

# **DDA JE (Civil)**

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17 Oct, 2023 Shift 3**



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Participant ID	
Participant Nam	
Test Center Nam	
Test Date	17/10/2023
Test Time	4:30 PM - 6:30 PM
Subject	Junior Engineer (Civil)

Section : Respective Discipline syllabus

**Q.1** What will be the diameter of the kern for the hollow circular sectioned vertical compression member?

External diameter = 30 cm

Internal diameter = 10 cm

- Ans**
- ☒ 1. 7.50 cm
  - ☒ 2. 8.33 cm
  - ☒ 3. 6.67 cm
  - ☒ 4. 10 cm

Question ID : 630680398150  
 Option 1 ID : 6306801552611  
 Option 2 ID : 6306801552612  
 Option 3 ID : 6306801552613  
 Option 4 ID : 6306801552610

Status : Answered

Chosen Option : 2

**Q.2** Which of the following stiffeners in a plate girder should be used to prevent local crushing of the web due to concentrated loading?

- Ans**
- ☒ 1. Diagonal Stiffener
  - ☒ 2. Bearing Stiffener
  - ☐ 3. Load carrying Stiffener
  - ☐ 4. Tension Stiffener

Question ID : 630680398158  
 Option 1 ID : 6306801552643  
 Option 2 ID : 6306801552645  
 Option 3 ID : 6306801552644  
 Option 4 ID : 6306801552642  
 Status : Answered  
 Chosen Option : 3

**Q.3** According to the MIT System of Soil Classification, if the soil particles size is in between 0.06 to 2.0 mm then identify the group of the soil.

- Ans**
- ☒ 1. Sand
  - ☐ 2. Silt
  - ☐ 3. Clay
  - ☐ 4. Gravel

Question ID : 630680398129  
 Option 1 ID : 6306801552528  
 Option 2 ID : 6306801552526  
 Option 3 ID : 6306801552527  
 Option 4 ID : 6306801552529  
 Status : Answered  
 Chosen Option : 1

**Q.4** What is the correct range of composition in percentage of Alumina ( $Al_2O_3$ ) in Ordinary Portland cement?

- Ans**
- ☐ 1. 62 to 67
  - ☒ 2. 3 to 8
  - ☐ 3. 17 to 25
  - ☐ 4. 0.2 to 1

Question ID : 630680398119  
 Option 1 ID : 6306801552486  
 Option 2 ID : 6306801552488  
 Option 3 ID : 6306801552489  
 Option 4 ID : 6306801552487  
 Status : Answered  
 Chosen Option : 3

**Q.5** A RCC simply supported beam has 3.5 m of effective span. According to IS 456: 2000, the beam will be deemed to be a deep beam if \_\_\_\_\_.

- Ans**
- ☒ 1. The overall depth of beam is 750mm
  - ☒ 2. The overall depth of beam is 1000mm
  - ☒ 3. The overall depth of beam is 2000mm
  - ☒ 4. The overall depth of beam is 800mm

Question ID : 630680398162  
 Option 1 ID : 6306801552658  
 Option 2 ID : 6306801552660  
 Option 3 ID : 6306801552661  
 Option 4 ID : 6306801552659  
 Status : Answered  
 Chosen Option : 3

**Q.6** Which load combination satisfies the value of partial safety factor for live loads as 1.5 in case of limit state of strength?

- Ans**
- ☒ 1. DL + WL + EL
  - ☒ 2. DL + AL + LL
  - ☒ 3. DL + ER
  - ☒ 4. DL + LL + CL

Question ID : 630680398195  
 Option 1 ID : 6306801552790  
 Option 2 ID : 6306801552792  
 Option 3 ID : 6306801552793  
 Option 4 ID : 6306801552791  
 Status : Answered  
 Chosen Option : 4

**Q.7** Which of the following relation is the correct relation to adopt for determining the contour interval in general topographical work?

- Ans**
- ☒ 1. Contour interval =  $\frac{10}{\text{No. of cm per km}}$  (meter)
  - ☒ 2. Contour interval =  $\frac{25}{\text{No. of cm per km}}$  (meter)
  - ☒ 3. Contour interval =  $\frac{100}{\text{No. of cm per km}}$  (meter)
  - ☒ 4. Contour interval =  $\frac{50}{\text{No. of cm per km}}$  (meter)

Question ID : 630680398127  
 Option 1 ID : 6306801552520  
 Option 2 ID : 6306801552519  
 Option 3 ID : 6306801552521  
 Option 4 ID : 6306801552518  
 Status : Answered  
 Chosen Option : 1

Q.8 After immersing the bricks in cold water for 24 hours, the water absorption should not be more than:

- Ans
- ☒ 1. 15 percent
  - ☒ 2. 20 percent
  - ☐ 3. 05 percent
  - ☐ 4. 10 percent

Question ID : 630680398163  
Option 1 ID : 6306801552664  
Option 2 ID : 6306801552665  
Option 3 ID : 6306801552662  
Option 4 ID : 6306801552663

Status : Answered

Chosen Option : 2

Q.9 Which type of rocks are non-crystalline and glassy in texture?

- Ans
- ☐ 1. Hypabyssal igneous rocks
  - ☐ 2. Plutonic igneous rocks
  - ☐ 3. Aqueous igneous rocks
  - ☒ 4. Volcanic igneous rocks

Question ID : 630680398171  
Option 1 ID : 6306801552694  
Option 2 ID : 6306801552696  
Option 3 ID : 6306801552697  
Option 4 ID : 6306801552695

Status : Answered

Chosen Option : 3

Q.10 Find the ratio of the maximum deflections of a simply supported beam with a central point load W and a cantilever beam of same length (identical cross-section and material) and with a point load W at its free end.

- Ans
- ☒ 1.  $\frac{1}{16}$
  - ☐ 2.  $\frac{1}{10}$
  - ☐ 3.  $\frac{1}{8}$
  - ☐ 4.  $\frac{1}{12}$

Question ID : 630680398153  
Option 1 ID : 6306801552624  
Option 2 ID : 6306801552623  
Option 3 ID : 6306801552625  
Option 4 ID : 6306801552622

Status : Answered

Chosen Option : 1

Q.11 Which type of bituminous is used for cold weather bituminous road construction and maintenance and the distillates used for its preparation are naphtha, kerosene, diesel oil and furnace oil?

- Ans
- ☒ 1. Bitumen primers
  - ☒ 2. Modified bitumen
  - ☒ 3. Bitumen emulsion
  - ☒ 4. Cutback bitumen

Question ID : 630680398183

Option 1 ID : 6306801552743

Option 2 ID : 6306801552742

Option 3 ID : 6306801552744

Option 4 ID : 6306801552745

Status : Answered

Chosen Option : 4

Q.12 What will be the maximum aggregate crushing value when determined in accordance with IS 2386 (Part 4), for the aggregates to be used in concrete for spillways?

- Ans
- ☒ 1. 30%
  - ☒ 2. 35%
  - ☒ 3. 45%
  - ☒ 4. 53%

Question ID : 630680398155

Option 1 ID : 6306801552631

Option 2 ID : 6306801552632

Option 3 ID : 6306801552630

Option 4 ID : 6306801552633

Status : Answered

Chosen Option : 4

Q.13 What should be the minimum gradient for 150mm diameter sewer of building drainage when flowing half-full?

- Ans
- ☒ 1. 1 in 193
  - ☒ 2. 1 in 145
  - ☒ 3. 1 in 57
  - ☒ 4. 1 in 100

Question ID : 630680398167

Option 1 ID : 6306801552678

Option 2 ID : 6306801552679

Option 3 ID : 6306801552681

Option 4 ID : 6306801552680

Status : Answered

Chosen Option : 2

Q.14 The cavitation in the pump can be avoided by:

- Ans
- ✓ 1. Reducing the suction head.
  - ✗ 2. Enhancing the velocity in the suction pipe.
  - ✗ 3. Enhancing hfs in suction pipe by using smooth pipe.
  - ✗ 4. Selecting the pump whose specific speed is high.

Question ID : 630680398179  
 Option 1 ID : 6306801552727  
 Option 2 ID : 6306801552728  
 Option 3 ID : 6306801552726  
 Option 4 ID : 6306801552729  
 Status : Answered  
 Chosen Option : 1

Q.15 A 'breast wall' is usually provided above the sill of a canal head regulator at a barrage site, between:

- Ans
- ✗ 1. Pond level and FSL of canal
  - ✓ 2. Pond level and HFL of river
  - ✗ 3. Sill level and pond level
  - ✗ 4. Bed level of canal

Question ID : 630680398141  
 Option 1 ID : 6306801552574  
 Option 2 ID : 6306801552576  
 Option 3 ID : 6306801552575  
 Option 4 ID : 6306801552577  
 Status : Answered  
 Chosen Option : 3

Q.16 Choose the correct name of the terminology used in water resources engineering, with the following description.  
 "Description- The whole period of cultivation from the time when irrigation water is first applied for preparation of the ground for planting the crop, to its last watering before harvesting."

- Ans
- ✗ 1. Crop period
  - ✗ 2. Delta
  - ✗ 3. Field capacity
  - ✓ 4. Base period

Question ID : 630680398138  
 Option 1 ID : 6306801552562  
 Option 2 ID : 6306801552565  
 Option 3 ID : 6306801552564  
 Option 4 ID : 6306801552563  
 Status : Answered  
 Chosen Option : 4



Q.17 Which is an important outdoor air pollutant often divided into separate categories of methane and non-methane?

- Ans
- ✗ 1. Radioactive pollutants
  - ✗ 2. Chlorofluorocarbons
  - ✗ 3. Carbon monoxide
  - ✓ 4. Volatile organic compounds

Question ID : 630680398186  
Option 1 ID : 6306801552755  
Option 2 ID : 6306801552754  
Option 3 ID : 6306801552756  
Option 4 ID : 6306801552757  
Status : Answered  
Chosen Option : 4

Q.18 What is the range of silica content in OPC?

- Ans
- ✗ 1. 1-3%
  - ✗ 2. 13-18%
  - ✗ 3. 0.4-1.3%
  - ✓ 4. 17-25%

Question ID : 630680398165  
Option 1 ID : 6306801552670  
Option 2 ID : 6306801552672  
Option 3 ID : 6306801552671  
Option 4 ID : 6306801552673  
Status : Answered  
Chosen Option : 2

Q.19 Which of the following statements is/are incorrect regarding construction of Bituminous Pavement?

- i. The main function of Bituminous Surface Dressing is to support the infiltration of surface water.
- ii. The main function of Bituminous Surface Dressing is to serve as a thin wearing course of pavement.
- iii. The main function of Seal Coat is to reduce skid resistant texture.
- iv. The main function of Seal Coat is to enliven an existing dry or weathered bituminous surface.

- Ans
- ✗ 1. Both (iii) and (iv)
  - ✗ 2. Both (i) and (ii)
  - ✗ 3. Both (ii) and (iv)
  - ✓ 4. Both (i) and (iii)

Question ID : 630680398144  
Option 1 ID : 6306801552589  
Option 2 ID : 6306801552587  
Option 3 ID : 6306801552586  
Option 4 ID : 6306801552588  
Status : Answered  
Chosen Option : 4

Q.20 What is the advantage of dumpy level?

- Ans
- ✓ 1. Level readings are very accurate.
  - ✗ 2. Vertical angles can easily be quantified.
  - ✗ 3. They can also be used in bad lightning condition.
  - ✗ 4. It can be conveniently used at dusk or places.

Question ID : 630680398170

Option 1 ID : 6306801552690

Option 2 ID : 6306801552691

Option 3 ID : 6306801552693

Option 4 ID : 6306801552692

Status : Answered

Chosen Option : 1

Q.21 Choose the correct statement(s) from the following, related to flow through the open channel.

Statements:

- i. The flow in which depth of flow changes abruptly over a small length of the channel is known as Gradually Varied Flow.
- ii. If at any point in open channel flow, the velocity of flow, depth of flow or rate of flow changes with respect to time then the flow is said to be steady flow.
- iii. For a given length of the channel, the velocity of flow, depth of flow, slope of the channel and cross-section, do not remain constant, the flow is known as non-uniform flow.

- Ans
- ✗ 1. Both (ii) and (iii)
  - ✗ 2. Both (i) and (iii)
  - ✓ 3. Only (iii)
  - ✗ 4. Only (ii)

Question ID : 630680398136

Option 1 ID : 6306801552556

Option 2 ID : 6306801552555

Option 3 ID : 6306801552557

Option 4 ID : 6306801552554

Status : Answered

Chosen Option : 3

**Q.22** Which of the following statements is/are INCORRECT about hot weather concreting?

Statements:

- i. In hot weather concreting it is recommended to use cements with lower heat of hydration and use water reducing admixtures.
- ii. In hot weather concreting it is recommended to have minimum cement content consistent with other functional requirements.
- iii. In hot weather concreting it is recommended to use insulating formwork.

**Ans**

✗ 1. Only (ii)

✗ 2. Only (i)

✗ 3. Both (i) and (ii)

✓ 4. Only (iii)

Question ID : 630680398157  
Option 1 ID : 6306801552639  
Option 2 ID : 6306801552638  
Option 3 ID : 6306801552641  
Option 4 ID : 6306801552640  
Status : Answered  
Chosen Option : 1

**Q.23** Which of these should be the maximum total quantity of dry aggregates by mass per 50 kg of cement required, to be taken as the sum of the individual masses of fine and coarse aggregates for M20 grade concrete?

**Ans**

✓ 1. 250 kg

✗ 2. 330 kg

✗ 3. 170 kg

✗ 4. 480 kg

Question ID : 630680398192  
Option 1 ID : 6306801552780  
Option 2 ID : 6306801552779  
Option 3 ID : 6306801552781  
Option 4 ID : 6306801552778  
Status : Answered  
Chosen Option : 2

**Q.24** According to IS 456: 2000, if 28 cubic meter quantity is required for M25 grade of concrete at a site, the minimum number of cube samples should be taken from a site are \_\_\_\_\_.

**Ans**

✗ 1. 2

✗ 2. 5

✓ 3. 3

✗ 4. 4

Question ID : 630680398154  
Option 1 ID : 6306801552629  
Option 2 ID : 6306801552628  
Option 3 ID : 6306801552626  
Option 4 ID : 6306801552627  
Status : Answered  
Chosen Option : 4

Q.25 Estimate the cost of brickwork required in a wall 5m long, 3m high, and 150 mm thick and the rate of brickwork is ₹400 per cum.

- Ans
- ☒ 1. ₹600
  - ☒ 2. ₹900
  - ☒ 3. ₹750
  - ☒ 4. ₹850

Question ID : 630680398122  
Option 1 ID : 6306801552498  
Option 2 ID : 6306801552499  
Option 3 ID : 6306801552500  
Option 4 ID : 6306801552501

Status : Answered  
Chosen Option : 2

Q.26 Identify the expression for slope according to double integration method?

- Ans
- ☒ 1.  $EI \frac{d^4 y}{dx^4}$
  - ☒ 2.  $\frac{dy}{dx}$
  - ☒ 3.  $EI \frac{d^3 y}{dx^3}$
  - ☒ 4.  $EI \frac{d^2 y}{dx^2}$

Question ID : 630680398189  
Option 1 ID : 6306801552769  
Option 2 ID : 6306801552766  
Option 3 ID : 6306801552768  
Option 4 ID : 6306801552767

Status : Answered  
Chosen Option : 4

Q.27 Which of the following ingredients of cement is responsible for the colour?

- Ans
- ☒ 1. Silica
  - ☒ 2. Iron Oxide
  - ☒ 3. Calcium Sulphate
  - ☒ 4. Lime

Question ID : 630680398118  
Option 1 ID : 6306801552482  
Option 2 ID : 6306801552483  
Option 3 ID : 6306801552484  
Option 4 ID : 6306801552485

Status : Answered  
Chosen Option : 2

Q.28 The working of hydraulic jack is based on:

- Ans
- ☐ 1. Simon's rule
  - ☐ 2. Archimedes' principle
  - ☒ 3. Pascal's law
  - ☐ 4. Bernoulli's principle

Question ID : 630680398177

Option 1 ID : 6306801552721

Option 2 ID : 6306801552719

Option 3 ID : 6306801552718

Option 4 ID : 6306801552720

Status : Answered

Chosen Option : 3

Q.29 Which of the following statements is/are incorrect about the Assumptions of Limit State of Collapse in Compression?

Statements:

- i. The maximum compressive strain in concrete in axial compression is taken as 0.0035.
- ii. The maximum strain in concrete at the outermost compression fiber is taken as 0.002, subjected to bending compression.
- iii. Plane sections normal to the axis remain plane after bending.

- Ans
- ☒ 1. Both (i) and (ii)
  - ☐ 2. Only (iii)
  - ☐ 3. Both (i) and (iii)
  - ☐ 4. Both (ii) and (iii)

Question ID : 630680398160

Option 1 ID : 6306801552653

Option 2 ID : 6306801552650

Option 3 ID : 6306801552652

Option 4 ID : 6306801552651

Status : Answered

Chosen Option : 1

**Q.30** Which of the following does represent the correct sketch of the deflected shape of a fixed beam loaded with uniformly distributed load on whole span?

**Ans**

✗ 1.



✗ 2.



✓ 3.



✗ 4.



Question ID : 630680398151

Option 1 ID : 6306801552616

Option 2 ID : 6306801552617

Option 3 ID : 6306801552615

Option 4 ID : 6306801552614

Status : Answered

Chosen Option : 3

**Q.31** What is/are standard method of disposal of municipal solid waste?

1. Incineration
2. Pulverization
3. Barging out into sea
4. Composting

Choose the correct option.

**Ans**

✗ 1. Only 4

✗ 2. 1 and 2 only

✓ 3. All 1, 2, 3, and 4

✗ 4. 2 and 4 only

Question ID : 630680398147

Option 1 ID : 6306801552601

Option 2 ID : 6306801552598

Option 3 ID : 6306801552600

Option 4 ID : 6306801552599

Status : Answered

Chosen Option : 2

Q.32 What should be the activity ratio for inactive clays?

- Ans
- ☐ 1. 0.90 - 1.25
  - ☐ 2. 0.30 - 0.85
  - ☐ 3. <1.50
  - ☒ 4. <0.75

Question ID : 630680398174

Option 1 ID : 6306801552709

Option 2 ID : 6306801552708

Option 3 ID : 6306801552706

Option 4 ID : 6306801552707

Status : Answered

Chosen Option : 4

Q.33 Which of the following IRC Code is referred for the guidelines for the Road Signs?

- Ans
- ☐ 1. IRC: 37
  - ☐ 2. IRC: 56
  - ☐ 3. IRC: 35
  - ☒ 4. IRC: 67

Question ID : 630680398142

Option 1 ID : 6306801552579

Option 2 ID : 6306801552578

Option 3 ID : 6306801552581

Option 4 ID : 6306801552580

Status : Answered

Chosen Option : 1

Q.34 Which is characterized as type-I settling in wastewater treatment?

- Ans
- ☐ 1. Flocculent Particles
  - ☐ 2. Hindered or Zone settling
  - ☒ 3. Discrete particle settling
  - ☐ 4. Compression

Question ID : 630680398185

Option 1 ID : 6306801552753

Option 2 ID : 6306801552750

Option 3 ID : 6306801552751

Option 4 ID : 6306801552752

Status : Answered

Chosen Option : 3

Q.35 Which is a merit of bull-headed rails?

- Ans
- ✓ 1. These rails provide longer life to wooden sleepers.
  - ✗ 2. These rails require light maintenance cost.
  - ✗ 3. B.H. rails are of more strength and stiffness.
  - ✗ 4. B.H. rails require no additional cost of iron chairs.

Question ID : 630680398184

Option 1 ID : 6306801552747

Option 2 ID : 6306801552748

Option 3 ID : 6306801552749

Option 4 ID : 6306801552746

Status : Answered

Chosen Option : 4

Q.36 Calculate the quantity of cement (in kg), for 1:2:4 (for 1 cu m quantity) proportion with stone chips.

- Ans
- ✗ 1. Cement = 236.7 Kg
  - ✗ 2. Cement = 326.4 Kg
  - ✓ 3. Cement = 316.8 Kg
  - ✗ 4. Cement = 441.84 Kg

Question ID : 630680398124

Option 1 ID : 6306801552506

Option 2 ID : 6306801552509

Option 3 ID : 6306801552508

Option 4 ID : 6306801552507

Status : Answered

Chosen Option : 3

Q.37 Choose the correct name of the type of plume shown in the figure related to air pollution?



- Ans
- ✗ 1. Conning plume
  - ✓ 2. Fanning plume
  - ✗ 3. Neutral plume
  - ✗ 4. Looping plume

Question ID : 630680398149

Option 1 ID : 6306801552606

Option 2 ID : 6306801552607

Option 3 ID : 6306801552608

Option 4 ID : 6306801552609

Status : Answered

Chosen Option : 2



Q.38 As per general rules for Macaulay's method of calculating deflection of beams, origin should be taken at

- Ans
- ✓ 1. left-hand side of the beam.
  - ✗ 2. top centre-end of the beam.
  - ✗ 3. right-hand side of the beam.
  - ✗ 4. bottom centre-end of the beam.

Question ID : 630680398190  
 Option 1 ID : 6306801552773  
 Option 2 ID : 6306801552770  
 Option 3 ID : 6306801552772  
 Option 4 ID : 6306801552771  
 Status : Answered  
 Chosen Option : 1

Q.39 Which is the physical property of fluid expressed as the reciprocal of mass density?

- Ans
- ✗ 1. Weight density
  - ✓ 2. Specific volume
  - ✗ 3. Specific gravity
  - ✗ 4. Specific weight

Question ID : 630680398176  
 Option 1 ID : 6306801552714  
 Option 2 ID : 6306801552716  
 Option 3 ID : 6306801552717  
 Option 4 ID : 6306801552715  
 Status : Answered  
 Chosen Option : 2

Q.40 The Bricks are crystallized and disintegrated by the presence of \_\_\_\_\_ ingredients in brick earth.

- Ans
- ✗ 1. Lime
  - ✗ 2. Alkalies
  - ✓ 3. Iron Pyrites
  - ✗ 4. Pebbles

Question ID : 630680398117  
 Option 1 ID : 6306801552478  
 Option 2 ID : 6306801552480  
 Option 3 ID : 6306801552481  
 Option 4 ID : 6306801552479  
 Status : Answered  
 Chosen Option : 2

Q.41 Which is the grade of OPC usually not recommended where M20 and above is required?

- Ans
- ☐ 1. Grade 43
  - ☐ 2. Grade 23
  - ☐ 3. Grade 53
  - ☒ 4. Grade 33

Question ID : 630680398193  
 Option 1 ID : 6306801552784  
 Option 2 ID : 6306801552782  
 Option 3 ID : 6306801552785  
 Option 4 ID : 6306801552783  
 Status : Answered  
 Chosen Option : 2

Q.42 Identify the diameter of one of the soils separate i.e., sand?

- Ans
- ☐ 1. 80 - 300 mm
  - ☐ 2. < 0.002 mm
  - ☒ 3. 0.002 - 0.075 mm
  - ☐ 4. 4.75 - 80 mm

Question ID : 630680398172  
 Option 1 ID : 6306801552701  
 Option 2 ID : 6306801552698  
 Option 3 ID : 6306801552699  
 Option 4 ID : 6306801552700  
 Status : Answered  
 Chosen Option : 3

Q.43 What will be the required discharge capacity at the outlet to irrigate the crop if the kor depth is 259.2 mm, kor period is 30 days and the area of crop field is 2400 hectares?

- Ans
- ☐ 1. 3.6 m<sup>3</sup>/sec
  - ☐ 2. 2.8 m<sup>3</sup>/sec
  - ☐ 3. 6.73 m<sup>3</sup>/sec
  - ☒ 4. 2.4 m<sup>3</sup>/sec

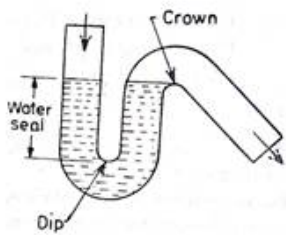
Question ID : 630680398140  
 Option 1 ID : 6306801552571  
 Option 2 ID : 6306801552572  
 Option 3 ID : 6306801552573  
 Option 4 ID : 6306801552570  
 Status : Answered  
 Chosen Option : 4

**Q.44** To calculate the approximate quantity of Brickbats in cu m which of the following Empirical equations for materials and manpower would be used?  
Where 'A' represents the plinth area of a building in sq. m.

- Ans ☒ 1. Brickbats in cu m =  $(0.113A - 0.83)$   
☒ 2. Brickbats in cu m =  $(226A + 6680)$   
☒ 3. Brickbats in cu m =  $(0.0893A + 0.06)$   
☒ 4. Brickbats in cu m =  $(0.145A + 1.5)$

Question ID : 630680398123  
Option 1 ID : 6306801552503  
Option 2 ID : 6306801552502  
Option 3 ID : 6306801552505  
Option 4 ID : 6306801552504  
Status : Answered  
Chosen Option : 4

**Q.45** Study the following sketch and choose the correct name of the trap.



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

Question ID : 630680398146  
Option 1 ID : 6306801552595  
Option 2 ID : 6306801552597  
Option 3 ID : 6306801552594  
Option 4 ID : 6306801552596  
Status : Answered  
Chosen Option : 1

**Q.46** Which of the following statements is/are correct or incorrect about the atmospheric pressure?

Statements:

- i) The atmospheric pressure at sea level at 15°C is 101.3 kN/m<sup>2</sup>.
- ii) The atmospheric pressure head is 760 mm of mercury.

- Ans**
- ☒ 1. Statement (i) is incorrect and Statement (ii) is correct
  - ☒ 2. Both Statements (i) & (ii) are correct
  - ☒ 3. Both Statements (i) & (ii) are incorrect
  - ☒ 4. Statement (i) is correct and Statement (ii) is incorrect

Question ID : 630680398134  
 Option 1 ID : 6306801552547  
 Option 2 ID : 6306801552549  
 Option 3 ID : 6306801552548  
 Option 4 ID : 6306801552546  
 Status : Answered  
 Chosen Option : 1

**Q.47** Which group of timber are most commonly available in quantity 1415 m<sup>3</sup> or more per year according to IS: 339-1963?

- Ans**
- ☒ 1. Q
  - ☒ 2. X
  - ☒ 3. Y
  - ☒ 4. Z

Question ID : 630680398164  
 Option 1 ID : 6306801552666  
 Option 2 ID : 6306801552667  
 Option 3 ID : 6306801552668  
 Option 4 ID : 6306801552669  
 Status : Not Answered  
 Chosen Option : --

**Q.48** What should be the calculated safe stopping sight distance value on rural highways for 25 kmph?

- Ans**
- ☒ 1. 18 m
  - ☒ 2. 24 m
  - ☒ 3. 45 m
  - ☒ 4. 30 m

Question ID : 630680398182  
 Option 1 ID : 6306801552738  
 Option 2 ID : 6306801552739  
 Option 3 ID : 6306801552741  
 Option 4 ID : 6306801552740  
 Status : Answered  
 Chosen Option : 2

**Q.49** Which of the following statements is/are correct or incorrect about the Heads and Efficiencies of a Centrifugal Pump?

Statements:

- i. The vertical distance between the center line of the pump and the water surface in the tank to which water is delivered is known as the delivery head.
- ii. The ratio of the manometric head to the head imparted by the impeller to the water is known as manometric efficiency.

- Ans**
- ☒ 1. Statement (i) is incorrect and Statement (ii) is correct
  - ☒ 2. Both Statements (i) & (ii) are correct
  - ☒ 3. Both Statements (i) & (ii) are incorrect
  - ☒ 4. Statement (i) is correct and Statement (ii) is incorrect

Question ID : 630680398137  
 Option 1 ID : 6306801552559  
 Option 2 ID : 6306801552561  
 Option 3 ID : 6306801552560  
 Option 4 ID : 6306801552558  
 Status : Answered  
 Chosen Option : 2

**Q.50** What are the recommended safe limits of land slope for efficient irrigation for sandy soils?

- Ans**
- ☒ 1. 0.40 to 0.85 %
  - ☒ 2. 0.05 to 0.25 %
  - ☒ 3. 0.25 to 0.65 %
  - ☒ 4. 0.20 to 0.40 %

Question ID : 630680398181  
 Option 1 ID : 6306801552737  
 Option 2 ID : 6306801552734  
 Option 3 ID : 6306801552736  
 Option 4 ID : 6306801552735  
 Status : Answered  
 Chosen Option : 3

**Q.51** What will be the maximum area of tension reinforcement permitted by IS 456: 2000 for the given (in figure) rectangular singly reinforced RCC beam, if the reinforcement steel grade is Fe500?



- Ans**
- ✓ 1. 1800 mm<sup>2</sup>
  - ✗ 2. 1920 mm<sup>2</sup>
  - ✗ 3. 2040 mm<sup>2</sup>
  - ✗ 4. 2100 mm<sup>2</sup>

Question ID : 630680398161  
 Option 1 ID : 6306801552654  
 Option 2 ID : 6306801552656  
 Option 3 ID : 6306801552655  
 Option 4 ID : 6306801552657

Status : Answered  
 Chosen Option : 3

**Q.52** What allowance for each side of trench shall be added to the specified width in case of excavation trenches for foundations for depth exceeding 1 m?

- Ans**
- ✗ 1. 25 mm/m
  - ✗ 2. 15 mm/m
  - ✗ 3. 40 mm/m
  - ✓ 4. 50 mm/m

Question ID : 630680398168  
 Option 1 ID : 6306801552683  
 Option 2 ID : 6306801552682  
 Option 3 ID : 6306801552684  
 Option 4 ID : 6306801552685

Status : Answered  
 Chosen Option : 1

Q.53 Identify one of the cohesive index property of soils?

- Ans
- ✓ 1. Sensitivity
  - ✗ 2. Clay content
  - ✗ 3. Shape of particles
  - ✗ 4. In-place density

Question ID : 630680398173

Option 1 ID : 6306801552704

Option 2 ID : 6306801552703

Option 3 ID : 6306801552702

Option 4 ID : 6306801552705

Status : Answered

Chosen Option : 1

Q.54 If "P" is the corner load assumed as a concentrated point load in kg, h is the thickness of slab in cm and  $S_c$  is stress due to corner load in  $\text{kg/cm}^2$  then Goldbeck's formula for calculating the stress due to corner load is given by \_\_\_\_\_.

- Ans
- ✗ 1.  $S_c = \frac{P}{3h^2}$
  - ✗ 2.  $S_c = \frac{3P}{h^3}$
  - ✓ 3.  $S_c = \frac{3P}{h^2}$
  - ✗ 4.  $S_c = \frac{P}{h^2}$

Question ID : 630680398143

Option 1 ID : 6306801552584

Option 2 ID : 6306801552585

Option 3 ID : 6306801552582

Option 4 ID : 6306801552583

Status : Answered

Chosen Option : 3

Q.55 Which of the following statement(s) is/are correct or incorrect about the Internal Focusing telescope?

Statements:

- i. To increase the diameter of the objective lens and in order to reduce the aberrations of the system, Internal focusing gives the optical designer an extra lens to work with.
- ii. The interior of the telescope is easily accessible for field cleaning and repairs.

- Ans
- ☒ 1. Statement (i) is incorrect and Statement (ii) is correct
  - ☒ 2. Statement (i) is correct and Statement (ii) is incorrect
  - ☒ 3. Both Statements (i) & (ii) are correct
  - ☒ 4. Both Statements (i) & (ii) are incorrect

Question ID : 630680398126  
Option 1 ID : 6306801552515  
Option 2 ID : 6306801552514  
Option 3 ID : 6306801552517  
Option 4 ID : 6306801552516  
Status : Answered  
Chosen Option : 2

Q.56 According to IS:1200 (Part II) – 1974, the unit of measurement in MKS for Cavity Wall is:

- Ans
- ☒ 1. Running Meter
  - ☒ 2. Numbers
  - ☒ 3. Square Meter
  - ☒ 4. Cubic Meter

Question ID : 630680398121  
Option 1 ID : 6306801552495  
Option 2 ID : 6306801552497  
Option 3 ID : 6306801552494  
Option 4 ID : 6306801552496  
Status : Answered  
Chosen Option : 3

Q.57 Which of the following statements is/are correct related to the Rankine's Earth Pressure Theory assumptions?

Statements:

- i. The soil mass is semi-infinite.
- ii. The soil is cohesive.
- iii. The soil element is in a state of plastic equilibrium.

- Ans
- ☒ 1. Only (iii)
  - ☒ 2. Both (i) and (iii)
  - ☒ 3. Only (ii)
  - ☒ 4. Both (ii) and (iii)

Question ID : 630680398132  
Option 1 ID : 6306801552539  
Option 2 ID : 6306801552541  
Option 3 ID : 6306801552538  
Option 4 ID : 6306801552540  
Status : Answered  
Chosen Option : 2



**Q.58** Which of the following statements is/are correct or incorrect about the Surveyor's & Prismatic Compass?

Statements:

- i. In Prismatic Compass, the graduated card ring is attached with the needle. The ring does not rotate along with the line of sight.
- ii. In Surveyor's Compass, Sighting and reading taking cannot be done simultaneously from one position of the observer.

- Ans**
- ☒ 1. Statement (i) is incorrect and Statement (ii) is correct
  - ☒ 2. Statement (i) is correct and Statement (ii) is incorrect
  - ☒ 3. Both Statements (i) & (ii) are correct
  - ☒ 4. Both Statements (i) & (ii) are incorrect

Question ID : 630680398128  
 Option 1 ID : 6306801552523  
 Option 2 ID : 6306801552522  
 Option 3 ID : 6306801552525  
 Option 4 ID : 6306801552524  
 Status : Answered  
 Chosen Option : 3

**Q.59** What is the area of a pipeline which carries  $125 \text{ m}^3/\text{s}$  of water with a velocity of  $0.50 \text{ m/s}$ ?

- Ans**
- ☒ 1.  $500 \text{ m}^2$
  - ☒ 2.  $62.5 \text{ m}^2$
  - ☒ 3.  $250 \text{ m}^2$
  - ☒ 4.  $125 \text{ m}^2$

Question ID : 630680398178  
 Option 1 ID : 6306801552725  
 Option 2 ID : 6306801552722  
 Option 3 ID : 6306801552724  
 Option 4 ID : 6306801552723  
 Status : Answered  
 Chosen Option : 3

**Q.60** What is the correct relation between the Loss of head at the entrance of a pipe ( $h_i$ ) and Loss of head at the exit of pipe ( $h_o$ )?

- Ans**
- ☒ 1.  $h_i = 1.25 h_o$
  - ☒ 2.  $h_i = 1.5 h_o$
  - ☒ 3.  $h_i = h_o$
  - ☒ 4.  $h_i = 0.5 h_o$

Question ID : 630680398135  
 Option 1 ID : 6306801552552  
 Option 2 ID : 6306801552553  
 Option 3 ID : 6306801552551  
 Option 4 ID : 6306801552550  
 Status : Answered  
 Chosen Option : 4

Q.61 Identify the force in gravity dam that causes stability?

- Ans
- ✓ 1. Horizontal thrust of tail water.
  - ✗ 2. Silt pressure
  - ✗ 3. Uplift pressure
  - ✗ 4. Water pressure from reservoir.

Question ID : 630680398188  
 Option 1 ID : 6306801552765  
 Option 2 ID : 6306801552762  
 Option 3 ID : 6306801552763  
 Option 4 ID : 6306801552764  
 Status : Answered  
 Chosen Option : 1

Q.62 The preferably recommended maximum shear stress in concrete section for M20 grade is:

- Ans
- ✗ 1. 3.1
  - ✓ 2. 2.8
  - ✗ 3. 3.7
  - ✗ 4. 3.5

Question ID : 630680398196  
 Option 1 ID : 6306801552795  
 Option 2 ID : 6306801552794  
 Option 3 ID : 6306801552797  
 Option 4 ID : 6306801552796  
 Status : Answered  
 Chosen Option : 2

Q.63 What is the minimum pre-hardening period at 10 °C for M20 Grade of concrete made with OPC?

- Ans
- ✗ 1. 38 hours
  - ✗ 2. 42 hours
  - ✗ 3. 33 hours
  - ✓ 4. 46 hours

Question ID : 630680398191  
 Option 1 ID : 6306801552775  
 Option 2 ID : 6306801552776  
 Option 3 ID : 6306801552774  
 Option 4 ID : 6306801552777  
 Status : Answered  
 Chosen Option : 2

Q.64 To which of the following, the "Buhler process and Nusoil process" are related?

- Ans
- ☒ 1. Bargeing into the sea
  - ☒ 2. Mechanical composting of solid waste
  - ☒ 3. Sanitary land filling
  - ☒ 4. Incineration of solid waste

Question ID : 630680398148

Option 1 ID : 6306801552603

Option 2 ID : 6306801552605

Option 3 ID : 6306801552602

Option 4 ID : 6306801552604

Status : Answered

Chosen Option : 4

Q.65 Choose the correct name of the process of applying chlorine to the water before filtration or before sedimentation-coagulation.

- Ans
- ☒ 1. Super chlorination
  - ☒ 2. Plain chlorination
  - ☒ 3. Break-point chlorination
  - ☒ 4. Pre-chlorination

Question ID : 630680398145

Option 1 ID : 6306801552590

Option 2 ID : 6306801552591

Option 3 ID : 6306801552592

Option 4 ID : 6306801552593

Status : Answered

Chosen Option : 4

Q.66 Which is the assumption for Terzaghi's bearing capacity theory?

- Ans
- ☒ 1. The problem is two-dimensional.
  - ☒ 2. The load is vertical and non-symmetrical.
  - ☒ 3. The soil is infinite and homogenous.
  - ☒ 4. The ground surface is vertical.

Question ID : 630680398175

Option 1 ID : 6306801552713

Option 2 ID : 6306801552712

Option 3 ID : 6306801552710

Option 4 ID : 6306801552711

Status : Answered

Chosen Option : 3

**Q.67** What will be the effective length of intermediate transverse stiffeners used in calculating the buckling resistance,  $F_{qd}$ , when "L" is the length of the stiffener?

- Ans
- ☒ 1.  $1.5 L$
  - ☒ 2.  $1.0 L$
  - ☒ 3.  $0.7 L$
  - ☒ 4.  $0.5 L$

Question ID : 630680398159  
 Option 1 ID : 6306801552649  
 Option 2 ID : 6306801552648  
 Option 3 ID : 6306801552646  
 Option 4 ID : 6306801552647

Status : Answered  
 Chosen Option : 4

**Q.68** What will be the critical velocity (m/sec) of the channel by using Kennedy's theory, if the depth of flow in an irrigation channel is 2m and the value of the critical velocity ratio is 1.1?

- Ans
- ☒ 1.  $2.2 \times (1.1)^{0.64}$
  - ☒ 2.  $0.11 \times (2)^{0.32}$
  - ☒ 3.  $2.2 \times (1.1)^{0.32}$
  - ☒ 4.  $0.605 \times (2)^{0.64}$

Question ID : 630680398139  
 Option 1 ID : 6306801552566  
 Option 2 ID : 6306801552569  
 Option 3 ID : 6306801552567  
 Option 4 ID : 6306801552568

Status : Answered  
 Chosen Option : 4

**Q.69** Which method of irrigation is mostly useful for the fruits crops however some land is occupied under bunds, irrigation channels etc?

- Ans
- ☒ 1. Deep furrow method
  - ☒ 2. Corrugation method
  - ☒ 3. Basin irrigation
  - ☒ 4. Border strip method

Question ID : 630680398180  
 Option 1 ID : 6306801552732  
 Option 2 ID : 6306801552733  
 Option 3 ID : 6306801552730  
 Option 4 ID : 6306801552731

Status : Answered  
 Chosen Option : 3

**Q.70** The variety of chain available in lengths of 5, 10, 20 and 30 meters is termed as:

- Ans**
- ☒ 1. Band chain
  - ☒ 2. Revenue chains
  - ☒ 3. Engineer's chain
  - ☒ 4. Metric chains

Question ID : 630680398169  
Option 1 ID : 6306801552689  
Option 2 ID : 6306801552688  
Option 3 ID : 6306801552686  
Option 4 ID : 6306801552687

Status : Answered  
Chosen Option : 4

**Q.71** What will be the effective length for cantilever of length  $L$ , at continuous support with lateral restraint to top flange, that to under destabilizing loading conditions?

- Ans**
- ☒ 1.  $6.2 L$
  - ☒ 2.  $7.5 L$
  - ☒ 3.  $3.0 L$
  - ☒ 4.  $5.0 L$

Question ID : 630680398194  
Option 1 ID : 6306801552787  
Option 2 ID : 6306801552789  
Option 3 ID : 6306801552786  
Option 4 ID : 6306801552788

Status : Not Answered  
Chosen Option : --

**Q.72** Consider the following statements related to continuous beam and choose the correct option from the following.  
Statements:

1. Continuous beam is a statically determinate beam and can be analysed by equations of static equilibrium alone.
2. Continuous beam cannot be analysed by the Moment distribution method.
3. Clapeyron's theorem for continuous beams is a relationship among three support moments of two consecutive spans of the beam.

- Ans**
- ☒ 1. All three statements are false.
  - ☒ 2. All three statements are true.
  - ☒ 3. Statement 1 and 2 are false while statements 3 is true.
  - ☒ 4. Statement 1 is true while statements 2 and 3 are false.

Question ID : 630680398152  
Option 1 ID : 6306801552621  
Option 2 ID : 6306801552619  
Option 3 ID : 6306801552618  
Option 4 ID : 6306801552620

Status : Answered  
Chosen Option : 3

**Q.73** Which of the following statement(s) is/are correct or incorrect related to the Compressibility & Bulk Modulus?

Statements:

- i. Compressibility is the reciprocal of the bulk modulus of elasticity.
- ii. Compressibility is directly proportional to the Bulk Modulus.

**Ans**

- ✓ 1. Statement (i) is correct and Statement (ii) is incorrect
- ✗ 2. Both Statements (i) & (ii) are incorrect
- ✗ 3. Statement (i) is incorrect and Statement (ii) is correct
- ✗ 4. Both Statements (i) & (ii) are correct

Question ID : 630680398133  
Option 1 ID : 6306801552542  
Option 2 ID : 6306801552544  
Option 3 ID : 6306801552543  
Option 4 ID : 6306801552545  
Status : Answered  
Chosen Option : 1

**Q.74** Which system of tile drainage is adopted in land that slopes from both sides and the line in between is in depression?

**Ans**

- ✗ 1. Double main system
- ✗ 2. Grid iron system
- ✗ 3. Intercepting system
- ✓ 4. Herringbone system

Question ID : 630680398187  
Option 1 ID : 6306801552758  
Option 2 ID : 6306801552760  
Option 3 ID : 6306801552761  
Option 4 ID : 6306801552759  
Status : Answered  
Chosen Option : 4

**Q.75** Identify the percentage passing for all in aggregate of 20 mm nominal size for 40 mm IS sieve designation?

**Ans**

- ✓ 1. 100 mm
- ✗ 2. 30-50 mm
- ✗ 3. 80-95 mm
- ✗ 4. 10-25 mm

Question ID : 630680398166  
Option 1 ID : 6306801552674  
Option 2 ID : 6306801552676  
Option 3 ID : 6306801552675  
Option 4 ID : 6306801552677  
Status : Answered  
Chosen Option : 1

**Q.76** What will be the degree of workability if the compacting factor of 20mm and maximum size of aggregate is 0.9?

- Ans
- ☒ 1. Stiff
  - ☒ 2. High
  - ☒ 3. Stiff Plastic
  - ☒ 4. Plastic

Question ID : 630680398156  
 Option 1 ID : 6306801552637  
 Option 2 ID : 6306801552634  
 Option 3 ID : 6306801552635  
 Option 4 ID : 6306801552636  
 Status : Answered  
 Chosen Option : 2

**Q.77** The distance PQ on the ground as measured on a plan drawn to a scale of 1 cm = 50m was found to be 800 m. Later it was detected that the surveyor wrongly used a scale of 1 cm = 40 m in the calculations. Determine the true length of the line PQ.

- Ans
- ☒ 1. 725 m
  - ☒ 2. 1000 m
  - ☒ 3. 625 m
  - ☒ 4. 800 m

Question ID : 630680398125  
 Option 1 ID : 6306801552510  
 Option 2 ID : 6306801552513  
 Option 3 ID : 6306801552512  
 Option 4 ID : 6306801552511  
 Status : Answered  
 Chosen Option : 2

**Q.78** Identify the stone surface finish obtained by the dressing of stones given in the figure.



- Ans
- ☒ 1. Hammer-dressed finish
  - ☒ 2. Reticulated finish
  - ☒ 3. Boasted or droved finish
  - ☒ 4. Dragged or combed finish

Question ID : 630680398120  
 Option 1 ID : 6306801552490  
 Option 2 ID : 6306801552493  
 Option 3 ID : 6306801552492  
 Option 4 ID : 6306801552491  
 Status : Answered  
 Chosen Option : 3

Q.79 What will be the correct range of Coefficient of permeability (mm/sec) if the soil type is Dense silt?

- Ans
- ☐ 1.  $10^{-8}$  to  $10^{-6}$
  - ☒ 2.  $10^{-5}$  to  $10^{-4}$
  - ☐ 3.  $10^{-2}$  to  $10^{+1}$
  - ☐ 4.  $10^{+5}$  to  $10^{+6}$

Question ID : 630680398131

Option 1 ID : 6306801552535

Option 2 ID : 6306801552534

Option 3 ID : 6306801552537

Option 4 ID : 6306801552536

Status : Answered

Chosen Option : 2

Q.80 In a Homogeneous dam, the phreatic line is \_\_\_\_\_.

- Ans
- ☐ 1. Elliptical
  - ☐ 2. Hyperbolic
  - ☒ 3. Basic Parabolic
  - ☐ 4. Circular

Question ID : 630680398130

Option 1 ID : 6306801552532

Option 2 ID : 6306801552530

Option 3 ID : 6306801552533

Option 4 ID : 6306801552531

Status : Answered

Chosen Option : 3

Section : Reasoning

Q.1 A man pointing to a woman in a photograph says that, "She is the mother of my brother". How is that woman related to that man?

- Ans
- ☒ 1. Mother
  - ☐ 2. Daughter
  - ☐ 3. Sister
  - ☐ 4. Wife

Question ID : 630680398204

Option 1 ID : 6306801552827

Option 2 ID : 6306801552828

Option 3 ID : 6306801552826

Option 4 ID : 6306801552829

Status : Answered

Chosen Option : 1



**Q.2** In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

**Statements:**

- I. All H are B.
- II. Some N are H.
- III. Some S are H.

**Conclusions:**

- I. All S are B.
- II. All N are S.
- III. All N are B.

- Ans**
- ☒ 1. Only conclusion III follows
  - ☒ 2. Only conclusion II follows
  - ☒ 3. Only conclusion I follows
  - ☒ 4. Neither of the given conclusion follows

Question ID : 630680398203

Option 1 ID : 6306801552824

Option 2 ID : 6306801552823

Option 3 ID : 6306801552822

Option 4 ID : 6306801552825

Status : Answered

Chosen Option : 4

**Q.3** In this question TWO statements are given. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusion, if any, follows from the given statement.

**Statements:**

- (A) Some tables are chairs.
- (B) Some chairs are fans.

**Conclusions:**

- I. Some tables are fans.
- II. No table is fan.

- Ans**
- ☒ 1. Either conclusion I or II follows
  - ☒ 2. Only conclusion I follows
  - ☒ 3. Neither conclusion I nor II follows
  - ☒ 4. Only conclusion II follows

Question ID : 630680398198

Option 1 ID : 6306801552805

Option 2 ID : 6306801552802

Option 3 ID : 6306801552804

Option 4 ID : 6306801552803

Status : Answered

Chosen Option : 1

Q.4 In the following question, select the missing number from the given series.  
13, 0, 21, -8, 29, ?

- Ans ☐ 1. 0  
☐ 2. -12  
☒ 3. -16  
☐ 4. -5

Question ID : 630680398205  
Option 1 ID : 6306801552830  
Option 2 ID : 6306801552832  
Option 3 ID : 6306801552833  
Option 4 ID : 6306801552831  
Status : Answered  
Chosen Option : 3

Q.5 J, K, L, M, N, O and P are sitting on a wall facing North. O is immediate left of K. O is fourth from the left end. L is on endpoint and P is his neighbour. Only M is sitting between K and N. Who is immediately right side of J?

- Ans ☐ 1. M  
☐ 2. K  
☒ 3. O  
☐ 4. P

Question ID : 630680398197  
Option 1 ID : 6306801552798  
Option 2 ID : 6306801552801  
Option 3 ID : 6306801552800  
Option 4 ID : 6306801552799  
Status : Answered  
Chosen Option : 3

Q.6 The given series is a letter cluster series with one term missing. Choose the correct option in place of the question mark and complete the series.  
SAW, VDZ, YGC, BJE, EMI, ?

- Ans ☐ 1. GPL  
☒ 2. HPL  
☐ 3. GNJ  
☐ 4. HNJ

Question ID : 630680398199  
Option 1 ID : 6306801552808  
Option 2 ID : 6306801552809  
Option 3 ID : 6306801552806  
Option 4 ID : 6306801552807  
Status : Answered  
Chosen Option : 2

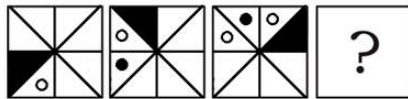
**Q.7** If '+' means 'division', '-' means 'addition', '×' means 'subtraction' and '÷' means 'multiplication', what will be the value of the following expression?  
 $78 - 34 \div 11 \times 221 + 17 = ?$

- Ans**
- ☒ 1. 329
  - ☒ 2. 439
  - ☒ 3. 229
  - ☒ 4. 549

Question ID : 630680398202  
 Option 1 ID : 6306801552819  
 Option 2 ID : 6306801552820  
 Option 3 ID : 6306801552818  
 Option 4 ID : 6306801552821

Status : Answered  
 Chosen Option : 2

**Q.8** Select the figure from among the given options that can replace the question mark (?) in the following series.



**Ans**

- ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 630680398201  
 Option 1 ID : 6306801552816  
 Option 2 ID : 6306801552817  
 Option 3 ID : 6306801552815  
 Option 4 ID : 6306801552814

Status : Answered  
 Chosen Option : 3

**Q.9** In a certain code language, "ROCKET" is coded as "OIXVSG" and "DOMAIN" is coded as "EMRHSQ". How will "NOTICE" be coded in same language?

- Ans**
- ✓ 1. MGIRSX
  - ✗ 2. RMGSXI
  - ✗ 3. RSXMGI
  - ✗ 4. MRSGIX

Question ID : 630680398200  
 Option 1 ID : 6306801552810  
 Option 2 ID : 6306801552813  
 Option 3 ID : 6306801552812  
 Option 4 ID : 6306801552811  
 Status : Answered  
 Chosen Option : 2

**Q.10** In the following question, select the missing number from the given series.  
 205, 194, 182, 169, 155, ?

- Ans**
- ✗ 1. 138
  - ✗ 2. 141
  - ✓ 3. 140
  - ✗ 4. 139

Question ID : 630680398206  
 Option 1 ID : 6306801552834  
 Option 2 ID : 6306801552836  
 Option 3 ID : 6306801552837  
 Option 4 ID : 6306801552835  
 Status : Answered  
 Chosen Option : 3

## Section : Quantitative Aptitude

**Q.1** The ratio of three numbers is 5:3:1 and the sum of their squares is 1260. The difference between the highest and smallest value is:

- Ans**
- ✗ 1. 22
  - ✓ 2. 24
  - ✗ 3. 25
  - ✗ 4. 23

Question ID : 630680398210  
 Option 1 ID : 6306801552850  
 Option 2 ID : 6306801552852  
 Option 3 ID : 6306801552853  
 Option 4 ID : 6306801552851  
 Status : Answered  
 Chosen Option : 2

Q.2 At what rate of compound interest per annum will a sum of ₹2300 becomes ₹2420 in one year. (Round off value)

- Ans
- ☒ 1. 4%
  - ☒ 2. 2%
  - ☒ 3. 5%
  - ☒ 4. 3%

Question ID : 630680398211  
Option 1 ID : 6306801552856  
Option 2 ID : 6306801552854  
Option 3 ID : 6306801552857  
Option 4 ID : 6306801552855  
Status : Answered  
Chosen Option : 3

Q.3 Sum of Rs. 60000 is divided among P, Q and R in the ratio of 8 : 5 : 2 respectively. If each of them has received Rs. 200 less, then what will be the ratio of the amount received by Q and R respectively?

- Ans
- ☒ 1. 33 : 13
  - ☒ 2. 35 : 6
  - ☒ 3. 35 : 36
  - ☒ 4. 33 : 10

Question ID : 630680398215  
Option 1 ID : 6306801552870  
Option 2 ID : 6306801552873  
Option 3 ID : 6306801552871  
Option 4 ID : 6306801552872  
Status : Answered  
Chosen Option : 1

Q.4 Amit buys 6 tables and 12 chairs for Rs. 3000. He sells chairs at a profit of 20 percent and tables at loss of 20 percent. If his overall profit is Rs. 300, then what is the sum of the cost price of one table and one chair?

- Ans
- ☒ 1. Rs. 312.5
  - ☒ 2. Rs. 625
  - ☒ 3. Rs. 425.5
  - ☒ 4. Rs. 550.5

Question ID : 630680398214  
Option 1 ID : 6306801552869  
Option 2 ID : 6306801552866  
Option 3 ID : 6306801552868  
Option 4 ID : 6306801552867  
Status : Answered  
Chosen Option : 3

Q.5 A cone is kept on a cylinder. The base of cone and cylinder are identical. The height of the conical part is 24 cm and height of the cylindrical part is 18 cm. If the diameter of the cone is 56 cm, then what is the volume of the solid?

- Ans
- ☐ 1. 64645 cm<sup>3</sup>
  - ☐ 2. 75050 cm<sup>3</sup>
  - ☐ 3. 65605 cm<sup>3</sup>
  - ☒ 4. 64064 cm<sup>3</sup>

Question ID : 630680398216  
 Option 1 ID : 6306801552874  
 Option 2 ID : 6306801552877  
 Option 3 ID : 6306801552875  
 Option 4 ID : 6306801552876

Status : Answered

Chosen Option : 4

Q.6 The value of  $\frac{1}{5} + \frac{1}{5 \times 6} + \frac{1}{5 \times 6 \times 7}$  is:

- Ans
- ☐ 1.  $\frac{13}{11}$
  - ☐ 2.  $\frac{13}{12}$
  - ☐ 3.  $\frac{13}{21}$
  - ☒ 4.  $\frac{5}{21}$

Question ID : 630680398207  
 Option 1 ID : 6306801552839  
 Option 2 ID : 6306801552840  
 Option 3 ID : 6306801552838  
 Option 4 ID : 6306801552841

Status : Answered

Chosen Option : 4

Q.7 The average weight of 12 employees in an organization is 61kgs. If the HR weight is added then the average weight increases by 2kgs. Find the weight of HR in kgs.

- Ans
- ☐ 1. 89
  - ☒ 2. 87
  - ☐ 3. 86
  - ☐ 4. 88

Question ID : 630680398208  
 Option 1 ID : 6306801552845  
 Option 2 ID : 6306801552843  
 Option 3 ID : 6306801552842  
 Option 4 ID : 6306801552844

Status : Answered

Chosen Option : 2

Q.8 If  $\frac{1}{6} + \frac{1}{12} + \frac{1}{A} = \frac{1}{2}$ , then what is the value of A?

- Ans ☒ 1. 4  
☒ 2. 1/2  
☒ 3. 2  
☒ 4. 1/4

Question ID : 630680398212  
 Option 1 ID : 6306801552861  
 Option 2 ID : 6306801552859  
 Option 3 ID : 6306801552860  
 Option 4 ID : 6306801552858  
 Status : Answered  
 Chosen Option : 1

Q.9 Price of 4 kg of brinjal is increased by 44 percent and the increase is of Rs. 176. What is the new price of the brinjal per kg?

- Ans ☒ 1. Rs. 444  
☒ 2. Rs. 100  
☒ 3. Rs. 144  
☒ 4. Rs. 176

Question ID : 630680398213  
 Option 1 ID : 6306801552862  
 Option 2 ID : 6306801552863  
 Option 3 ID : 6306801552864  
 Option 4 ID : 6306801552865  
 Status : Answered  
 Chosen Option : 3

Q.10 Due to reduction of 5% in the price of oil, Rama is able to buy 1kg more for Rs ₹80. Find the original and reduced rate of oil(in ₹).

- Ans ☒ 1. 4.8, 3.99  
☒ 2. 4.8, 3.65  
☒ 3. 4.2, 3.65  
☒ 4. 4.2, 3.99

Question ID : 630680398209  
 Option 1 ID : 6306801552848  
 Option 2 ID : 6306801552847  
 Option 3 ID : 6306801552849  
 Option 4 ID : 6306801552846  
 Status : Answered  
 Chosen Option : 4

Q.1 Which of the following rivers discharge their waters in the Arabian Sea.

- a)The Indus
- b)The Narmada
- c)The Krishna
- d)The Mahi

Ans ☒ 1. ( b ) , ( c ) and ( d )  
☒ 2. ( a ) , ( b ) and ( c )  
☒ 3. ( a ) , ( c ) and ( d )  
☒ 4. ( a ) , ( b ) and ( d )

Question ID : 630680398220  
Option 1 ID : 6306801552890  
Option 2 ID : 6306801552891  
Option 3 ID : 6306801552892  
Option 4 ID : 6306801552893  
Status : Answered  
Chosen Option : 4

Q.2 Which of the following Fundamental Duty is mentioned in Article 51A (g) of the Indian Constitution?

Ans ☒ 1. To safeguard public property  
☒ 2. To protect the natural environment  
☒ 3. To develop the scientific temper  
☒ 4. To abjure violence

Question ID : 630680398226  
Option 1 ID : 6306801552916  
Option 2 ID : 6306801552914  
Option 3 ID : 6306801552915  
Option 4 ID : 6306801552917  
Status : Answered  
Chosen Option : 4

Q.3 Which Article in Indian constitution states that there shall be a Parliament for the Union which shall consist of the President and two Houses to be known respectively as the Council of States and the House of the People?

Ans ☒ 1. Article 79  
☒ 2. Article 68  
☒ 3. Article 78  
☒ 4. Article 69

Question ID : 630680398221  
Option 1 ID : 6306801552895  
Option 2 ID : 6306801552896  
Option 3 ID : 6306801552894  
Option 4 ID : 6306801552897  
Status : Answered  
Chosen Option : 2



Q.4 Which of the following articles of the Indian Constitution is related with, to assemble peacefully and without arms?

- Ans ☐ 1. Article 19(1) (d)  
☐ 2. Article 19(1) (a)  
☒ 3. Article 19(1) (b)  
☐ 4. Article 19(1) (c)

Question ID : 630680398225  
Option 1 ID : 6306801552913  
Option 2 ID : 6306801552910  
Option 3 ID : 6306801552911  
Option 4 ID : 6306801552912  
Status : Not Answered  
Chosen Option : --

Q.5 Which dynasty in South India made a successful use of their navy and conquered not only Maldiva and Lakshdweep Islands but also Sri Lanka?

- Ans ☐ 1. Pallava Dynasty  
☐ 2. Pandya Dynasty  
☒ 3. Chola Dynasty  
☐ 4. Chalukya Dynasty

Question ID : 630680398218  
Option 1 ID : 6306801552884  
Option 2 ID : 6306801552882  
Option 3 ID : 6306801552883  
Option 4 ID : 6306801552885  
Status : Answered  
Chosen Option : 3

Q.6 \_\_\_\_\_ is the Chairman of ISRO as of July 2023.

- Ans ☐ 1. K. Radhakrishnan  
☒ 2. S. Somanath  
☐ 3. K. Sivan  
☐ 4. S. Nayak

Question ID : 630680398217  
Option 1 ID : 6306801552879  
Option 2 ID : 6306801552878  
Option 3 ID : 6306801552880  
Option 4 ID : 6306801552881  
Status : Answered  
Chosen Option : 2

Q.7 Which country won the SAFF football Championship 2023?

- Ans ☐ 1. Kuwait  
☐ 2. Bangladesh  
☒ 3. India  
☐ 4. Pakistan

Question ID : 630680398222  
Option 1 ID : 6306801552898  
Option 2 ID : 6306801552901  
Option 3 ID : 6306801552899  
Option 4 ID : 6306801552900  
Status : Answered  
Chosen Option : 3

Q.8 Who among the following leaders was one of the founders of the 'Oudh Kisan Sabha' in 1920?

- Ans ☐ 1. Bal Gangadhar Tilak  
☒ 2. Jawaharlal Nehru  
☐ 3. Bhagat Singh  
☐ 4. Mahatma Gandhi

Question ID : 630680398223  
Option 1 ID : 6306801552905  
Option 2 ID : 6306801552902  
Option 3 ID : 6306801552904  
Option 4 ID : 6306801552903  
Status : Answered  
Chosen Option : 1

Q.9 The Brahmaputra river marks the \_\_\_\_\_ boundary of the Himalayas.

- Ans ☐ 1. western-most  
☐ 2. southern-most  
☐ 3. northern-most  
☒ 4. eastern-most

Question ID : 630680398219  
Option 1 ID : 6306801552887  
Option 2 ID : 6306801552888  
Option 3 ID : 6306801552889  
Option 4 ID : 6306801552886  
Status : Answered  
Chosen Option : 4

Q.10 The National Legal Services Authority is the central authority and is headed by the \_\_\_\_\_ as its Patron-in-Chief.

- Ans
- ☐ 1. Attorney-General for India
  - ☐ 2. Prime Minister of India
  - ☐ 3. President of India
  - ☒ 4. Chief Justice of India

Question ID : 630680398224  
Option 1 ID : 6306801552906  
Option 2 ID : 6306801552909  
Option 3 ID : 6306801552908  
Option 4 ID : 6306801552907  
Status : Answered  
Chosen Option : 4

Section : English Language

Q.1 Select the option that correctly infers the meaning of the given sentence.

In spite of her illness, Garima secured a distinction in her final examination.

- Ans
- ☐ 1. Garima was not ill during her final examination and she secured a distinction.
  - ☐ 2. Garima secured a distinction in her final examination because she was ill.
  - ☒ 3. Garima was ill during her final examination but she secured a distinction.
  - ☐ 4. Garima was ill during her final examination so she secured a distinction.

Question ID : 630680398231  
Option 1 ID : 6306801552937  
Option 2 ID : 6306801552936  
Option 3 ID : 6306801552934  
Option 4 ID : 6306801552935  
Status : Answered  
Chosen Option : 3

Q.2 Select the option that correctly infers the meaning of the given sentence.

If Ravi had studied hard, he would have cleared the test.

- Ans
- ☐ 1. Ravi had studied well, yet he could not clear the test.
  - ☒ 2. Ravi did not study well, so he failed in the test.
  - ☐ 3. Ravi studied well, so he cleared the test.
  - ☐ 4. Ravi did not study well, but he cleared the test.

Question ID : 630680398230  
Option 1 ID : 6306801552930  
Option 2 ID : 6306801552931  
Option 3 ID : 6306801552932  
Option 4 ID : 6306801552933  
Status : Answered  
Chosen Option : 2

Q.3 Choose the word that means the same as the given word.  
Backward

- Ans ☒ 1. Immodest  
☒ 2. Convivial  
☒ 3. Urbane  
☒ 4. Reverse

Question ID : 630680398235  
Option 1 ID : 6306801552952  
Option 2 ID : 6306801552953  
Option 3 ID : 6306801552950  
Option 4 ID : 6306801552951  
Status : Answered  
Chosen Option : 4

Q.4 Select the correct option to substitute the given set of words.

There needs to be a situation in which the identity of a person is unknown in the scrutiny of entries to the competition.

- Ans ☒ 1. infinity  
☒ 2. infirmity  
☒ 3. ambiguity  
☒ 4. anonymity

Question ID : 630680398232  
Option 1 ID : 6306801552941  
Option 2 ID : 6306801552940  
Option 3 ID : 6306801552938  
Option 4 ID : 6306801552939  
Status : Answered  
Chosen Option : 4

Q.5 A sentence has been given with a blank to be filled with an appropriate option. Choose the correct alternative.  
I cannot make you understand the problems I \_\_\_\_\_ facing.

- Ans ☒ 1. are  
☒ 2. were  
☒ 3. am  
☒ 4. is

Question ID : 630680398233  
Option 1 ID : 6306801552945  
Option 2 ID : 6306801552944  
Option 3 ID : 6306801552943  
Option 4 ID : 6306801552942  
Status : Answered  
Chosen Option : 3

Q.6 Choose the word that is opposite in meaning to the given word.  
Apathetic

- Ans ☒ 1. Zealous  
☒ 2. Accidental  
☒ 3. Indifferent  
☒ 4. Wretched

Question ID : 630680398236  
Option 1 ID : 6306801552955  
Option 2 ID : 6306801552957  
Option 3 ID : 6306801552954  
Option 4 ID : 6306801552956  
Status : Answered  
Chosen Option : 3

Q.7 Choose the most appropriate idiom for the underlined phrase in the given sentence.  
You have to come back soon before it starts to rain heavily.

- Ans ☒ 1. Starts petting down  
☒ 2. Smokes like a chimney  
☒ 3. No spring chicken  
☒ 4. Under the weather

Question ID : 630680398234  
Option 1 ID : 6306801552946  
Option 2 ID : 6306801552949  
Option 3 ID : 6306801552947  
Option 4 ID : 6306801552948  
Status : Answered  
Chosen Option : 4

Q.8 Fill in the blank with the correct option to complete the sentence below.

They were taken aback when Rajiv screamed \_\_\_\_\_.

- Ans ☒ 1. adversely  
☒ 2. carefully  
☒ 3. excitedly  
☒ 4. coolly

Question ID : 630680398227  
Option 1 ID : 6306801552918  
Option 2 ID : 6306801552921  
Option 3 ID : 6306801552920  
Option 4 ID : 6306801552919  
Status : Answered  
Chosen Option : 3

Q.9 Fill in the blank with the correct option to complete the sentence below.

Sheela prefers continental breakfast, \_\_\_\_\_ she loves Indian cuisine.

- Ans
- ☒ 1. yet
  - ☐ 2. so
  - ☐ 3. and
  - ☐ 4. for

Question ID : 630680398228

Option 1 ID : 6306801552923

Option 2 ID : 6306801552924

Option 3 ID : 6306801552922

Option 4 ID : 6306801552925

Status : Answered

Chosen Option : 1

Q.10 Fill in the blank with the correct option to complete the sentence below.

He could not believe that he had \_\_\_\_\_ 18 years of service in the profession.

- Ans
- ☐ 1. put on
  - ☐ 2. put out
  - ☒ 3. put in
  - ☐ 4. put off

Question ID : 630680398229

Option 1 ID : 6306801552926

Option 2 ID : 6306801552929

Option 3 ID : 6306801552928

Option 4 ID : 6306801552927

Status : Answered

Chosen Option : 1

