chosen Option : 1

Q.81 Which of the following statements is correct, according to Maslow's theory of motivation?

Ans 1. Job satisfaction and dissatisfaction are not opposites.

2.

Humans have three types of emotional needs such as achievement, power and affiliation.

3.

Five categories of human needs such as physiological, safety, love and belonging, esteem and self-actualisation needs dictate an individual's behaviour.

4.

There are three groups of core needs such as existence (E), relatedness (R), and growth (G) dictate an individual's behaviour.

Question ID : 630680246952
Option 1 ID : 630680958090
Option 2 ID : 630680958089
Option 3 ID : 630680958087
Option 4 ID : 630680958088
Status : **Not Answered**
Chosen Option : --

Q.82 The span of a small span bridges is up to _____.

Ans 1. 30 m
 2. 50 m
 3. 15 m
 4. 10 m

Question ID : 630680246974
Option 1 ID : 630680958177
Option 2 ID : 630680958178
Option 3 ID : 630680958176
Option 4 ID : 630680958175
Status : **Answered**
Chosen Option : 1

Q.83 Which of the following is NOT a resection method in plane table surveying?

Ans 1. Resection after orientation by back sighting
 2. Resection after orientation two point problem
 3. Resection after orientation by plumbing fork
 4. Resection after orientation three point problem

Question ID : 630680246933

Option 1 ID : 630680958012

Option 2 ID : 630680958014

Option 3 ID : 630680958011

Option 4 ID : 630680958013

Status : **Answered**

Chosen Option : 3

Q.84 Extra time by which an activity can be delayed so that succeeding activity can be started on earliest start time is known as _____.

Ans 1. penalty time
 2. total float
 3. independent float
 4. free float

Question ID : 630680247010

Option 1 ID : 630680958322

Option 2 ID : 630680958320

Option 3 ID : 630680958321

Option 4 ID : 630680958319

Status : **Answered**

Chosen Option : 4

Q.85 Study the given statements and identify the correct answer.

Statement A: Circular sewer sections can be manufactured easily and conveniently as compared to other sections.

Statement B: Circular sewers provide the maximum area for a given perimeter.

Ans 1. Statement B is correct but A is incorrect
 2. Both the statements are incorrect
 3. Statement A is correct but B is incorrect
 4. Both the statements are correct

Question ID : 630680246980

Option 1 ID : 630680958200

Option 2 ID : 630680958202

Option 3 ID : 630680958199

Option 4 ID : 630680958201

Status : **Answered**

Chosen Option : 1

Q.86 Deduction for openings in measurement of plastering is NOT done if the area of the opening is _____.

Ans 1. Less than 0.1 m^2
 2. Less than 0.5 m^2
 3. Less than 3 m^2
 4. Less than 1 m^2

Question ID : 630680246881

Option 1 ID : 630680957805

Option 2 ID : 630680957804

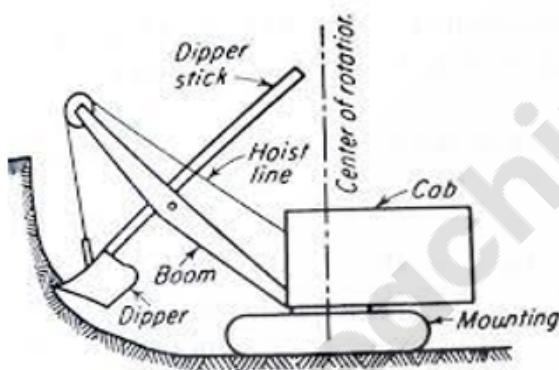
Option 3 ID : 630680957806

Option 4 ID : 630680957803

Status : Answered

Chosen Option : 2

Q.87 Identify the earth moving equipment shown in the figure.



Ans 1. Dozer
 2. Power shovel
 3. Back hoe
 4. Drag line

Question ID : 630680247026

Option 1 ID : 630680958386

Option 2 ID : 630680958383

Option 3 ID : 630680958384

Option 4 ID : 630680958385

Status : Answered

Chosen Option : 3

Q.88 Study the given statements with respect to deep and shallow foundations and identify the correct answer.

Statement A: Under reamed piles are bored cast in-situ concrete piles.

Statement B: Grillage foundations are classified as shallow foundations.

Ans 1. Both the statements are correct
 2. Statement A is correct but B is incorrect
 3. Both the statements are incorrect
 4. Statement B is correct but A is incorrect

Question ID : 630680246873

Option 1 ID : 630680957773

Option 2 ID : 630680957771

Option 3 ID : 630680957774

Option 4 ID : 630680957772

Status : Answered

Chosen Option : 1

Q.89 Identify the INCORRECT statement with respect to preparation of detailed project report (DPR).

Ans 1. A DPR consists of report, estimate and drawing of a project.
 2. A DPR is an input for planning and design phase of a project.
 3. Client and consultant's interaction plays important role in DPR preparation.
 4. A DPR is a blue print for execution and eventual operation of a project.

Question ID : 630680246951

Option 1 ID : 630680958086

Option 2 ID : 630680958085

Option 3 ID : 630680958083

Option 4 ID : 630680958084

Status : Answered

Chosen Option : 4

Q.90 Calculate the maximum spacing of vertical stirrups along the axis of the member, if the effective depth of section is 250 mm.

Ans 1. 187.5 mm
 2. 202.5 mm
 3. 231.5 mm
 4. 150 mm

Question ID : 630680246904

Option 1 ID : 630680957895

Option 2 ID : 630680957898

Option 3 ID : 630680957897

Option 4 ID : 630680957896

Status : Answered

Chosen Option : 1

Q.91 Which of the following is NOT a part of a centrifugal pump?

Ans 1. Casing
 2. Impeller
 3. Piston
 4. Foot valve and strainer

Question ID : 630680246916

Option 1 ID : 630680957943

Option 2 ID : 630680957944

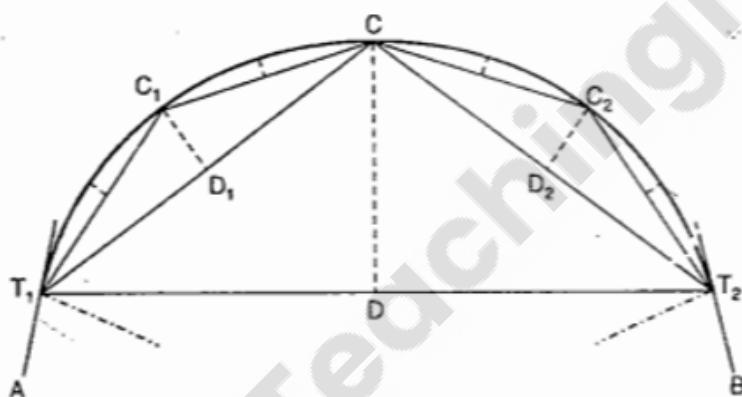
Option 3 ID : 630680957945

Option 4 ID : 630680957946

Status : Answered

Chosen Option : 4

Q.92 Identify the method of curve setting as shown in the figure.



Ans 1. Curve setting by ordinate from the long chord.
 2. Curve setting by two theodolite method.
 3. Curve setting by offset from tangents.
 4. Curve setting by successive bisection of arcs.

Question ID : 630680246998

Option 1 ID : 630680958273

Option 2 ID : 630680958274

Option 3 ID : 630680958272

Option 4 ID : 630680958271

Status : Answered

Chosen Option : 4

Q.93 Calculate the horizontal distance on a fairly level ground; if the staff intercept measured from the instrument station to a random point A on ground is found to be 1.850 m. Consider the system of Tacheometric measurement as "Stadia method". Take, multiplying constant (k) = 100 and additive constant(C) of the instrument = 0.

Ans 1. 125 m
 2. 185 m
 3. 92.5 m
 4. 18.5 m

Question ID : 630680246999
Option 1 ID : 630680958278
Option 2 ID : 630680958276
Option 3 ID : 630680958277
Option 4 ID : 630680958275
Status : **Answered**
Chosen Option : 2

Q.94 Calculate the bulking of sand if the height of sand sample is 24 cm in a graduated measuring jar and when fully saturated the height of sand is 20 cm.

Ans 1. 25%
 2. 20%
 3. 28%
 4. 22%

Question ID : 630680246864
Option 1 ID : 630680957737
Option 2 ID : 630680957735
Option 3 ID : 630680957738
Option 4 ID : 630680957736
Status : **Not Answered**
Chosen Option : --

Q.95 In CPWD department, a Chief Engineer is assisted by the _____ for co-coordinating the technical works and progress of various schemes in the zone as also for the administration of staff in the zone.

Ans 1. Superintending Engineer
 2. Director of Administration
 3. Financial Officer
 4. Assistant Engineer

Question ID : 630680246886
Option 1 ID : 630680957825
Option 2 ID : 630680957823
Option 3 ID : 630680957824
Option 4 ID : 630680957826
Status : **Answered**
Chosen Option : 1

Q.96 Study the given statements with respect to digital elevation model (DEM) and identify the correct answer.

Statement A: DEM is a representation of the bare ground (bare earth) topographic surface of the earth excluding trees, buildings, and any other surface objects.

Statement B: DEMs derived from high-resolution lidar and IfSAR (Alaska only) data.

Ans

- 1. Statement A is correct but B is incorrect
- 2. Statement B is correct but A is incorrect
- 3. Both the statements are correct
- 4. Both the statements are incorrect

Question ID : 630680247004

Option 1 ID : 630680958295

Option 2 ID : 630680958296

Option 3 ID : 630680958297

Option 4 ID : 630680958298

Status : Not Answered

Chosen Option : --

Q.97 Discharge through a rectangular notch is independent of ____.

Ans

- 1. coefficient of discharge
- 2. length of notch
- 3. head over notch
- 4. material type used in notch

Question ID : 630680246913

Option 1 ID : 630680957931

Option 2 ID : 630680957932

Option 3 ID : 630680957933

Option 4 ID : 630680957934

Status : Answered

Chosen Option : 4

Q.98 Study the given statements with respect to glass fibres and identify the correct answer.

Statement A: The glass fibres have low modulus but significantly higher stiffness.

Statement B: Fibres of glass are produced by extruding molten glass, at a temperature around 1200°C through holes in a spinneret with diameter of 1 or 2 mm and then drawing the filaments to produce fibres having diameters usually between 5 to 15.

Ans

- 1. Statement B is correct but A is incorrect
- 2. Both the statements are correct
- 3. Both the statements are incorrect
- 4. Statement A is correct but B is incorrect

Question ID : 630680247018

Option 1 ID : 630680958352

Option 2 ID : 630680958353

Option 3 ID : 630680958354

Option 4 ID : 630680958351

Status : Answered

Chosen Option : 2

Q.99 Select the correct option with respect to range of the density index (I_D) that is used to express the relative compactness of soil.

Ans 1. $0 < I_D \leq 1$
 2. $0 < I_D < 2$
 3. $I_D < 0$
 4. $I_D > 0$

Question ID : 630680246858

Option 1 ID : 630680957713

Option 2 ID : 630680957714

Option 3 ID : 630680957712

Option 4 ID : 630680957711

Status : Answered

Chosen Option : 1

Q.100 The diameter of a soak pit shall NOT be less than _____ in diameter.

Ans 1. 0.9 m
 2. 2.1 m
 3. 2.5 m
 4. 1.5 m

Question ID : 630680246992

Option 1 ID : 630680958247

Option 2 ID : 630680958249

Option 3 ID : 630680958250

Option 4 ID : 630680958248

Status : Answered

Chosen Option : 2

Q.101 Which of the following is the correct full form of 'PPE' related to construction site safety measures?

Ans 1. Personal Preventive Equipment
 2. Public Protective Equipment
 3. Public Preventive Equipment
 4. Personal Protective Equipment

Question ID : 630680247012

Option 1 ID : 630680958329

Option 2 ID : 630680958327

Option 3 ID : 630680958330

Option 4 ID : 630680958328

Status : Answered

Chosen Option : 4

Q.102 The topo sheets that represent a symbolic or conventional picture of the physical and cultural landscape of small area are available on scale of _____.

Ans 1. 1:250000, 1:50000 and 1:25000
 2. 1:250000000, 1:50000000 and 1:2500000
 3. 1:500000, 1:250000 and 1:10000
 4. 1:1000000, 1:500000 and 1:25000

Question ID : 630680247003

Option 1 ID : 630680958291

Option 2 ID : 630680958294

Option 3 ID : 630680958292

Option 4 ID : 630680958293

Status : Not Answered

Chosen Option : --

Q.103 Study the given statements with respect to prefabrication construction and identify the correct answer.

Statement A: Prefabrication construction is more consistent in quality compared to on-site construction.

Statement B: Prefabrication construction increases debris quantity at construction site.

Ans 1. Both the statements are incorrect
 2. Both the statements are correct
 3. Statement B is correct but A is incorrect
 4. Statement A is correct but B is incorrect

Question ID : 630680247022

Option 1 ID : 630680958370

Option 2 ID : 630680958369

Option 3 ID : 630680958368

Option 4 ID : 630680958367

Status : Answered

Chosen Option : 2

Q.104 An RCC column with dimension 200 mm \times 450 mm provided in a building. Calculate the least cross-sectional area of steel reinforcement can be provided, according to IS 456-2000.

Ans 1. 720 mm²
 2. 800 mm²
 3. 1080 mm²
 4. 520 mm²

Question ID : 630680246906

Option 1 ID : 630680957904

Option 2 ID : 630680957905

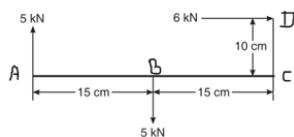
Option 3 ID : 630680957906

Option 4 ID : 630680957903

Status : Answered

Chosen Option : 2

Q.105 Calculate the moment induced by the force system acting on a bracket ABCD about point C shown in the figure.



Ans 1. 135 kN-cm clockwise
 2. 210 kN-cm clockwise
 3. 180 kN-cm counter clockwise
 4. 75 kN-cm counter clockwise

Question ID : 630680246847

Option 1 ID : 630680957668

Option 2 ID : 630680957669

Option 3 ID : 630680957670

Option 4 ID : 630680957667

Status : Answered

Chosen Option : 1

Q.106 _____ fuses are used in power systems to protect the power transformer, distribution transformers and instrument transformer.

Ans 1. Cartridge

2. High voltage
 3. Blade type and bolted type
 4. D-Type cartridge

Question ID : 630680247025

Option 1 ID : 630680958379

Option 2 ID : 630680958380

Option 3 ID : 630680958381

Option 4 ID : 630680958382

Status : Answered

Chosen Option : 3

Q.107 Study the given statements with respect to functions of Central Board for the Prevention and Control of Air Pollution as per Air (Prevention and Control of pollution) Act, 1981, and identify the correct answer.

Statement A: Central Pollution Control Board will lay down standards for the quality of air.

Statement B: To collect, compile and publish technical and statistical data relating to air pollution and the measures devised for its effective prevention, control or abatement and prepare manuals.

Ans 1. Statement A is true but B is false
 2. Statement A is false but B is true
 3. Both the statements are false
 4. Both the statements are true

Question ID : 630680246895

Option 1 ID : 630680957859

Option 2 ID : 630680957860

Option 3 ID : 630680957862

Option 4 ID : 630680957861

Status : Answered

Chosen Option : 4

Q.108 Study the given statements with respect to methods of quantity estimation and identify the correct answer.

Statement A: Number of joints are calculated first in long-wall-short-wall method.

Statement B: Centre line method involves multiplying centre line length with breadth and depth of respective items to obtain quantity.

Ans 1. Both the statements are incorrect

2. Statement A is correct but B is incorrect

3. Both the statements are correct

4. Statement B is correct but A is incorrect

Question ID : 630680246880

Option 1 ID : 630680957802

Option 2 ID : 630680957799

Option 3 ID : 630680957801

Option 4 ID : 630680957800

Status : Answered

Chosen Option : 4

Q.109 Study the given statements with respect to line-ranger used in surveying and identify the correct answer.

Statement A: A line-ranger consists of either two plane mirrors or two right-angled isosceles prisms placed one above the other.

Statement B: A line-ranger is used for direct ranging.

Ans 1. Statement B is correct but A is incorrect

2. Statement A is correct but B is incorrect

3. Both the statements are correct

4. Both the statements are incorrect

Question ID : 630680246928

Option 1 ID : 630680957992

Option 2 ID : 630680957991

Option 3 ID : 630680957993

Option 4 ID : 630680957994

Status : Answered

Chosen Option : 1

Q.110 Which of the following functions of management sets objectives and develops appropriate courses of action to achieve them?

Ans 1. Organising

2. Staffing

3. Planning

4. Leading

Question ID : 630680246949

Option 1 ID : 630680958078

Option 2 ID : 630680958077

Option 3 ID : 630680958076

Option 4 ID : 630680958075

Status : Answered

Chosen Option : 3

Q.111 Which of the following statements is INCORRECT with respect to characteristics of labour?

Ans 1. Labour is perishable

2.

As compared to capital and other goods, labour is highly mobile

3. Labour has weak bargaining power

4. Labour cannot be separated from the labourer

Question ID : 630680247014

Option 1 ID : 630680958335

Option 2 ID : 630680958337

Option 3 ID : 630680958338

Option 4 ID : 630680958336

Status : Answered

Chosen Option : 2

Q.112 Which of the following statements with respect to Poisson's ratio of a material is INCORRECT?

Ans 1.

The value of Poisson's ratio for a material is different in tension and compression.

2.

Poisson's ratio is named after a French mathematician Poisson who predicted its existence.

3.

The ratio of lateral strain to linear strain of an object stressed within its elastic limit is known as Poisson's ratio.

4. The value of Poisson's ratio ranges between 0 to 0.5.

Question ID : 630680246850

Option 1 ID : 630680957681

Option 2 ID : 630680957680

Option 3 ID : 630680957679

Option 4 ID : 630680957682

Status : Answered

Chosen Option : 1

Q.113 Study the given statements with respect to fillet weld in comparison with groove weld and identify the correct answer.

Statement A: Fillet welds normally require less material preparation and are easier to fit than groove welds.

Statement B: For a given amount of weld material, fillet welds are stronger than groove welds.

Ans 1. Statement A is correct but B is incorrect

2. Statement B is correct but A is incorrect

3. Both the statements are correct

4. Both the statements are incorrect

Question ID : 630680246960

Option 1 ID : 630680958119

Option 2 ID : 630680958120

Option 3 ID : 630680958121

Option 4 ID : 630680958122

Status : Answered

Chosen Option : 3

Q.114 _____ is a problem caused by dam construction.

Ans 1. Irrigation
 2. Flood control
 3. Changes on riverine ecosystem
 4. Hydro power generation

Question ID : 630680246892

Option 1 ID : 630680957848

Option 2 ID : 630680957847

Option 3 ID : 630680957849

Option 4 ID : 630680957850

Status : Answered

Chosen Option : 3

Q.115 As per the Indian Partnership Act, 1932, Notice of Change in the Constitution of the firm or of the dissolution of the firm is done through _____.

Ans 1. Form I
 2. Form II
 3. Form V
 4. Form IV

Question ID : 630680246948

Option 1 ID : 630680958071

Option 2 ID : 630680958072

Option 3 ID : 630680958074

Option 4 ID : 630680958073

Status : Not Answered

Chosen Option : --

Q.116 A rectangular open channel of width 4 m and depth 2 m is having a bed slope of 1 in 1600. What is the maximum discharge through the channel, if the Chezy's constant $C = 50$?

Ans 1. $40 \text{ m}^3/\text{sec}$
 2. $16 \text{ m}^3/\text{sec}$
 3. $10 \text{ m}^3/\text{sec}$
 4. $8 \text{ m}^3/\text{sec}$

Question ID : 630680246914

Option 1 ID : 630680957937

Option 2 ID : 630680957938

Option 3 ID : 630680957936

Option 4 ID : 630680957935

Status : Answered

Chosen Option : 3

Q.117 Which of the following is the correct Inglis' formula to compute flood discharge(Q) for small catchment areas?

Ans 1. $Q = 123 \sqrt{A}$, where A is area of catchment in sq.km.

2. $Q = AC^{3/2}$, where, 'A' is catchment area in sq.km. and 'C' is flood coefficient.

3. $Q = AC^{2/3}$, where, 'A' is catchment area in sq.km. and 'C' is flood coefficient.

4. $Q = 1.25 \sqrt{A}$, where A is area of catchment in sq.km.

Question ID : 630680246975

Option 1 ID : 630680958180

Option 2 ID : 630680958181

Option 3 ID : 630680958182

Option 4 ID : 630680958179

Status : Answered

Chosen Option : 3

Q.118 As per IS-456-2000, for ultimate limit states, the partial factor of safety assigned for concrete is ____.

Ans 1. 1.5

2. 1.15

3. 1.0

4. 1.87

Question ID : 630680246898

Option 1 ID : 630680957873

Option 2 ID : 630680957872

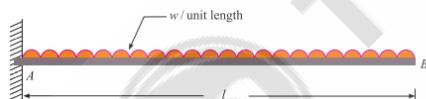
Option 3 ID : 630680957871

Option 4 ID : 630680957874

Status : Answered

Chosen Option : 1

Q.119 A cantilever beam of length 'l' is subjected to a uniformly distributed load of intensity w/unit length, as shown in the figure. Calculate deflection at free end 'B' if E = modulus of elasticity of material used and I = Moment of inertia of beam section.



Ans 1. $\frac{wl^4}{8EI}$

2. $\frac{wl^3}{24EI}$

3. $\frac{wl^4}{24EI}$

4. $\frac{wl^3}{8EI}$

Question ID : 630680246856

Option 1 ID : 630680957704

Option 2 ID : 630680957706

Option 3 ID : 630680957705

Option 4 ID : 630680957703

Status : Answered

Chosen Option : 4

Q.120 Which of the following classified types of broad-gauge railway track lines are meant for a sanctioned speed up to 160 km/h?

Ans 1. Group B
 2. Group D
 3. Group C
 4. Group A

Question ID : 630680246971
Option 1 ID : 630680958164
Option 2 ID : 630680958166
Option 3 ID : 630680958165
Option 4 ID : 630680958163
Status : **Answered**
Chosen Option : 4

Q.121 Which of the following is NOT a measure of particle size range in coarse grained soil?

Ans 1. Effective size
 2. Fineness modulus
 3. Coefficient of curvature
 4. Uniformity coefficient

Question ID : 630680246860
Option 1 ID : 630680957719
Option 2 ID : 630680957722
Option 3 ID : 630680957721
Option 4 ID : 630680957720
Status : **Answered**
Chosen Option : 4

Q.122 As per IS 800:2007, the minimum edge and end distances from the centre of any hole to the nearest edge of a plate shall NOT be less than _____ the hole diameter in case of rolled, machine-flame cut, sawn and planed edges.

Ans 1. 2.1 times
 2. 1.5 times
 3. 1.8 times
 4. 1.2 times

Question ID : 630680246958
Option 1 ID : 630680958114
Option 2 ID : 630680958112
Option 3 ID : 630680958113
Option 4 ID : 630680958111
Status : **Answered**
Chosen Option : 2

Q.123 A commercial building constructed on plot of land 1000 m^2 . The plinth area is 800 m^2 . The building fetches a gross rent of ₹50,000 per month. The total outgoings per year is _____, if the cost of repair is at the rate of 10% of income and yearly property tax is ₹5 per m^2 of land and ₹40 per m^2 of plinth area.

Ans 1. ₹3,00,000
 2. ₹1,24,000
 3. ₹45,500
 4. ₹97,000

Question ID : 630680246883

Option 1 ID : 630680957812

Option 2 ID : 630680957814

Option 3 ID : 630680957811

Option 4 ID : 630680957813

Status : Answered

Chosen Option : 4

Q.124 Calculate the length of long chord of a simple circular curve whose radius is 500 m. Take deflection angle (Δ) as 60° .

Ans 1. 430 m
 2. 250 m
 3. 325 m
 4. 500 m

Question ID : 630680246997

Option 1 ID : 630680958270

Option 2 ID : 630680958267

Option 3 ID : 630680958269

Option 4 ID : 630680958268

Status : Answered

Chosen Option : 4

Q.125 Study the given statements regarding land degradation and identify the correct answer.

Statement A: Land is degraded due to unplanned destruction of forests.

Statement B: The washing off of fine soil particles from deforested areas has caused great soil erosion.

Ans 1. Both the statements are incorrect
 2. Both the statements are correct
 3. Statement B is correct but A is incorrect
 4. Statement A is correct but B is incorrect

Question ID : 630680246891

Option 1 ID : 630680957846

Option 2 ID : 630680957845

Option 3 ID : 630680957844

Option 4 ID : 630680957843

Status : Answered

Chosen Option : 4

Q.126 The pressure intensity (P) inside the spherical droplet of a liquid (in excess of outside pressure intensity) with diameter 'd' is given by _____. Where, σ = surface tension of liquid.

Ans

1. $P = \frac{2\sigma}{d}$

2. $P = \frac{6\sigma}{d}$

3. $P = \frac{4\sigma}{d}$

4. $P = \frac{8\sigma}{d}$

Question ID : 630680246907

Option 1 ID : 630680957909

Option 2 ID : 630680957910

Option 3 ID : 630680957907

Option 4 ID : 630680957908

Status : **Answered**

Chosen Option : 3

Q.127 In _____ style of leadership, decisions are made based on the team's opinion and feedback.

Ans

1. autocratic

2. democratic

3. coach-style

4. laissez-faire

Question ID : 630680247007

Option 1 ID : 630680958307

Option 2 ID : 630680958308

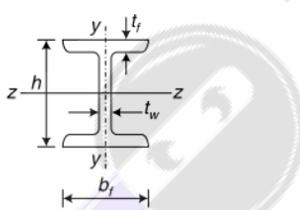
Option 3 ID : 630680958310

Option 4 ID : 630680958309

Status : **Answered**

Chosen Option : 2

Q.128 Which of the following buckling curve is applicable about z-z axis for a rolled steel I-section used as a axially loaded compression member shown in the figure, if $(h/b_f) > 1.2$ and $t_f \leq 40?$



Ans

1. Class - b

2. Class - d

3. Class - a

4. Class - c

Question ID : 630680246963

Option 1 ID : 630680958132

Option 2 ID : 630680958131

Option 3 ID : 630680958134

Option 4 ID : 630680958133

Status : **Not Answered**

Chosen Option : --

Q.129 Identify the INCORRECT statement with respect to burnt bricks.

Ans 1.

Moulded clay should not be heated beyond 1300°C to ensure good quality of bricks.

2.

Calcium is the major compound present in burnt bricks and it reacts with alumina to form stable and strong bricks.

3.

Moulded clay should be heated up to 700 to 1000°C to achieve strong and stable bricks.

4. Burning of bricks removes the water present in the clay.

Question ID : **630680246868**

Option 1 ID : **630680957754**

Option 2 ID : **630680957753**

Option 3 ID : **630680957752**

Option 4 ID : **630680957751**

Status : **Answered**

Chosen Option : 4

Q.130 Which of the following ISO standards defines minimum quality system requirements for design/development, production, installation and servicing?

Ans 1. ISO 9003

2. ISO 9000

3. ISO 9002

4. ISO 9001

Question ID : **630680247011**

Option 1 ID : **630680958326**

Option 2 ID : **630680958323**

Option 3 ID : **630680958325**

Option 4 ID : **630680958324**

Status : **Not Answered**

Chosen Option : --

Q.131 Which of the following is NOT a type of varnish?

Ans 1. Water varnish

2. Oil varnish

3. Bagasse varnish

4. Spirit varnish

Question ID : **630680246871**

Option 1 ID : **630680957764**

Option 2 ID : **630680957763**

Option 3 ID : **630680957765**

Option 4 ID : **630680957766**

Status : **Answered**

Chosen Option : 1

Q.132 The process of determining how much time the total project will take, tracking labour hours and how long each stage will take is known as _____.

Ans 1. staffing
 2. controlling
 3. scheduling
 4. directing

Question ID : 630680247008

Option 1 ID : 630680958313

Option 2 ID : 630680958311

Option 3 ID : 630680958312

Option 4 ID : 630680958314

Status : Answered

Chosen Option : 3

Q.133 Calculate the additional length to be added for two bent-ups (45° crank) given along the length of a 16 mm diameter bar, used in a RCC slab culvert. Take the vertical distance between the centre of upper and lower arms of bent-up bar as 184 mm.

Ans 1. 154.56 mm
 2. 184 mm
 3. 92 mm
 4. 77.28 mm

Question ID : 630680246987

Option 1 ID : 630680958229

Option 2 ID : 630680958230

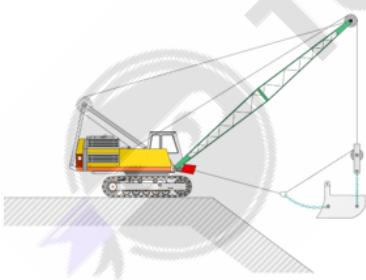
Option 3 ID : 630680958228

Option 4 ID : 630680958227

Status : Answered

Chosen Option : 2

Q.134 Identify the equipment shown in the figure, which is used for road subgrade preparation.



Ans 1. Dozer
 2. Back hoe
 3. Drag line
 4. Power shovel

Question ID : 630680246941

Option 1 ID : 630680958046

Option 2 ID : 630680958044

Option 3 ID : 630680958045

Option 4 ID : 630680958043

Status : Answered

Chosen Option : 3

Q.135 The energy drink 'Red Bull' is an example of _____ type of intellectual property.

Ans 1. patent

2. geographical indication

3. trade mark

4. copyright

Question ID : 630680246955

Option 1 ID : 630680958099

Option 2 ID : 630680958102

Option 3 ID : 630680958100

Option 4 ID : 630680958101

Status : **Answered**

Chosen Option : 3

Q.136 The Indian Road Congress (IRC) was established by the Central Government in 1934, as per the recommendations of the _____.

Ans 1. Highway Research Board

2. Central Road Research Institute

3. Jayakar Committee

4. Lord William Bentinck

Question ID : 630680246937

Option 1 ID : 630680958029

Option 2 ID : 630680958028

Option 3 ID : 630680958027

Option 4 ID : 630680958030

Status : **Answered**

Chosen Option : 3

Q.137 Which of the following type of canals is aligned roughly at right angles to the contours of the country?

Ans 1. Offset canal

2. Ridge canal

3. Contour canal

4. Side slope canal

Question ID : 630680246921

Option 1 ID : 630680957966

Option 2 ID : 630680957965

Option 3 ID : 630680957963

Option 4 ID : 630680957964

Status : **Answered**

Chosen Option : 2

Q.138 Which of the following maps shows the physical features of a place or country, like rivers, mountains, forests and lakes?

Ans 1. Physical map
 2. Road map
 3. Topographic map
 4. Political map

Question ID : 630680247002

Option 1 ID : 630680958290

Option 2 ID : 630680958287

Option 3 ID : 630680958288

Option 4 ID : 630680958289

Status : Answered

Chosen Option : 3

Q.139 Calculate the delta for a crop if its duty is 2000 hectares/cumec on the field. Consider the base period of crop as 100 days.

Ans 1. 172.8 cm
 2. 43.2 cm
 3. 202.42 cm
 4. 84.4 cm

Question ID : 630680246918

Option 1 ID : 630680957952

Option 2 ID : 630680957953

Option 3 ID : 630680957954

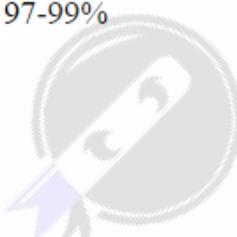
Option 4 ID : 630680957951

Status : Answered

Chosen Option : 2

Q.140 The carbon content in carbon fibres is about _____.

Ans 1. 70-80%
 2. 80-90%
 3. 60-40%
 4. 97-99%



Question ID : 630680247017

Option 1 ID : 630680958349

Option 2 ID : 630680958348

Option 3 ID : 630680958350

Option 4 ID : 630680958347

Status : Answered

Chosen Option : 4

Q.141 It is found that the weight of a liquid that measures 6 litres is 30 N. Calculate its specific weight.

Ans 1. 5000 N/m^3
 2. 1800 N/m^3
 3. 6000 N/m^3
 4. 3000 N/m^3

Question ID : 630680246908

Option 1 ID : 630680957912

Option 2 ID : 630680957911

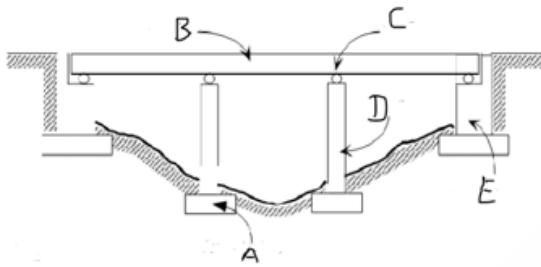
Option 3 ID : 630680957914

Option 4 ID : 630680957913

Status : Answered

Chosen Option : 1

Q.142 Identify the component of a bridge labelled 'B', as shown in the figure.



Ans 1. Bearing
 2. Abutment
 3. Deck
 4. Pier

Question ID : 630680246973

Option 1 ID : 630680958173

Option 2 ID : 630680958174

Option 3 ID : 630680958172

Option 4 ID : 630680958171

Status : Answered

Chosen Option : 3

Q.143 As per the analysis of rates by Government of Odisha, the initial lift mentioned for earth work is within _____.

Ans 1. 1 m
 2. 3.0 m
 3. 1.5 m
 4. 4.5 m

Question ID : 630680246885

Option 1 ID : 630680957819

Option 2 ID : 630680957821

Option 3 ID : 630680957820

Option 4 ID : 630680957822

Status : Answered

Chosen Option : 3

Q.144 In general, within a normal range of pH, water with hardness _____ and above is considered as hard.

Ans 1. 200 mg/l
 2. 275 mg/l
 3. 75 mg/l
 4. 125 mg/l

Question ID : 630680246982

Option 1 ID : 630680958209

Option 2 ID : 630680958210

Option 3 ID : 630680958207

Option 4 ID : 630680958208

Status : **Answered**

Chosen Option : 1

Q.145 As per IS 2000(part 15):1987, the paint coefficient (multiplying factor) for fully glazed steel doors is _____.

Ans 1. 1.0 for each side
 2. 2 for each side
 3. 0.5 for each side
 4. 1.5 for each side

Question ID : 630680246879

Option 1 ID : 630680957797

Option 2 ID : 630680957795

Option 3 ID : 630680957796

Option 4 ID : 630680957798

Status : **Answered**

Chosen Option : 4

Q.146 While determining the permeability of a soil stratum at field by pumping test, minimum _____ observation well(s) is/are required.

Ans 1. zero
 2. three
 3. one
 4. two

Question ID : 630680246862

Option 1 ID : 630680957727

Option 2 ID : 630680957730

Option 3 ID : 630680957728

Option 4 ID : 630680957729

Status : **Answered**

Chosen Option : 3

Q.147 _____ style of leadership expects employees to adhere to leader's decisions that are not sustainable in the long run.

Ans 1. Autocratic
 2. Laissez-faire
 3. Coach
 4. Democratic

Question ID : 630680247013
Option 1 ID : 630680958331
Option 2 ID : 630680958333
Option 3 ID : 630680958334
Option 4 ID : 630680958332
Status : Answered
Chosen Option : 1

Q.148 Which of the following is NOT a type of ballast?

Ans 1. Cinder ballast
 2. Sand ballast
 3. Silica fume ballast
 4. Brick bat ballast

Question ID : 630680246969
Option 1 ID : 630680958157
Option 2 ID : 630680958156
Option 3 ID : 630680958158
Option 4 ID : 630680958155
Status : Answered
Chosen Option : 2

Q.149 Study the given statements with respect to functions and duties of NABARD and identify the correct answer.

Statement A: NABARD does not provide and regulate credit and other facilities for the promotion and development of small-scale industries.

Statement B: NABARD provides and regulates credit and other facilities for the promotion and development of agriculture, handicrafts and other rural crafts.

Ans 1. Statement A is correct but B is incorrect
 2. Statement B is correct but A is incorrect
 3. Both the statements are correct
 4. Both the statements are incorrect

Question ID : 630680246947
Option 1 ID : 630680958067
Option 2 ID : 630680958068
Option 3 ID : 630680958069
Option 4 ID : 630680958070
Status : Answered
Chosen Option : 2

Q.150 Identify the INCORRECT statement with respect to plinth area estimate.

Ans

- ✓ 1. Plinth area estimate includes courtyard.
- ✗ 2. Plinth area estimate does not consider open areas.
- ✗ 3. Plinth area estimate is a preliminary estimate.
- ✗ 4. Plinth area estimate is approximate in nature.

Question ID : 630680246878
Option 1 ID : 630680957793
Option 2 ID : 630680957794
Option 3 ID : 630680957792
Option 4 ID : 630680957791
Status : Answered
Chosen Option : 1

Q.151 Study the given statements with respect to beam subjected to bending and identify the correct answer.

Statement A: Bending stress is inversely proportional to the radius of curvature of the beam.

Statement B: Bending stress is directly proportional to the moment of inertia of the beam section.

Ans

- ✗ 1. Both the statements are incorrect
- ✓ 2. Statement A is correct but B is incorrect
- ✗ 3. Both the statements are correct
- ✗ 4. Statement B is correct but A is incorrect

Question ID : 630680246851
Option 1 ID : 630680957686
Option 2 ID : 630680957683
Option 3 ID : 630680957685
Option 4 ID : 630680957684
Status : Answered
Chosen Option : 2

Q.152 What is the range of relative density of very loose soil?

Ans

- ✗ 1. 75-90%
- ✗ 2. 25-40%
- ✓ 3. 0-15%
- ✗ 4. 45-60%

Question ID : 630680246857
Option 1 ID : 630680957710
Option 2 ID : 630680957708
Option 3 ID : 630680957707
Option 4 ID : 630680957709
Status : Answered
Chosen Option : 3

Q.153 Identify the INCORRECT statement with respect to different methods used to balance a traverse.

Ans 1.

The Bowditch's method assumes that the errors in linear measurements are directly proportional to square root of length of surveyed line.

2.

The Bowditch's method assumes that the errors in angular measurements are inversely proportional to square root of length of surveyed line.

3.

The angles are less affected by corrections applied by transit method than by Bowditch's method.

4.

The transit rule may be employed where angular measurements are less precise than the linear measurements.

Question ID : 630680246936

Option 1 ID : 630680958023

Option 2 ID : 630680958024

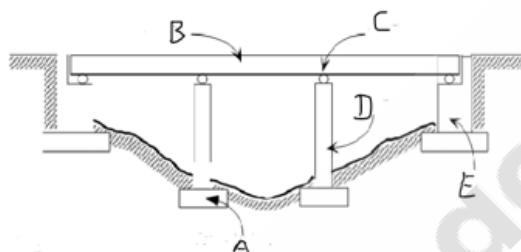
Option 3 ID : 630680958026

Option 4 ID : 630680958025

Status : Answered

Chosen Option : 2

Q.154 Which of the following represents 'part D' of the given figure of a bridge?



Ans 1. Abutment

2. Deck

3. Pier

4. Bearing

Question ID : 630680246986

Option 1 ID : 630680958226

Option 2 ID : 630680958224

Option 3 ID : 630680958223

Option 4 ID : 630680958225

Status : Answered

Chosen Option : 3

Q.155 It is found that the earthwork in excavation required to construct a simple vertical fall for a distributary of 360 cm bed width is 70 m^3 . Calculate the total cost required after adding 3% contingencies and 2% work charged establishment if the rate is ₹40 per m^3 of earth work excavation.

Ans 1. ₹2,800
 2. ₹2,996
 3. ₹2,940
 4. ₹3,012

Question ID : 630680246990

Option 1 ID : 630680958239

Option 2 ID : 630680958240

Option 3 ID : 630680958241

Option 4 ID : 630680958242

Status : Answered

Chosen Option : 3

Q.156 Study the given statements and identify the correct answer.

Statement A: The hydrosphere covers three-quarters of the earth's surface.

Statement B: Human activities such as deforestation create serious changes in the hydrosphere.

Ans 1. Statement A is correct but B is incorrect
 2. Statement B is correct but A is incorrect
 3. Both statements are correct
 4. Both statements are incorrect

Question ID : 630680246888

Option 1 ID : 630680957831

Option 2 ID : 630680957832

Option 3 ID : 630680957833

Option 4 ID : 630680957834

Status : Answered

Chosen Option : 3

Q.157 Study the given statements with respect to Doubly Reinforced Sections and identify the correct answer.

Statement A: When compression reinforcement is provided in addition to tension reinforcement in beams, such beams are termed doubly reinforced beams.

Statement B: If the cross-sectional area of hanger bars used for the purpose of holding stirrups is greater than 0.2 per cent of the RC section, then they can be considered as compression reinforcement.

Ans 1. Statement B is correct but A is incorrect
 2. Statement A is correct but B is incorrect
 3. Both the statements are incorrect
 4. Both the statements are correct

Question ID : 630680246902

Option 1 ID : 630680957888

Option 2 ID : 630680957887

Option 3 ID : 630680957890

Option 4 ID : 630680957889

Status : Answered

Chosen Option : 4

Q.158 Study the given statements and identify the correct answer.

Statement A: Leaders are willing to learn and grow personally, whereas, managers perfect existing, proven skills.

Statement B: Results of management are intangible, whereas, results of leadership is measurable.

Ans 1. Statement A is correct but B is incorrect
 2. Both the statements are incorrect
 3. Both the statements are correct
 4. Statement B is correct but A is incorrect

Question ID : 630680246953

Option 1 ID : 630680958091

Option 2 ID : 630680958094

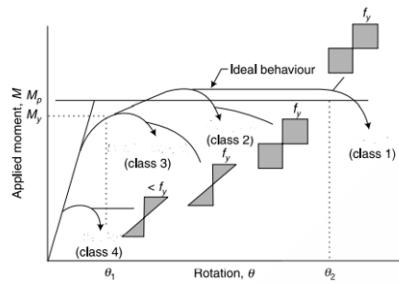
Option 3 ID : 630680958093

Option 4 ID : 630680958092

Status : Answered

Chosen Option : 3

Q.159 Moment rotation behaviour of the four classes of cross-sections that are necessary for limit state design of steel beams is shown in the figure. Class 2 section is also called _____.



Ans 1. Slender section
 2. Semi-compact section
 3. Compact section
 4. Plastic section

Question ID : 630680246965

Option 1 ID : 630680958142

Option 2 ID : 630680958140

Option 3 ID : 630680958141

Option 4 ID : 630680958139

Status : Answered

Chosen Option : 3

Q.160 Identify the type of weld made between two plate as shown in the figure.



Ans

- 1. Groove weld
- 2. Flat fillet weld
- 3. Lap weld
- 4. Continuous fillet weld

Question ID : 630680246961

Option 1 ID : 630680958123

Option 2 ID : 630680958125

Option 3 ID : 630680958126

Option 4 ID : 630680958124

Status : Answered

Chosen Option : 1

Q.161 Which of the following type of dams transfers a major part of the water load to its abutments horizontally?

Ans

- 1. Concrete gravity dam
- 2. Concrete buttress dam
- 3. Earth dam
- 4. Arch dam

Question ID : 630680246926

Option 1 ID : 630680957984

Option 2 ID : 630680957986

Option 3 ID : 630680957985

Option 4 ID : 630680957983

Status : Answered

Chosen Option : 4

Q.162 _____ shows the spatial distribution of one or more specific data themes for selected geographic areas.

Ans

- 1. Topographic map
- 2. Physical map
- 3. Thematic map
- 4. Road map

Question ID : 630680247001

Option 1 ID : 630680958284

Option 2 ID : 630680958286

Option 3 ID : 630680958285

Option 4 ID : 630680958283

Status : Answered

Chosen Option : 1

Q.163 Calculate the quantity of earthwork using Mid Sectional Area Method, for portion of a road. Height of banks at the two ends of the road being 1.00 m and 1.50 m, formation width = 10 m, length 120 m, side slopes = 2 : 1 (H : V).

Ans 1. 2000 m³
 2. 1875 m³
 3. 1725 m
 4. 1500 m³

Question ID : 630680246989

Option 1 ID : 630680958236

Option 2 ID : 630680958235

Option 3 ID : 630680958238

Option 4 ID : 630680958237

Status : Answered

Chosen Option : 3

Q.164 Which of the following type of sleepers offer greater service life?

Ans 1. Cast iron sleepers
 2. Wooden sleepers
 3. Concrete sleepers
 4. Steel sleepers

Question ID : 630680246970

Option 1 ID : 630680958161

Option 2 ID : 630680958159

Option 3 ID : 630680958162

Option 4 ID : 630680958160

Status : Answered

Chosen Option : 2

Q.165 Study the given statements with respect to coffer dams and identify the correct answer.

Statement A: A coffer dam is temporary structure that is built to keep the water away from the permanent dam execution site, so that the structure can be built on the dry surface.

Statement B: A coffer dam should be of earth and not of rock fill.

Ans 1. Both the statements are incorrect
 2. Statement A is correct but B is incorrect
 3. Statement B is correct but A is incorrect
 4. Both the statements are correct

Question ID : 630680246976

Option 1 ID : 630680958186

Option 2 ID : 630680958183

Option 3 ID : 630680958184

Option 4 ID : 630680958185

Status : Answered

Chosen Option : 2

Q.166 Which of the following classified type of broad gauge railway track lines is meant for a sanctioned speed of 130 km/h?

Ans 1. Group D
 2. Group C
 3. Group B
 4. Group A

Question ID : 630680246967
Option 1 ID : 630680958150
Option 2 ID : 630680958149
Option 3 ID : 630680958148
Option 4 ID : 630680958147
Status : Answered
Chosen Option : 3

Q.167 It is found that the bending stress at the base of a circular chimney as 20 N/mm^2 and direct compressive stress 42 N/mm^2 . Identify the correct statement with respect to resultant stress of the mentioned combined stresses.

Ans 1. Resultant stress is equal to 62 N/mm^2 throughout the base section of chimney.
 2. Resultant stress varies between 22 N/mm^2 to 62 N/mm^2 at the base section of chimney.
 3. Resultant stress will always be less than 20 N/mm^2 .
 4. Resultant stress will always be greater than 62 N/mm^2 at the base section of chimney.

Question ID : 630680246852
Option 1 ID : 630680957689
Option 2 ID : 630680957690
Option 3 ID : 630680957688
Option 4 ID : 630680957687
Status : Not Answered
Chosen Option : --

Q.168 _____ is a long-term cause of food shortage.

Ans 1. Transportation
 2. Fall in purchasing capacity of people
 3. Population growth
 4. Increase in consumption level

Question ID : 630680246890
Option 1 ID : 630680957842
Option 2 ID : 630680957840
Option 3 ID : 630680957839
Option 4 ID : 630680957841
Status : Answered
Chosen Option : 3

Q.169 Calculate the volume of loose metal required for a 3.7 m wide Macadam road with compacted thickness 8 cm. Consider length of road as 2 km and the volume of loose metal gets reduced by 1/3 on compaction.

Ans 1. 592 m^3
 2. 999 m^3
 3. 650 m^3
 4. 888 m^3

Question ID : 630680246988
Option 1 ID : 630680958231

Option 2 ID : 630680958234

Option 3 ID : 630680958233

Option 4 ID : 630680958232

Status : Answered

Chosen Option : 1

Q.170 Which of the following type of canal linings can be placed on irregular subgrade and hence fine dressing of subgrade is not required?

Ans 1. Shotcrete lining
 2. Concrete lining
 3. Brick lining
 4. Precast concrete lining

Question ID : 630680246922

Option 1 ID : 630680957969

Option 2 ID : 630680957967

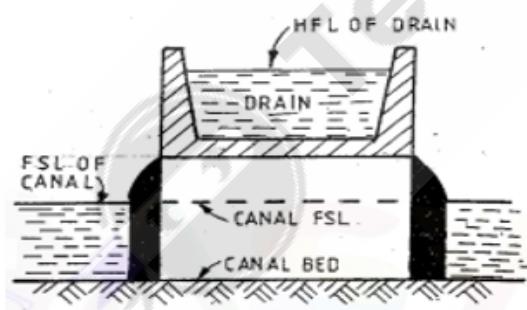
Option 3 ID : 630680957970

Option 4 ID : 630680957968

Status : Answered

Chosen Option : 1

Q.171 Identify the type of cross drainage work shown in the given figure.



Ans 1. Siphon aqueduct
 2. Aqueduct
 3. Level crossing
 4. Super passage

Question ID : 630680246924

Option 1 ID : 630680957977

Option 2 ID : 630680957975

Option 3 ID : 630680957978

Option 4 ID : 630680957976

Status : Answered

Chosen Option : 4

Q.172 In case of soundness test on coarse aggregates, the aggregates are immersed in a saturated solution of _____.

Ans 1. calcium silicate
 2. HCl
 3. zinc aluminate
 4. sodium sulphate

Question ID : 630680246940

Option 1 ID : 630680958040

Option 2 ID : 630680958042

Option 3 ID : 630680958041

Option 4 ID : 630680958039

Status : **Answered**

Chosen Option : 4

Q.173 A steel bar 2 m long, with cross-sectional area 800 mm^2 throughout its length is subjected to an axial pull of 100 kN in the direction of its length. Calculate the change in the length of the bar. Take modulus of elasticity(E) = 200 GPa and Poisson's ratio = 0.3.

Ans 1. 2 mm
 2. 1.25 mm
 3. 0.50 mm
 4. 2.5 mm

Question ID : 630680246854

Option 1 ID : 630680957695

Option 2 ID : 630680957697

Option 3 ID : 630680957696

Option 4 ID : 630680957698

Status : **Answered**

Chosen Option : 2

Q.174 Which of the following types of chains is 100 feet long and consists of 100 links with each link being 1 foot long?

Ans 1. Metric chain
 2. Revenue chain
 3. Gunter's chain
 4. Engineer's chain

Question ID : 630680246932

Option 1 ID : 630680958009

Option 2 ID : 630680958007

Option 3 ID : 630680958008

Option 4 ID : 630680958010

Status : **Answered**

Chosen Option : 4