BHEL ET

Previous Year Paper

(Civil) 2019

Participant ID	
Participant Name	
Test Center Name	
Test Date	
Test Time	
Subject	ENGINEER TRAINEE CIVIL

Section : **Discipline Question**

Q.1 As per IS 800 : 2007, the cross-sections which can develop plastic moment of resistance, but have inadequate plastic hinge rotation capacity for formation of plastic mechanism, due to local buckling is:

Ans
✔ 1. compact section
✘ 2. semi-compact section
✘ 3. plastic Section
✘ 4. slender section

Question ID : **1501838588**
Status : **Answered**
Chosen Option : **4**

Q.2 The bearing of line CD is 140°, and the angle CDE is 116°. The bearing of line DE is:

Ans
✘ 1. 66°
✘ 2. 64°
✘ 3. 106°
✔ 4. 76°

Question ID : **1501838662**
Status : **Not Answered**
Chosen Option : **--**

Q.3 In hydrologic analysis, a linear reservoir concept, is one in which:

Ans
✘ 1. volume varies linearly with elevation
✔ 2. storage varies linearly with the outflow rate
✘ 3. storage varies linearly with time
✘ 4. storage varies linearly the inflow rate

Question ID : **1501838622**

Status : **Answered**
Chosen Option : **4**

Q.4 Match the Items in List 1 (description of planning) with those in List 2 (Type of development) and choose the best answer using the codes.

List 1	List 2
A. Development occurring in vacant or underused lots in otherwise built up areas	1. Planned unit development
B. Developing a large area as single entity merging zoning and subdivision control.	2. Infill development
C. Development with compatible land uses integrating varied activities at different times of the day	3. Transit oriented development
D. Development located within walking distance from mass transit stations along the corridor	4. Mixed use development

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

Question ID : **1501838680**
Status : **Answered**
Chosen Option : **3**

Q.5 Given below are the statements associated with Concrete:
Statement 1: As the compaction factor increases slump increases.
Statement 2: Slump test helps in qualitatively understand the setting time of concrete.
Decide which of the following options is correct?

Ans
✗ 1. Statement 1 and statement 2 are true.
✓ 2. Statement 1 is true and statement 2 is false.
✗ 3. Statement 1 is false and statement 2 is true.
✗ 4. Statement 1 and statement 2 are false

Question ID : **1501838581**
Status : **Answered**
Chosen Option : **2**

Q.6 A saturated soil sample has a dry unit weight of 18000 N/m^3 and specific gravity 2.65. If unit weight of water is 9810 N/m^3, determine the water content of the soil sample.

Ans
✗ 1. 0.25
✗ 2. 0.41
✗ 3. 0.34
✓ 4. 0.17

Question ID : **1501838600**
Status : **Answered**
Chosen Option : **3**

Q.7 A rigid bar is suspended horizontally by three rods made of the same material. The area and length of the central rod are 2 A and L respectively; while that of the two outer rods are A and 2 L respectively. If a downward force of 96 kN is applied to the rigid bar, the forces on the central and each of the outer rods are:

Ans

1. 64 kN, 16 kN
2. 72 kN, 12 kN
3. 48 kN, 24 kN
4. 32 kN each

Question ID : **1501838572**
Status : **Answered**
Chosen Option : **4**

Q.8 As per IS, for a load bearing brick masonry wall built in cement mortar, the maximum permissible slenderness ratio is:

Ans
1. 17
2. 27
3. 38
4. 20

Question ID : **1501838584**
Status : **Answered**
Chosen Option : **1**

Q.9 According to ICAO recommendation, as the elevation of the locality changes, the rate at which runway length has to be modified is:

Ans
1. decreased at the rate of 9% per 300 m rise in elevation above MSL
2. increased at the rate of 10% per 300 m rise in elevation above MSL
3. increased at the rate of 7% per 300 m rise in elevation above MSL
4. decreased at the rate of 5% per 300 m rise in elevation above MSL

Question ID : **1501838659**
Status : **Answered**
Chosen Option : **3**

Q.10 The standard for GPS surveying is designated in terms of _____ of the average of the set of squared differences between data set co-ordinate values and the true or theoretical location of the point obtained preferably from an independent source of higher accuracy.

Ans
1. root mean square error
2. standard deviation
3. average deviation from mean
4. mean

Question ID : **1501838673**
Status : **Answered**
Chosen Option : **3**

Q.11 What is the purpose of providing slipways in a harbour?

Ans
1. To demarcate the harbor entrance.
2. To act as cushion to absorb shock of ship during loading and unloading.

✔ 3. Repairing and building of ship.

✘ 4. Mooring structure in combination with loading platform.

Question ID : **1501838658**
Status : **Answered**
Chosen Option : **2**

Q.12 Match the items in List 1 (Purpose) with those in List 2 (Designed Component used in Airport, and select the answer using codes given below.

List 1	List 2
A. Basic Runway length	1. Width and length of Safety area of airport
B. Runway Capacity	2. Housing, Servicing of aircrafts
C. Runway geometric design	3. Location of exit taxiways
D. Hangar	4. Engine failure class

Ans

✔ 1. A-4, B- 3, C-1, D-2

✘ 2. A-4, B- 1, C-3, D-2

✘ 3. A-1, B- 2, C-4, D-3

✘ 4. A-4, B- 2, C-3, D-1

Question ID : **1501838660**
Status : **Answered**
Chosen Option : **1**

Q.13 To prepare the master plan for a city, the following basic studies have to be undertaken. Choose the answer using codes.
C1 : Delineation of planning area
C2 : Historical evolution
C3 : Geographical, climatology and related aspects
C4 : Religion, Caste and gender data

Ans

✘ 1. C2, C3 and C4

✘ 2. C1, C3 and C4

✔ 3. C1, C2 and C3

✘ 4. C1, C2, C3 and C4

Question ID : **1501838681**
Status : **Answered**
Chosen Option : **3**

Q.14 In the case of a vertical parabolic curve, the rate of change of gradient is:

Ans

✘ 1. always negative

✘ 2. always positive

✔ 3. constant

✘ 4. from point to point

Question ID : **1501838666**
Status : **Answered**
Chosen Option : **4**

Q.15

Consider the following statements S1 and S2:
S1: Noise pollution can be reduced by using double glass window panes.
S2: The noise totally reflects back due to the two layers of glass.
Identify the correct option.

Ans
1. Both S1 and S2 are correct, and S2 is the correct explanation of S1
2. Both S1 and S2 are correct, but S2 is not the correct explanation of S1
3. S1 is False and S2 is True
4. S1 is true and S2 is False

Question ID : **1501838644**
Status : **Answered**
Chosen Option : **1**

Q.16 A line of levels has been run from a bench mark of elevation +25.32 m and ends at another bench mark of elevation +25.35 m. The sum of back sights is 18.55 m and the sum of foresights is 18.58 m respectively. The closing error in the survey work is:

Ans
1. - 0.06 m
2. 0.03 m
3. - 0.03 m
4. 0.06 m

Question ID : **1501838665**
Status : **Not Answered**
Chosen Option : **--**

Q.17 Match the items in List 1 (Requirement condition) with List 2 (Foundation type) and select the best answer.

List 1	List 2
A. When columns are very close to the property line.	1. Floating rafts
B. To transfer the moment between two adjacent footings.	2. Under-reamed piles
C. To restrict settlement of soft clays/silts.	3. Strap Footing
D. To restrict damages due to volume changes of swelling soils.	4. Combined Footing

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

Question ID : **1501838613**
Status : **Answered**
Chosen Option : **4**

Q.18 It is proposed to design a culvert on a rural road. The return period to be adopted for the annual maximum flood of a given magnitude was found to be 5 years. The probability that this flood magnitude will be exceeded at least once during the next 2 years is:

Ans
1. 0.2
2. 0.36
3. 0.64
4. 0.8

Question ID : **1501838623**
Status : **Answered**
Chosen Option : **2**

Q.19 An infinite slope of clay having cohesion of 10 kN/m^2 and unit weight of 20 kN/m^3. If the depth of clay is 5m, determine the stability number for the slope.

Ans
1. 0.4 ✗
2. 0.1 ✓
3. 0.2 ✗
4. 0.3 ✗

Question ID : **1501838604**
Status : **Answered**
Chosen Option : **3**

Q.20 Match the following statements related to ecology; List 1 (System description) with those in List 2 (Name of system) and select the best answer using the codes.

List 1	List 2
1. Physical, chemical and biological factors that the species needs in order to live, and reproduce exist	A. Climax ecosystem
2. Presence of rich and unique biological diversity found in an ecotone.	B. Ecological niche
3. Stage in the evolution of an ecosystem at which all the species are in dynamic equilibrium among themselves and with the environment	C. Biome
4. Formation of plants and animals that have common characteristics due to similar climate and can be found over a range of continents.	D. Edge effect

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

Question ID : **1501838645**
Status : **Not Answered**
Chosen Option : **--**

Q.21

Match the items in List 1 (Type of materials for repair of structures) with those in List 2 (Use/characteristics). Choose the best answer using the codes given in options.

List 1	List 2
A. Carbon fibre reinforced polymeric composite	1. Flowable, shrinkage free, high early strength concrete.
B. Fibre Reinforced Polymeric (FRP) Composite bars	2. Repair of column
C. Micro concrete	3. Replacement of defective/corroded reinforcement
D. High performance concrete	4. Heavy duty floors with congested reinforcement
E. Carbon aramid meshes	

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

Question ID : **1501838678**
Status : **Answered**
Chosen Option : **2**

Q.22 As per IS classification, fine sand size particle are of diameter ranging from:

Ans
1. 0.002 mm to 0.075 mm
2. less than 0.002 mm
3. 0.075 mm to 0.425 mm
4. 0.002 mm to 0.425 mm

Question ID : **1501838598**
Status : **Answered**
Chosen Option : **1**

Q.23 Match the items in List 1(Use of stone) with the List 2 (Name of stone) and select the correct option using the codes given below in lists.

List 1	List 2
A. Rough Stone work	1. Marble
B. Ballast	2. Chalk
C. Ornamental Work	3. Granite
D. Manufacture of cement	4. Laterite

Ans
1. A – 3, B – 1, C – 2, D – 4
2. A – 1, B – 3, C – 4, D – 2
3. A – 4, B – 3, C – 1, D – 2
4. A – 4, B – 2, C – 1, D – 3

Question ID : **1501838582**
Status : **Answered**
Chosen Option : **3**

Q.24 The density at any point of a slender rod of length L varies with the first power of the distance of the point from one end of the rod. Locate the mass centre.

Ans
1. $\frac{2L}{3}$
2. $\frac{3L}{5}$

3. $\frac{L}{4}$

4. $\frac{L}{2}$

Question ID : **1501838570**
Status : **Answered**
Chosen Option : **1**

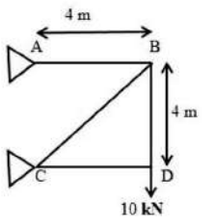
Q.25 While making the vertical excavation in soft saturated clay, soil caved in at a depth of 4 m. If the unit weight of soil is 20000 N/m^3, what is the cohesion of the soil?

Ans

1. 26.67 kN/m^2
2. 40 kN/m^2
3. 20 kN/m^2
4. 10 kN/m^2

Question ID : **1501838609**
Status : **Not Answered**
Chosen Option : **--**

Q.26 For the truss shown in figure (supports A & C are hinge type), the force in member AB and BC are respectively:



Ans

1. 10 (compressive); $\frac{10}{\sqrt{2}}$ (tensile)
2. zero; $10\sqrt{2}$ (compressive)
3. $10\sqrt{2}$ (tensile); $\frac{10}{\sqrt{2}}$ (compressive)
4. 10 (tensile); $10\sqrt{2}$ (compressive)

Question ID : **1501838580**
Status : **Answered**
Chosen Option : **3**

Q.27 Consider the following statements with respect to aerobic and anaerobic sewage treatment process.

S1: Biomass production in the aerobic treatment process is less when compared to the anaerobic treatment process.
S2: Energy consumption and production is more in the aerobic treatment process as compared to anaerobic treatment process
S3: Start-up period is less in aerobic treatment process as compared to the anaerobic treatment process.
Which of these statements is/are correct?

Ans

1. S1 and S2
2. S1only
3. S2 and S3
4. S3 only

Question ID : **1501838638**
Status : **Answered**
Chosen Option : **1**

Q.28 A retaining wall is constructed on the side of a river bank with smooth vertical back 4 m. The foundation is over an expansive collapsible soil and has a horizontal surface at the level of the top of the wall and carries a uniformly distributed load of 200 kPa. The unit weight and angle of internal friction of the soil are 18000 N/m^3 and 30° respectively. Compute the total active earth pressure per metre length of the wall.

Ans
✔ 1. 314.6 kN/m
✗ 2. 410.4 kN/m
✗ 3. 848 kN/m
✗ 4. 266.4 kN/m

Question ID : **1501838603**
Status : **Answered**
Chosen Option : **2**

Q.29 A clay layer 10 m thick in the field takes 250 days to attain 50% consolidation with the condition of double drainage. If the same clay layer is underlain by a hard rock, then the time taken to attain 50% consolidation is:

Ans
✔ 1. 1000 days
✗ 2. 62.5 days
✗ 3. 125 days
✗ 4. 500 days

Question ID : **1501838602**
Status : **Answered**
Chosen Option : **4**

Q.30 The observed N value from a standard penetration test conducted on a saturated sandy soil stratum is 33. The corrected N value for dilatancy can be estimated as:

Ans
✔ 1. 24
✗ 2. 15
✗ 3. 48
✗ 4. 17

Question ID : **1501838606**
Status : **Answered**
Chosen Option : **2**

Q.31 Identify the INCORRECT statement(s) (S1, S2, S3) pertaining to the Vector data Model in GIS.
S1 : Topology is static and any updation /editing of vector data requires re-building of topology.
S2 : Accurate geographic location of data can be maintained.
S3 : Continuous data like elevation data can be effectively represented in vector form.

Ans
✗ 1. S1and S3
✗ 2. S2
✔ 3. S3
✗ 4. S2 and S3

Question ID : **1501838674**
Status : **Answered**
Chosen Option : **1**

Q.32 The principle of GPS positioning is:

Ans
✗ 1. intersection
✗ 2. transposition
✗ 3. radiation

✔ 4. analytical resection

Question ID : **1501838670**
Status : **Answered**
Chosen Option : **2**

Q.33 A transportation trip survey was undertaken between private car, and public transport facilities. The proportion of those using private car is 0.4. While using the public transport, the further choices available are Metro rail and Mono rail, out of which commuting by mono rail has a proportion of 0.6. In such a situation, the choice of interest in using Private Car, Metro rail, and Mono rail, are respectively :

Ans
✘ 1. 0.4, 0.4 and 0.2
✘ 2. 0.24, 0.24, and 0.36
✘ 3. 0.24, 0.4 and 0.36
✔ 4. 0.4, 0.24, and 0.36

Question ID : **1501838656**
Status : **Answered**
Chosen Option : **3**

Q.34 The fatigue life of offshore structures is evaluated using:

Ans
✘ 1. Morison equation
✘ 2. Stoke-Berkoff damage law
✘ 3. Airy-Skempton damage formula
✔ 4. Palmgren-Miner damage rule

Question ID : **1501838630**
Status : **Answered**
Chosen Option : **2**

Q.35 A mass of 10 kg rests on a horizontal plane. The plane is gradually inclined until at an angle $\theta = 14^\circ$ with the horizontal, the mass just begins to slide. What is the co-efficient of static friction between the block and the surface?

Ans
✘ 1. 0.15
✘ 2. 0.42
✘ 3. 0.31
✔ 4. 0.25

Question ID : **1501838571**
Status : **Answered**
Chosen Option : **1**

Q.36 The following statements pertain to Fibre optic sensors used for data acquisition:
S1: Affected by electromagnetic interference, and radiated signals.
S2: Compatible with fibre optic communication systems.
S3: They do not conduct any electric current.
S4: Suited for taking measurements in environments that are explosive in nature.
Identify the INCORRECT statement(s).

Ans
✔ 1. S1 only
✘ 2. S4 only
✘ 3. S1 and S4
✘ 4. S3 only

Question ID : **1501838686**
Status : **Answered**
Chosen Option : **3**

Q.37 In connection with the design of a barrage in an alluvial stream, identify the correct matching of List 1 (Items of design) with those in List 2 (Criteria of design)

List 1	List 2
1. Width of waterway for the barrage	A. Lacey's scour depth and exit hydraulic gradient as given by Khosla's theory
2. Level and length of downstream floor	B. Uplift pressure distribution determined by Khosla's theory
3. Total length of floor and depth of downstream sheet piles	C. Lacey's wetted perimeter and discharge capacity of barrage determined by weir formula
4. Thickness of Barrage floor at different locations	D. Hydraulic Jump considerations

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

Question ID : **1501838628**
Status : **Answered**
Chosen Option : **2**

Q.38 For a vertical concentrated load acting on the surface of a semi-infinite elastic mass, the vertical normal stress at a depth z is proportional to:

Ans
1. Z^2
2. Z
3. $\frac{1}{Z^2}$
4. $\frac{1}{Z}$

Question ID : **1501838612**
Status : **Answered**
Chosen Option : **2**

Q.39 The following statements (S1 to S4) pertain to a compression member.

S1: The effective length depends on the boundary conditions of member at ends.
S2: The elastic critical stress in compression decreases with decrease in slenderness ratio.
S3: The ratio of the effective length to the radius of gyration of the member is termed as slenderness ratio of member.
S4: The elastic critical stress in compression is independent of the slenderness ratio.

Identify the correct statements.

Ans
1. S1 and S3
2. S2 and S4
3. S1, S2, S4
4. S2, S3, S4

Question ID : **1501838589**
Status : **Answered**
Chosen Option : **1**

Q.40 Two major roads with two lanes each are crossing in an urban area to form an uncontrolled intersection. The number of conflict points when both the roads are two way is X, and when both the roads are one way is Y. The ratio of conflict points X to Y is:

Ans

1. 4
2. 2
3. 3
4. 2.5

Question ID : **1501838651**
Status : **Answered**
Chosen Option : **2**

Q.41 It is necessary to use an accelerometer for measurement of vibrations. The requirements of the transducer in the accelerometer are : high output voltage, damping ratio = 0.01, frequency range = 10 to 10^5 Hz. Identify the type of accelerometer best suited to the situation.

Ans
1. Piezoelectric accelerometer
2. Potentiometer accelerometer
3. Variable reluctance accelerometer
4. Strain gauge accelerometer

Question ID : **1501838687**
Status : **Answered**
Chosen Option : **2**

Q.42 What is the steepest gradient permissible on a 2° curve for a broad gauge line having ruling gradient of 1 in 200?

Ans
1. 1 in 250
2. 1 in 238
3. 1 in 212
4. 1 in 194

Question ID : **1501838655**
Status : **Answered**
Chosen Option : **2**

Q.43 A steel rod of 20 mm diameter is used as a tie member in the roof bracing system, and may be subjected to possible reversal of stress due to wind load. What is the maximum permissible length of the member?

Ans
1. 1750 mm
2. 3000 mm
3. 2500 mm
4. 2000 mm

Question ID : **1501838587**
Status : **Answered**
Chosen Option : **4**

Q.44 The following statements (S1 to S4) pertain to collision diagrams in highway traffic studies. Collision diagram are used to:

S1: Eliminate accidents
S2 : Study accident pattern
S3 : Make statistical analysis of accidents
S4 : Determine remedial measures
Which of the above statement/s is/are correct?

Ans
1. 1 and 2
2. 3 and 4
3. 1 and 3
4. 2 and 4

Question ID : **1501838652**
Status : **Answered**
Chosen Option : **3**

Q.45 What is the actual ground area covered by a 20 cm x 20 cm size vertical aerial photograph at an average scale of 1 cm = 200 m, having 60% forward overlap and 20 % side overlap?

Ans

✔ 1. $5.12\ km^2$

✗ 2. $4.48\ km^2$

✗ 3. $1.92\ km^2$

✗ 4. $3.84\ km^2$

Question ID : **1501838668**
Status : **Answered**
Chosen Option : **2**

Q.46 A homogeneous simply supported prismatic beam of width B, depth D and span L is subjected to a concentrated load of magnitude 100 kN. The load can be placed anywhere along the span of beam. The maximum flexural stress developed in the beam is:

Ans

✗ 1. $\frac{300\,L}{BD^2}$

✔ 2. $\frac{150\,L}{BD^2}$

✗ 3. $\frac{25\,L}{2BD^2}$

✗ 4. $\frac{75\,L}{BD^2}$

Question ID : **1501838573**
Status : **Answered**
Chosen Option : **1**

Q.47 The most fundamental line in Surveying is:

Ans

✔ 1. plumb line

✗ 2. level Line

✗ 3. vertical line

✗ 4. horizontal line

Question ID : **1501838669**
Status : **Answered**
Chosen Option : **1**

Q.48 If the velocity vector for a two dimensional fluid flow is given by $V = (a\,x + b\,y)\,i + (c\,x + d\,y)\,j$ as a function of x and y, the condition for irrationality of flow is:

Ans

✗ 1. $ab = cx$

✗ 2. $a = d$

✗ 3. $a = c$

✔ 4. $b = c$

Question ID : **1501838614**
Status : **Answered**

Chosen Option : **3**

Q.49 Determine the quantity of bleaching powder required for a rural water supply scheme so as to chlorinate 20000 litre of water, whose chorine demand is 2 mg/l. Assume the bleaching powder has 40% available chlorine.

Ans

✗ 1. 40 gm

✗ 2. 200 gm

✗ 3. 16 gm

✓ 4. 100 gm

Question ID : **1501838636**
Status : **Answered**
Chosen Option : **2**

Q.50 As per IS, the minimum characteristic strength of concrete to be used in pre-tensioned and post-tensioned pre-stressed concrete works shall be respectively:

Ans

✗ 1. 30 MPa, 25 MPa

✗ 2. 35 MPa, 25 MPa

✓ 3. 40 MPa, 30 MPa

✗ 4. 40 MPa, 25 MPa

Question ID : **1501838593**
Status : **Answered**
Chosen Option : **3**

Q.51 Maximum allowable grades are lower for railways than for highways. The reason is:

Ans

✗ 1.
steel wheel on steel rails have greater frictional co-efficient than rubber tyres on pavements.

✓ 2.
steel wheel on steel rails have lower frictional co-efficient than rubber tyres on pavements.

✗ 3. high grade causes discomfort to passengers.

✗ 4. trains are longer than vehicles on highways.

Question ID : **1501838649**
Status : **Answered**
Chosen Option : **2**

Q.52 In an open channel flow, among the following gradually varied flow surface profiles, identify the one with all backwater curve profiles. (M,S,C and H – indicate mild, steep, critical, Horizontal slopes respectively)

Ans

✓ 1. M_1, S_1, H_3

✗ 2. M_2, H_2, C_1

✗ 3. M_2, H_2, S_3

✗ 4. S_1, M_2, S_3

Question ID : **1501838620**
Status : **Not Answered**
Chosen Option : **--**

Q.53 Which of the following tests employ ferroin indicator?

Ans

✗ 1. Iron

2. Fluoride
3. Chemical oxygen demand
4. Nitrate nitrogen

Question ID : **1501838635**
Status : **Answered**
Chosen Option : **1**

Q.54 As per IS 1893 : 2002, mass irregularity shall be considered to exist when the seismic weight of any storey is more than _____ of that of its adjacent storeys.

Ans
1. 250%
2. 200%
3. 300%
4. 150%

Question ID : **1501838595**
Status : **Answered**
Chosen Option : **2**

Q.55 A raft foundation is proposed on a clay soil. The permissible differential settlement (D) and limiting maximum settlement (M) as IS code are:

Ans
1. D= 40 mm; M = 65 to 100 mm
2. D= 40 mm; M = 40 to 65 mm
3. D= 25 mm; M = 40 to 65 mm
4. D= 25 mm; M = 65 to 100 mm

Question ID : **1501838605**
Status : **Answered**
Chosen Option : **2**

Q.56 The theoretical critical buckling load for a column with pinned ends is 100 kN. What is the theoretical critical buckling load of another column with the same dimensions and material, with fixed ends?

Ans
1. 25 kN
2. 50 kN
3. 200 kN
4. 400 kN

Question ID : **1501838577**
Status : **Answered**
Chosen Option : **3**

Q.57 As per IS 456 : 2000, the minimum grade of concrete to be used for plain concrete and reinforced concrete in concrete works exposed directly along the sea coast are respectively:

Ans
1. M15, M20
2. M15, M25
3. M20, M25
4. M20, M30

Question ID : **1501838585**
Status : **Answered**
Chosen Option : **4**

Q.58 In a city, pipe lines have to laid in connection with sewage disposal and water supply projects. Identify the survey to be employed for collecting the data for the same.

Ans

✗ 1. Topographic survey

✗ 2. Cadastral survey

✗ 3. Geodetic Survey

✓ 4. Cross–sectioning and profile levelling

Question ID : **1501838676**
Status : **Answered**
Chosen Option : **1**

Q.59 One of the probable causes of rutting on flexible pavements is :

Ans

✗ 1. excessive stripping of binder material from the wearing course

✗ 2. use of flaky aggregates in the wearing course

✓ 3. inadequate compaction of pavement layers

✗ 4. inadequate drainage on pavements

Question ID : **1501838654**
Status : **Answered**
Chosen Option : **2**

Q.60 Match the items in List 1 (Name of field exploration) with those in List 2 (Soil properties) and select the correct option.

List 1	List 2
A. Cyclic Pile load test	1. Modulus of subgrade reaction
B. Plate load test	2. Relative density and strength
C. Pressure meter test	3. Skin friction and point bearing resistance
D. Standard penetration test	4. Elastic constants

Ans

✗ 1. A-3, B-2, C-1, D-4

✓ 2. A-3, B-1, C-4, D-2

✗ 3. A-2, B-4, C-3, D-1

✗ 4. A-1, B-3, C-4, D-2

Question ID : **1501838611**
Status : **Answered**
Chosen Option : **2**

Q.61 Analysis of cracks in various structural elements in a building is as follows:
Crack1 : Cracks on RCC components, due to non-consideration of loads acting on the element on design
Crack2 : Formation of the crack due to the use of poor quality materials.
Crack 3 : Crack in the foundation due to overloading of structure not considered in design
Crack4 : Diagonal crack in a masonry wall due to temperature/moisture variations.
Identify the cracks as structural cracks (SC) and non-structural cracks (NSC).

Ans

✗ 1. SC: Crack4;
NSC: Crack1, Crack2, Crack3

✗ 2. SC: Crack1, Crack4;
NSC: Crack2, Crack3

✓ 3. SC : Crack1, Crack2, Crack3;
NSC: Crack4

4. SC: Crack1;
NSC: Crack2, Crack3, Crack4

Question ID : **1501838683**
Status : **Answered**
Chosen Option : **3**

Q.62 What will be the resultant decibel level when there are 4 sources making noise of equal levels?

Ans
1. Decibel level will increase by 4 decibels.
2. Decibel levels will remain the same.
3. Decibel level will increase by 8 decibels.
4. Decibel level will increase by 6 decibels.

Question ID : **1501838643**
Status : **Answered**
Chosen Option : **1**

Q.63 The condition for the occurrence of critical flow in an open channel is:

Ans
1. discharge is a maximum for a given specific force
2. for a given specific energy discharge is minimum
3. velocity head = hydraulic depth for the flow
4. for a given specific energy discharge is a maximum

Question ID : **1501838621**
Status : **Answered**
Chosen Option : **3**

Q.64 The condition for identifying the two perpendicular axes X and Y of a section as principal axes is:

Ans
1. product moment of Inertia (I_{XY}) is zero
2. product of moment of Inertia (I_X. I_Y) is zero
3. sum of squares of moment of Inertia about the axes $(I_X^2 + I_Y^2)$ is zero
4. moment of inertia about the axes are equal ($I_X = I_Y$)

Question ID : **1501838569**
Status : **Answered**
Chosen Option : **3**

Q.65 Given that E_1 and E_2 are the strain energies stored in a prismatic bar due to axial tensile forces F_1 and F_2 respectively. The strain energy stored E in the same bar due to combined action of F_1 and F_2 is:

Ans
1. $E < E_1 + E_2$
2. $E = E_1 + E_2$
3. $E > E_1 + E_2$
4. $E = E_1 . E_2$

Question ID : **1501838574**
Status : **Answered**

Chosen Option : **2**

Q.66 Identify the characteristics of a coliform organism.

1. Bacillus
2. Spore forming
3. Gram negative
4. Ferments lactose

Ans
1. ✗ 4 only
2. ✓ 1, 3, and 4
3. ✗ 1 and 2
4. ✗ 2 , 3, and 4

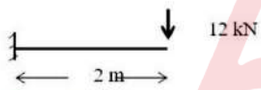
Question ID : **1501838634**
Status : **Answered**
Chosen Option : **3**

Q.67 An industry is having a water treatment plant which produces sludge having moisture content of 97%. With the solid content remaining the same the sludge is thickened so that the moisture content now is 94%. If the original quantity of sludge is P, estimate the quantity of thickened sludge?

Ans
1. ✗ 0.67 P
2. ✗ 0.75 P
3. ✗ 0.97 P
4. ✓ 0.5 P

Question ID : **1501838648**
Status : **Answered**
Chosen Option : **2**

Q.68 A cantilever beam of span 2 m is shown in the figure. The moment to be applied at the free end for zero vertical deflection at the point is:



Ans
1. ✗ 12 kN-m (anticlockwise)
2. ✓ 16 kN-m (anticlockwise)
3. ✗ 6 kN-m (anticlockwise)
4. ✗ 24 kN-m (anticlockwise)

Question ID : **1501838578**
Status : **Answered**
Chosen Option : **4**

Q.69 For water purification in a city, it is decided to use raid sand filter after sedimentation tanks, with the following data : Design loading rate per filter = 200 m^3/m^2 day; Design flow rate = 0.5m^3/s; Surface area per filter = 55 m^2. The number of filter units required in the plant are:

Ans
1. ✗ 3
2. ✗ 5
3. ✓ 4
4. ✗ 2

Question ID : **1501838647**
Status : **Answered**

Chosen Option : **1**

Q.70 A plane beach of a sea coast having a slope of 1 on 80 and normally incident waves with deep water height of 4 m and period 9 seconds. Estimate the maximum wave run up on beach.

Ans

✗ 1. 0.68 m

✓ 2. 1.2 m

✗ 3. 1.44 m

✗ 4. 0.86 m

Question ID : **1501838631**
Status : **Answered**
Chosen Option : **3**

Q.71 A single bay single storey portal frame has a fixed left support and hinged right support. It is loaded with a uniformly distributed load of *w*/ m length on the beam. Which one of the following statements is true with regard to the deformation of the frame? (Assume all the members have equal length.)

Ans

✗ 1. Insufficient data.

✗ 2. It would sway to the left side.

✓ 3. It would sway to the right side.

✗ 4. It would not sway at all.

Question ID : **1501838579**
Status : **Answered**
Chosen Option : **3**

Q.72 Identify the INCORRECT statement for Bernoulli's lemniscate used as a transition curve in modern roads.

Ans

✗ 1. The rate of increase of curvature decreases towards the circular curve.

✗ 2. Deflection angle is exactly three times the polar angle.

✗ 3. It is a symmetrical curve, more closely to an autogenous curve.

✓ 4. The rate of increase of curvature increases towards the circular curve.

Question ID : **1501838667**
Status : **Answered**
Chosen Option : **2**

Q.73 The corrosion of steel in reinforced concrete structures can be assessed by non-destructive testing using the principle:

Ans

✓ 1. Linear polarization resistance technique

✗ 2. Ultrasonic Pulse Velocity Method

✗ 3. Acoustic emission technique

✗ 4. Computer Tomography

Question ID : **1501838688**
Status : **Answered**
Chosen Option : **4**

Q.74 For a two hinged arch having constant *EI*, the horizontal thrust *H* at a point (*x*,*y*) on the arch, in terms of beam moment M is given by: (*E* : modulus of elasticity, *I* – moment of inertia)

Ans

1. $\frac{\int M\, y \frac{dy}{dx}}{\int y^3 \frac{ds}{EI}}$

2. $\frac{\int M\, y^2 \frac{dy}{dx}}{\int y^2 \frac{ds}{EI}}$

3. $\frac{\int M\, y \frac{dy}{dx}}{\int y^2 \frac{ds}{EI}}$

4. $\frac{\int M\, y \frac{dy}{dx}}{\int y \frac{ds}{EI}}$

Question ID : **1501838591**
Status : **Answered**
Chosen Option : **3**

Q.75 Identify the type of decay process taking place in Bangalore method and Indore method for solid waste disposal.

Ans

1. Both methods involves anaerobic decomposition of waste.

2. Both methods involve aerobic decomposition of waste.

3. Bangalore method has aerobic decomposition of waste, while Indore method follow anaerobic decomposition.

4. Bangalore method has anaerobic decomposition, while Indore method follow aerobic decomposition of waste.

Question ID : **1501838646**
Status : **Answered**
Chosen Option : **3**

Q.76 Match the items for an aquifer related to ground water development as in List 1 (Terminology) with those in List 2 (Definitions).

List 1	List 2
A. Specific retention	1. Volume of water drained by gravity per unit volume of aquifer
B. Specific storage	2. Yield of well per unit drawdown
C. Specific yield	3. Volume of water retained per unit volume of aquifer
D. Specific capacity	4. Difference of porosity and specific storage
	5. Volume of water released from unit volume of aquifer for unit decline in piezometric head

Ans

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

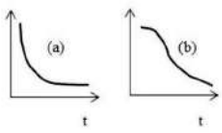
2. A-3, B-5, C-1, D-2

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

4. A-4, B-5, C-3, D-2

Question ID : **1501838625**
Status : **Answered**
Chosen Option : **2**

Q.77 The free vibration responses for a mass under two types of damping are shown in Figures (i) and (ii) as follows. Identify the type of damping for the responses.



Ans

1. (i) Underdamped, (ii)- Overdamped
2. (i) Critically damped, (ii)- Overdamped
3. (i) Overdamped, (ii)- Critically damped
4. (i) Underdamped, (ii)- Critically damped

Question ID : **1501838592**
Status : **Answered**
Chosen Option : **2**

Q.78 A tidal model has been made with horizontal scale ratio of 1 : 7000 and vertical scale ratio of 1 : 350. What is the period in which a tide of its natural period 8 hour can be simulated in the model?

Ans

1. 82.3 seconds
2. 4.4 minutes
3. 160 seconds
4. 77 seconds

Question ID : **1501838619**
Status : **Answered**
Chosen Option : **1**

Q.79 In a sewage treatment system, a grit chamber of dimensions 10 m x 1.5 m x 0.75 m liquid depth has a flow of 750 m^3/h. The surface loading rate and detention time of the grit chamber are respectively:

Ans

1. 5000 $l/h/m^2$; 9 min
2. 50,000 $l/h/m^2$; 0.9 min
3. 50 $m^3/h/m^2$; 1.8 min
4. 5 $m^3/h/m^2$; 0.9 min

Question ID : **1501838637**
Status : **Answered**
Chosen Option : **2**

Q.80 Well foundation is recommended for a bridge where the standard penetration N values = 22 for the soil constituting the foundation. When earthquake forces are included in the design, the permissible increase in the allowable bearing pressure as per IS 1893 : 2002 can be:

Ans

1. 25%
2. 50%
3. 40%
4. zero

Question ID : **1501838610**
Status : **Answered**
Chosen Option : **1**

Q.81 For 2 way slabs, with shorter span (less than 3.5 m) and imposed load less than 3 kN/m^2, the span to overall depth ratio of continuous slabs, with mild steel reinforcement is:

Ans

1. 28

✔ 2. 40

✘ 3. 35

✘ 4. 32

Question ID : **1501838586**
Status : **Answered**
Chosen Option : **1**

Q.82 The variation in duty of water from the head of a main canal (M) to that in the field (F) is:

Ans ✘ 1. duty of water at M can be greater or less than duty of water at F

✘ 2. duty of water at M is always equal to duty of water at F

✔ 3. duty of water at M is always less than duty of water at F

✘ 4. duty of water at M is always greater than duty of water at F

Question ID : **1501838629**
Status : **Answered**
Chosen Option : **2**

Q.83 A resistance strain gauge with gauge factor 2.11 and resistance 120 Ω is placed in an equal arm bridge circuit. The supply voltage is 10 V. If the detector resistance is 100 Ω and the meter current is 0.05 mA, determine the strain measure by the gauge. (in microstrain units)

Ans ✘ 1. 3428

✘ 2. 2805

✘ 3. 1988

✔ 4. 2085

Question ID : **1501838684**
Status : **Answered**
Chosen Option : **2**

Q.84 The following table gives the data on activities O, P, Q, R, S of a project.

Activity	(Start- End) week number	Resource needed/week
O	4 - 7	4
P	6 - 13	7
Q	8 - 17	5
R	12 - 19	4
S	10 - 21	8

Find the maximum total resources load in any week and the corresponding week.

Ans ✔ 1. 24 ; (12-13) week

✘ 2. 28 ; (11-12) week

✘ 3. 20 ; (12-13) week

✘ 4. 24 ; (14-15) week

Question ID : **1501838583**
Status : **Answered**
Chosen Option : **3**

Q.85 A piezoelectric transducer is used to measure force. The size of the piezoelectric crystal used in it is 6 mm x 6 mm x 2 mm, with a voltage sensitivity of 0.055 Vm/N. If the voltage developed is 120 V, find the force.

Ans
1. 39.24 N ✓
2. 19.62 N ✗
3. 13.05 N ✗
4. 78.48 N ✗

Question ID : **1501838685**
Status : **Answered**
Chosen Option : **2**

Q.86 The correct sequence of the sludge digestion steps is:

Ans
1. Methanogenesis, Acidogenesis, Hydrolysis ✗
2. Acidogenesis, Methanogenesis, Pyrolysis ✗
3. Hydrolysis, Acidogenesis, Methanogenesis ✓
4. Hydrolysis, Methanogenesis, Acidogenesis ✗

Question ID : **1501838641**
Status : **Answered**
Chosen Option : **3**

Q.87 The 2 D stress at a point is given by the matrix $\begin{bmatrix} \sigma_{xx} & \tau_{xy} \\ \tau_{yx} & \sigma_{yy} \end{bmatrix} = \begin{bmatrix} 50 & 15 \\ 15 & 10 \end{bmatrix}$ MPa. The maximum shear stress in (MPa) units is:

Ans
1. 45 ✗
2. 55 ✗
3. 25 ✓
4. 30 ✗

Question ID : **1501838576**
Status : **Answered**
Chosen Option : **1**

Q.88 A certain stretch of a lined trapezoidal canal for irrigation water supply has one vertical side wall and the other 45° sloping wall. If it is to carry a design discharge of 30 m^3/s with a velocity of 1 m/s, compute the flow depth and bed width of canal for minimum lining area (in m units).

Ans
1. 2.24, 4.15 ✗
2. 3.96, 5.6 ✓
3. 1.86, 3.26 ✗
4. 2.69, 4.7 ✗

Question ID : **1501838626**
Status : **Answered**
Chosen Option : **3**

Q.89 Foundation of a structure resting on sand settles by 20 mm. Differential settlement is expected be 30% of total settlement. If the column spacing for the structure is 6 m, then the angular distortion will be:

Ans
1. 1/1000 ✓
2. 1/100 ✗
3. 1/50 ✗

✗ 4. 1/500

Question ID : **1501838607**
Status : **Answered**
Chosen Option : **2**

Q.90 Which of the following is NOT an example of indeterminate structure?

Ans
✗ 1. Continuous beam
✗ 2. Two hinged arch
✓ 3. Simply supported beam with overhanging on both the sides.
✗ 4. Fixed beam

Question ID : **1501838590**
Status : **Answered**
Chosen Option : **2**

Q.91 If $\frac{dp}{dx}$ is the pressure gradient and $\frac{dv}{dx}$ the velocity gradient in a fluid flow, then the separation of boundary layer occurs the conditions are:

Ans
✗ 1. $\frac{dp}{dx} < 0; \frac{dv}{dx} > 0$
✗ 2. $\frac{dp}{dx} < 0; \frac{dv}{dx} < 0$
✗ 3. $\frac{dp}{dx} > 0; \frac{dv}{dx} > 0$
✓ 4. $\frac{dp}{dx} > 0; \frac{dv}{dx} < 0$

Question ID : **1501838618**
Status : **Not Answered**
Chosen Option : **--**

Q.92 The concentration of sulphur dioxide in ambient atmosphere was measures as 32 $\mu g/m^3$. Express the above sulphur dioxide concentration (in ppm units) under the same conditions. (Given $\frac{P}{RT} = 50 \text{ mole/m}^3$, where P-pressure, T –temperature, R- universal gas constant. Take molecular weight of sulphur dioxide as 64.)

Ans
✗ 1. 0.5
✗ 2. 0.05
✗ 3. 0.1
✓ 4. 0.01

Question ID : **1501838642**
Status : **Answered**
Chosen Option : **2**

Q.93 The different types of valves used in a water supply system with their functions are given. Identify the one which is NOT correctly matched.

Ans
✗ 1. Air Valve : To release the accumulated air
✗ 2.
Scour Valve: To remove silt in a pipe line and drain the pipe for repair work.
✗ 3.
Sluice Valve: To control the flow of water through pipe lines.

✔ 4. Check valve: To check Water flow in all directions.

Question ID : **1501838632**
Status : **Answered**
Chosen Option : **2**

Q.94 The following details pertain to the crossing of a canal and a drain. Bed level of canal = + 111 m; Full supply depth of canal = 1.8 m; Bed level of drain = + 109.4 m; Depth of flow at high flood level = + 2.1 m. The suitable type of cross drainage work is:

Ans
✘ 1. canal syphon
✔ 2. syphon aqueduct
✘ 3. aqueduct
✘ 4. super passage

Question ID : **1501838627**
Status : **Answered**
Chosen Option : **2**

Q.95 A lake 5 m deep consist of sand bed with saturated unit weight of 20 kN/m^3. Determine the effective vertical stress at 5 m below the bed of the river. (take unit weight of water as 9.81 kN/m^3)

Ans
✘ 1. 100 kN/m^2
✘ 2. 149 kN/m^2
✔ 3. 51 kN/m^2
✘ 4. 65 kN/m^2

Question ID : **1501838601**
Status : **Answered**
Chosen Option : **2**

Q.96 A plate of negligible thickness is held perpendicular to the flow direction. The drag force experienced on the plate is mainly due to:

Ans
✘ 1. friction drag
✘ 2. either friction drag or form drag, depends on the Froude number of flow
✘ 3. combination of friction drag and form drag
✔ 4. form drag

Question ID : **1501838616**
Status : **Answered**
Chosen Option : **1**

Q.97 A summit curve is formed at the intersection of a 3% up gradient and 5% down gradient. To provide a stopping sight distance of 128 m, length of summit curve needed is:

Ans
✘ 1. 256 m
✘ 2. 384 m
✔ 3. 298 m
✘ 4. 321 m

Question ID : **1501838650**
Status : **Answered**
Chosen Option : **3**

Q.98 Under residential use zone, identify the accessory use which is NOT permissible.

Ans
1. Local shopping
2. Godown
3. Nursery School
4. Hostels

Question ID : **1501838682**
Status : **Answered**
Chosen Option : **2**

Q.99 For sewage treatment using an oxidation pond, when it gets overloaded, a chemical that is added to stimulate the algal growth is:

Ans
1. sodium chloride
2. sodium nitrate
3. bleaching powder
4. calcium hydroxide

Question ID : **1501838640**
Status : **Answered**
Chosen Option : **2**

Q.100 On inspection of the damaged reinforced concrete (RCC) elements of a pier on the sea coast (with surface of members in tidal zone), it is seen that M20 concrete was used for the RCC works. As per IS 456 : 2000, the minimum grade of concrete to be used for the works would be:

Ans
1. M25
2. M35
3. M30
4. M40

Question ID : **1501838677**
Status : **Answered**
Chosen Option : **2**

Q.101 In triangulation survey, the strength of figure in a triangulation system is more:

Ans
1. in the method of trilateration
2. when the error is the least when computing the length of last line
3. when any angle of a triangle is not less than 30° or more than 120°
4. when the angles of a triangle are very nearly equal to 60°

Question ID : **1501838663**
Status : **Answered**
Chosen Option : **3**

Q.102 In reinforced concrete columns, the minimum and maximum quantity of longitudinal reinforcement, as percentage of the gross cross- sectional area of column, are respectively:

Ans
1. 0.15, 4
2. 1, 10

✔ 3. 0.8, 6

✘ 4. 0.12, 8

Question ID : **1501838596**
Status : **Answered**
Chosen Option : **3**

Q.103 Match the items in List 1 (Purpose) with those in List 2 (structure) used in harbours, and select the answer using codes given below.

List 1	List 2
A. Absorbs the energy of the moving vessel	1. Wharf
B. Separates the land from sea water	2. Breakwater
C. Protects a seashore	3. Fender system
D. Lays vessels alongside, receives and discharges cargo and passengers	4. Revetments

Ans

✘ 1. A- 2, B-1, C-3, D-4

✔ 2. A-3, B- 4, C- 2, D- 1

✘ 3. A-3, B- 1, C- 2, D- 4

✘ 4. A-4, B- 2, C- 3, D- 1

Question ID : **1501838657**
Status : **Answered**
Chosen Option : **2**

Q.104 Match the items in List 1 (Operation problem) with List 2 (Water/Waste water treatment) and select the best answer using the codes.

List 1	List 2
A. Sludge bulking	1. Rapid gravity filter
B. Negative head	2. Anaerobic sludge digester
C. pH reduction	3. Trickling filter
D. Fly breeding	4. Activated sludge process

Ans

✘ 1. 1-B, 2- D, 3- C, 4-A

✘ 2. 1-C, 2- A, 3- D, 4-B

✔ 3. 1-D, 2- A, 3- B, 4-C

✘ 4. 1- C, 2- B, 3-D, 4 -A

Question ID : **1501838639**
Status : **Answered**
Chosen Option : **1**

Q.105 The velocity distribution for a two dimensional flow is given by $u = ax$ and $v = -ay$. Determine the equation of the streamline passing through the points (3, 1).

Ans

✘ 1. $3x + y = 0$

✔ 2. $x - y = 3$

✘ 3. $x - y = 1$

✘ 4. $x + 3y = 0$

Question ID : **1501838615**
Status : **Answered**
Chosen Option : **4**

Q.106 In GPS surveying, the estimation of three components of a vector between the reference and rover stations is known as:

Ans

1. Ranging
2. GPS Positioning
3. Base line Solution
4. GPS timing

Question ID : **1501838671**
Status : **Answered**
Chosen Option : **3**

Q.107 The shear force at a section of a beam under bending action is equal to zero. What inference can be made about the bending moment at that section?

Ans
1. Zero
2. Constant
3. Minimum
4. Maximum

Question ID : **1501838575**
Status : **Answered**
Chosen Option : **4**

Q.108 The mass curve of rainfall for a duration of 100 minutes is given below:

Time from Start of rain (minute)	Cumulative rainfall (mm)
0	0
20	5
40	12
60	26
80	32
100	35

Estimate the maximum intensity of rainfall for 20 minute duration of the storm.

Ans
1. 51 mm/h
2. 14 mm/h
3. 21 mm/h
4. 42 mm/h

Question ID : **1501838624**
Status : **Answered**
Chosen Option : **3**

Q.109 A soil sample is subjected to laboratory sieve analysis using a complete set of standard IS sieves. Out of 2 kg of soil used in the test, 800 gram was retained on IS 600 micron sieve, 1000 gram was retained on IS 500 micron sieve and the remaining 200 gram was retained on IS 425 micron sieve. The uniformity co-efficient for the soil is:

Ans
1. 1.412
2. 1.2
3. 0.833
4. 0.71

Question ID : **1501838599**
Status : **Answered**
Chosen Option : **1**

Q.110 A pipe laid in a drainage layer having cross sectional area of 200 cm^2 and length 100 m. The head causing flow is 10 m. It is observed that the pipe got clogged with sand having a coefficient of permeability 10^{-2} cm/s and subsequently discharge reduced to 2 cm^3/s. The length of pipe for which there is clogging is:

Ans
✔ 1. 10 m
✘ 2. 8 m
✘ 3. 4 m
✘ 4. 20 m

Question ID : **1501838597**
Status : **Answered**
Chosen Option : **2**

Q.111 Match the items in List 1 (Features of Contour line) with those in List **2** (Type of feature) and select the correct answer using the codes given below.

List 1	List 2
P. Contour lines with higher values inside them	1. Steep slope
Q. Contour lines of different elevations cross one another	2. Hill
R. Contour lines are closely spaced.	3. Vertical Cliff
S. Contour lines of different elevations unite to form one line.	4. Overhanging Cliff

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

Question ID : **1501838664**
Status : **Answered**
Chosen Option : **3**

Q.112 Which of the following is NOT an urban road system?

Ans
✘ 1. Organic street system
✘ 2. Concentric and radial street system
✘ 3. Grid iron system
✔ 4. Polynomial street system

Question ID : **1501838679**
Status : **Answered**
Chosen Option : **1**

Q.113 The error that is NOT due to lack in permanent adjustment of total station is:

Ans
✘ 1. tilting axis
✘ 2. vertical collimation
✔ 3. centering
✘ 4. horizontal collimation

Question ID : **1501838672**
Status : **Answered**
Chosen Option : **3**

Q.114 The number of observations required in an operation to produce results having a specified accuracy:

Ans

1. varies inversely with the square root of the confidence interval
2. ✔ varies inversely with the square of the confidence interval
3. varies inversely with the square of the residual error
4. varies directly with the square of the confidence interval

Question ID : **1501838661**
Status : **Answered**
Chosen Option : **2**

Q.115 The five day BOD of the water sample from a river is 250 mg/l at 20 ° C. The value of the reaction constant is $K = 0.2$ /day with base e. Determine the ultimate BOD of sample (in mg/l units)

Ans

1. 197.8
2. 296.7
3. 454.5
4. ✔ 395.6

Question ID : **1501838633**
Status : **Answered**
Chosen Option : **2**

Q.116 Water flows with a flow rate of 0.5 cumecs through a pipe AB of length 12 m length having a uniform cross-section. The end B of the pipe is above the end A and the pipe makes an angle of 30 ° to the horizontal. For a pressure of 20 kN/m^2 at the end B, the corresponding pressure at the end A (in kN/m^2 units) is:

Ans

1. 137.7
2. 71
3. 38.9
4. ✔ 78.9

Question ID : **1501838617**
Status : **Answered**
Chosen Option : **3**

Q.117 Match the items in List 1(remote sensing) with that in List 2 (Process) and choose the correct answer using the codes given below :

List 1	List 2
A. Visual Interpretation	1. Capable of penetrating through atmosphere under almost all conditions 2.
B. Supervised Image Classification	Data model incorporating spatial data with attribute data and meta data
C. Geodata model	3. Visual Identification of objects using image characteristics
D. Microwave remote sensing	4. Maximum likelihood algorithm

Ans

1. A- 3, B- 1, C- 2, D-4
2. ✔ A- 3, B- 4, C- 2, D-1
3. A- 2, B- 3, C- 1, D-4
4. A- 3, B- 1, C- 4, D-2

Question ID : **1501838675**
Status : **Answered**
Chosen Option : **3**

Q.118 The following 2 statements (S1 and S2) pertain to design of flexible pavements :
S1 : Most flexible pavement design procedures are based on Benkelman beam deflection measurements
S2 : Elastic deflection is a practical non-destructive measure of pavement stiffness which relates well to fatigue failure.
Identify the correct option.

Ans
1. S1 is true and S2 is False
2. S1 is False and S2 is True
3. Both S1 and S2 are True and S2 is the correct explanation of S1.
4. Both S1 and S2 are True and S2 is not a correct explanation of S1

Question ID : **1501838653**
Status : **Answered**
Chosen Option : **4**

Q.119 As per IS 1893 : 2002, the response reduction factor for ordinary reinforced concrete moment resisting frames in buildings is:

Ans
1. 4
2. 3.5
3. 3
4. 5

Question ID : **1501838594**
Status : **Answered**
Chosen Option : **3**

Q.120 For which of the following conditions, shear failure happens between the base of a shallow strip footing and the first soil reinforcement layer? (Take D as the distance between the first layer of reinforcement and base of the footing and B the width of footing.)

Ans
1. $\frac{D}{B} > \frac{1}{3}$
2. $\frac{D}{B} > \frac{1}{2}$
3. $\frac{D}{B} < \frac{2}{3}$
4. $\frac{D}{B} > \frac{2}{3}$

Question ID : **1501838608**
Status : **Answered**
Chosen Option : **3**

Section : **Reasoning Question**

Q.1 Convert the following into vulgar fraction.

0.6

Ans
1. 3/5
2. 2/5

3. 3/4
4. 1/6

Question ID : **1501838717**
Status : **Not Answered**
Chosen Option : **--**

Q.2 Find the odd one from the following.

Ans
1. Neigh
2. Burrow
3. Nest
4. Hive

Question ID : **1501838690**
Status : **Answered**
Chosen Option : **2**

Q.3 What is the number of prime numbers less than 20?

Ans
1. 9
2. 8
3. 5
4. 7

Question ID : **1501838697**
Status : **Answered**
Chosen Option : **1**

Q.4 Read the following information carefully and decide whether the given statements are true or false.

Dryland farming is the only way to not only combat recurring drought but also meet the increasing food requirements of our country. About 45% of India's total crop production now comes from drylands. By the end of this century, this will have to increase to 60% if India is to provide adequate food for projected population of one billion by the turn of the century.

In India, the rate of growth of population is 25% per year.

Ans
1. Definitely false
2. Data inadequate
3. Probably true
4. Definitely true

Question ID : **1501838714**
Status : **Answered**
Chosen Option : **1**

Q.5 A question is given, followed by two arguments numbered I and II. Decide which of the argument(s) is/are strong with respect to the question.

Question:
Should government officers be transferred after one or two years?
Arguments:
I. Yes. They get friendly with local people and are manipulated by them.
II. No. By the time their policies and schemes start taking shape, they have to learn.
III. No. This will create a lot of administrative hassles and cause a lot of inconvenience.

Ans
1. Only argument I is strong
2. Only arguments II and III are strong

3. All are strong

4. Only arguments I and II are strong

Question ID : **1501838730**
Status : **Answered**
Chosen Option : **2**

Q.6 Find the simple interest on ₹10,000 at 5% per annum for 2 ½ years.

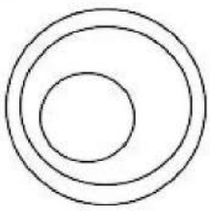
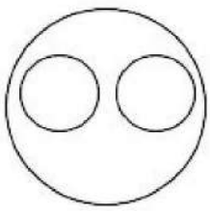
Ans

1. ₹1,050
2. ₹1,500
3. ₹1,000
4. ₹1,250

Question ID : **1501838700**
Status : **Answered**
Chosen Option : **4**

Q.7 Choose the Venn diagram that best illustrates the three given classes.
Indian, Japanese, Asian

Ans

1. 
2. 
3. 
4. 

Question ID : **1501838723**
Status : **Answered**
Chosen Option : **4**

Q.8 20 women can do a task in 16 days. 16 men can complete the same task in 15 days. What is the ratio of the capacity of a man to a woman?

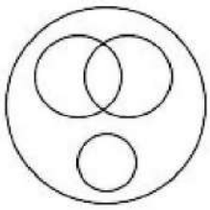
Ans

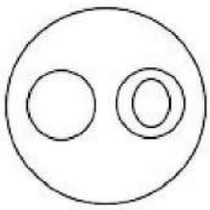
1. 5 : 3
2. 4 : 3
3. 3 : 5
4. 3 : 4

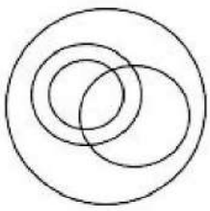
Question ID : **1501838708**
Status : **Answered**
Chosen Option : **3**

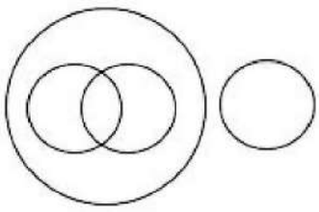
Q.9 In a birthday party, both chicken and fish were served. Some took only chicken and some took only fish. There were some vegetarians who did not take either. The rest took both chicken and fish. Which of the following logic diagrams correctly reflects this situation?

Ans

✔ 1. 

✘ 2. 

✘ 3. 

✘ 4. 

Question ID : **1501838716**
Status : **Answered**
Chosen Option : **1**

Q.10 Choose the most suitable description about the following three words.

Judo, Karate, Taekwondo

Ans

✔ 1. They are names of martial arts

✘ 2. They can be performed by actors only.

✘ 3. They are important events in the Olympic Games

✘ 4. They are performed in a studio

Question ID : **1501838726**
Status : **Answered**
Chosen Option : **1**

Q.11 In the following series, one of the numbers does NOT fit. Find the INCORRECT number.

0, 3, 8, 15, 24, 35, 48, 62, 80, 99

Ans

✔ 1. 62

✘ 2. 35

✘ 3. 48

✗ 4. 99

Question ID : **1501838731**
Status : **Answered**
Chosen Option : **3**

Q.12 Rohini leaves home and faces north. She walks 33 m after running to the east and then turns left to walk for 16 m. Then, she turns to her right and walks for another 30 m. Then, she turns to her right and walks for 32 m to reach the mall.

What is the distance she would have had to walk if she had taken a straight line path from her initial position to the mall?

Ans
✗ 1. 70 m
✗ 2. 61 m
✗ 3. 72 m
✓ 4. 65 m

Question ID : **1501838735**
Status : **Answered**
Chosen Option : **3**

Q.13 Read the following information carefully and decide whether the given statements are true or false.

Dryland farming is the only way to not only combat recurring drought but also meet the increasing food requirements of our country. About 45% of India's total crop production now comes from drylands. By the end of this century, this will have to increase to 60% if India is to provide adequate food for projected population of one billion by the turn of the century.

Dryland farming is important for India.

Ans
✗ 1. probably true
✗ 2. definitely false
✗ 3. Data inadequate
✓ 4. definitely true

Question ID : **1501838713**
Status : **Answered**
Chosen Option : **4**

Q.14 A human being always has _____.

Ans
✓ 1. heart
✗ 2. hair
✗ 3. hands
✗ 4. legs

Question ID : **1501838701**
Status : **Answered**
Chosen Option : **1**

Q.15 The average of seven consecutive numbers is 49. What is the largest of these numbers?

Ans
✗ 1. 50
✗ 2. 47
✗ 3. 49
✓ 4. 52

Question ID : **1501838719**

Status : **Answered**
Chosen Option : **3**

Q.16 A statement is given, followed by two assumptions numbered I and II. Decide which of the assumption(s) is/are implicit in the statement.

Statement:
'Guests should be provided with dinner' – Anu tells Renu.
Assumptions:
I. Unless told, dinner may not be provided.
II. Guests will stay during dinner time.

Ans
1. Only assumption I is implicit
2. Only assumption II is implicit
3. Both I and II are implicit
4. Neither I nor II is implicit

Question ID : **1501838706**
Status : **Answered**
Chosen Option : **1**

Q.17 If X's weight is 20% less than that of Y, then by what percent is Y's weight more than that of X?

Ans
1. 30%
2. 20%
3. 25%
4. 28%

Question ID : **1501838711**
Status : **Answered**
Chosen Option : **2**

Q.18 How many pieces of length 125 cm can be cut from a rod 50 metre long?

Ans
1. 40
2. 35
3. 45
4. 48

Question ID : **1501838724**
Status : **Answered**
Chosen Option : **1**

Q.19 Two statements numbered I and II are given. There may be cause and effect relationship between the two statements. Read both the statements and choose the correct option.

Statements:
I. The prices of petroleum products dropped marginally last month.
II. The State Government reduced the tax on petroleum products last month.

Ans
1. Statement I is the cause and statement II is its effect
2. Statement II is the cause and statement I is its effect
3. Both the statements I and II are independent causes
4. Both the statements I and II are effects of some common causes

Question ID : **1501838703**
Status : **Answered**
Chosen Option : **2**

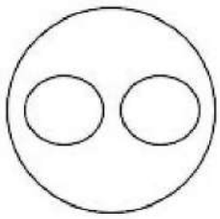
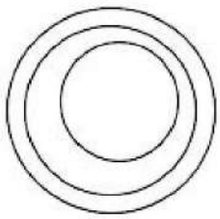
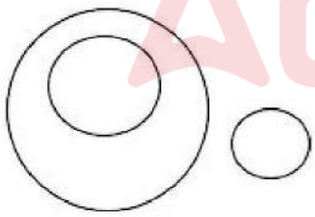
Q.20 On 28 February, 2004, it was a Saturday. What was the day of the week on 27th February, 2006?

Ans
1. Sunday
2. Monday
3. Tuesday
4. Saturday

Question ID : **1501838718**
Status : **Answered**
Chosen Option : **1**

Q.21 Select the Venn diagram that best illustrates the three given classes.

Violinists, Instrumentalists, Musicians

Ans
1. 
2. 
3. 
4. 

Question ID : **1501838689**
Status : **Answered**
Chosen Option : **2**

Q.22 How many minutes will Vinith take to cover a distance of 250 metres, if he runs at a speed of 30 km/hr?

Ans
1. ½ min
2. ¼ min
3. ¾ min
4. 1 min

Question ID : **1501838699**
Status : **Answered**
Chosen Option : **1**

Q.23 A train moves past an electric post and a bridge 275 metre long in 10 seconds and 15 seconds respectively. What is the speed of the train?

Ans
1. 198 km/h
2. 180 km/h
3. 185 km/h
4. 188 km/h

Question ID : **1501838725**
Status : **Answered**
Chosen Option : **2**

Q.24 The capacity of a tank of dimensions 9 m × 7.5 m × 1.2 m will be:

Ans
1. 75000 l
2. 72000 l
3. 80000 l
4. 81000 l

Question ID : **1501838729**
Status : **Answered**
Chosen Option : **4**

Q.25 Which one of the pair of numbers given in the options shares the same relation as the pair given below does?

121 : 10

Ans
1. 196 : 13
2. 169 : 11
3. 256 : 17
4. 225 : 15

Question ID : **1501838696**
Status : **Answered**
Chosen Option : **1**

Q.26 You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

Question: What is the value of 'Y'?

Statements:
(1) 29X + 12Y = 528
(2) 145X + 60Y = 2640

Ans
1. Statements (1) and (2) together are not sufficient to answer the question.
2. Both statements together are sufficient to answer the question, but neither statement alone is sufficient.
3. Statement (2) alone is sufficient to answer the question, but statement (1) alone is not sufficient.
4. Statement (1) alone is sufficient to answer the question, but statement (2) alone is not sufficient.

Question ID : **1501838732**
Status : **Answered**
Chosen Option : **2**

Q.27 If x% of x is 49, then x = ?

Ans

1. 10
2. 70
3. 7
4. 0.7

Question ID : **1501838692**
Status : **Answered**
Chosen Option : **2**

Q.28 'Mango' is related to 'Fruit', in the same way as 'Whale' is related to _____.

Ans
1. Reptile
2. Shark
3. Mammal
4. Rodent

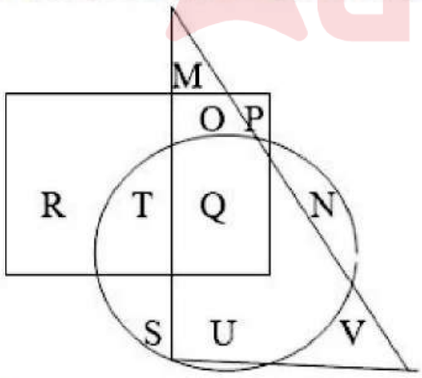
Question ID : **1501838698**
Status : **Answered**
Chosen Option : **3**

Q.29 The length, breadth and height of a rectangular cuboid are 20 m, 5 m and 25 m respectively. If the length increases by 25%, breadth increases by 15%, and height decreases by 10%, what will be the corresponding increase or decrease in the volume of the cuboid?

Ans
1. 29.38%
2. 27.29%
3. 24.75%
4. 32.11%

Question ID : **1501838737**
Status : **Answered**
Chosen Option : **2**

Q.30 Which letter is inside all the three figures?



Ans
1. Q
2. O
3. N
4. P

Question ID : **1501838705**
Status : **Answered**
Chosen Option : **1**

Q.31 Find the angle between the hour hand and the minute hand of a clock when the time is 3.30.

1

Ans
1. 85°
2. 75°
3. 90°
4. 84°

Question ID : **1501838721**
Status : **Answered**
Chosen Option : **3**

Q.32 A student has to obtain 35% of the total marks to pass. He got 135 marks and failed by 40 marks. The maximum marks are _____.

Ans
1. 350
2. 500
3. 550
4. 400

Question ID : **1501838702**
Status : **Answered**
Chosen Option : **3**

Q.33 Two statements are given, followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:
All women are peacocks.
All peacocks are sparrows.

Conclusions:
I. All women are sparrows.
II. All sparrows are women.

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

Question ID : **1501838693**
Status : **Answered**
Chosen Option : **1**

Q.34 In a city, 65% people are rice eaters, 40% people are wheat eaters and 25% are both rice and wheat eaters. What percent of the people are neither rice eaters nor wheat eaters?

Ans
1. 5%
2. 10%
3. 25%
4. 20%

Question ID : **1501838728**
Status : **Answered**
Chosen Option : **3**

Q.35 Select the option that is related to the third term in the same way as the second term is related to the first term.

INDIA : DELHI :: BELGIUM : _____

Ans
1. BRUSSELS

✗ 2. ANTWERP
✗ 3. BELGRADE
✗ 4. MALE

Question ID : **1501838736**
Status : **Answered**
Chosen Option : **1**

Q.36 Three statements are given, followed by four conclusions numbered I, II, III and IV. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:
No table is bed.
No bed is door.
All doors are chairs.

Conclusions:
I. No door is table.
II. No chair is bed.
III. No chair is table.
IV. All chairs are doors.

Ans
✗ 1. Only conclusion I and II follow
✗ 2. Only conclusion III and IV follow
✗ 3. All of the conclusions follow
✓ 4. None of the conclusions follows

Question ID : **1501838722**
Status : **Answered**
Chosen Option : **3**

Q.37 A museum has an average of 610 visitors on Sundays and 250 visitors on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday will be _____.

Ans
✗ 1. 325
✓ 2. 310
✗ 3. 350
✗ 4. 365

Question ID : **1501838704**
Status : **Answered**
Chosen Option : **2**

Q.38 Read the following information carefully and decide whether the given statements are true or false.

Dryland farming is the only way to not only combat recurring drought but also meet the increasing food requirements of our country. About 45% of India's total crop production now comes from drylands. By the end of this century, this will have to increase to 60% if India is to provide adequate food for projected population of one billion by the turn of the century.

The per acre crop production is more in drylands than others.

Ans
✓ 1. Data inadequate
✗ 2. probably true
✗ 3. definitely true
✗ 4. definitely false

Question ID : **1501838712**
Status : **Answered**
Chosen Option : **1**

Q.39 Find the missing term in the following series.

2, 9, 28, 65, 126, 217, _____

Ans
1. 343
2. 354
3. 298
4. 344

Question ID : **1501838727**
Status : **Answered**
Chosen Option : **2**

Q.40 In the following series, one of the numbers does NOT fit. Find the INCORRECT number.

256, 128, 64, 32, 16, 8, 4, 2, 0

Ans
1. 0
2. 64
3. 128
4. 8

Question ID : **1501838694**
Status : **Answered**
Chosen Option : **1**

Q.41 At present, the ratio of the ages of Rani and Vani is 4 : 5. After 5 years, Rani's age will be 25 years. What is the age of Vani at present?

Ans
1. 22 years
2. 25 years
3. 24 years
4. 28 years

Question ID : **1501838695**
Status : **Answered**
Chosen Option : **3**

Q.42 If '÷' denotes 'subtraction', '–' denotes 'addition', '+' denotes 'multiplication' and '×' denotes 'division', then what will be the value of the given expression?

$256 \times 8 \div 24 + 6 - 152$

Ans
1. 40
2. 86
3. 78
4. 28

Question ID : **1501838734**
Status : **Not Answered**
Chosen Option : **--**

Q.43

Read the following information carefully and decide whether the given statements are true or false.

Dryland farming is the only way to not only combat recurring drought but also meet the increasing food requirements of our country. About 45% of India's total crop production now comes from drylands. By the end of this century, this will have to increase to 60% if India is to provide adequate food for projected population of one billion by the turn of the century.

Currently, 45% of India's total crop production comes from drylands.

Ans
1. Data inadequate
2. Probably true
3. Definitely true
4. Definitely false

Question ID : **1501838715**
Status : **Not Answered**
Chosen Option : **--**

Q.44 Kiran, Vimal and Naveen started a business by investing ₹1,35,000, ₹ 1,50,000 and ₹ 1,65,000 respectively. Find the share of each (respectively), out of an annual profit of ₹ 60,000.

Ans
1. ₹ 18,000; ₹ 20,000; ₹ 22,000
2. ₹ 20,000; ₹ 22,000; ₹ 25,000
3. ₹ 20,000; ₹ 21,000; ₹ 22,000
4. ₹ 18,000; ₹ 20,000; ₹ 21,000

Question ID : **1501838709**
Status : **Not Answered**
Chosen Option : **--**

Q.45 The digit in the unit's place in the square root of 16384 is _____.

Ans
1. 2
2. 8
3. 6
4. 4

Question ID : **1501838707**
Status : **Not Answered**
Chosen Option : **--**

Q.46 Interchanging which two signs will make the following equation correct?

$168 - 12 + 152 \div 26 \times 6 = 10$

Ans
1. ÷ and ×
2. ÷ and –
3. ÷ and +
4. + and –

Question ID : **1501838733**
Status : **Not Answered**
Chosen Option : **--**

Q.47 Ravi has currency notes of ₹ 500, ₹ 200, ₹ 100 and ₹ 50 in the ratio of 16 : 28 : 34 : 17. The total amount of money with Ravi is ₹ 53,550. How many notes of ₹ 50 does Ravi have?

Ans
1. 850

2. 2550
3. 17
4. 51

Question ID : **1501838738**
Status : **Not Answered**
Chosen Option : **--**

Q.48 Which one of the pairs of words given in the options shares the same relation as the pair given below does?

Kuwait : Dinar

Ans
1. Iran : Dinar
2. UK : Dollar
3. Japan : Yuan
4. Bangladesh : Taka

Question ID : **1501838691**
Status : **Not Answered**
Chosen Option : **--**

Q.49 Two statements are given, followed by a conclusion based upon them. Choose the alternative which best applies to the given conclusion.
Statements:
I. Some students are weak in science.
II. All those, who are weak in science, are athletes.
Conclusion:
Some athletes are weak in science.
The conclusion drawn is:

Ans
1. either probably true or probably false
2. definitely true
3. irrelevant
4. definitely false

Question ID : **1501838710**
Status : **Not Answered**
Chosen Option : **--**

Q.50 Which one of the pair of words given in the options shares the same relation as the pair given below does?

Donkey : Bray

Ans
1. Cock : Caw
2. Horse : Gallop
3. Goat : Bleat
4. Cat : Kitten

Question ID : **1501838720**
Status : **Not Answered**
Chosen Option : **--**

Section : **General Knowledge**

Q.1 With which country does Nagaland share its international border?

Ans
1. Nepal
2. Myanmar

3. Bhutan
4. China

Question ID : **1501838750**
Status : **Answered**
Chosen Option : **3**

Q.2 Which of the following articles of the Constitution of India deals with annual financial statement?

Ans
1. Article 214
2. Article 202
3. Article 211
4. Article 160

Question ID : **1501838743**
Status : **Answered**
Chosen Option : **1**

Q.3 The London School of Economics and Political Science (LSE) has created a new academic position in honour of:

Ans
1. Raghuram Rajan
2. Arvind Subramanian
3. Amartya Sen
4. Manmohan Singh

Question ID : **1501838741**
Status : **Answered**
Chosen Option : **1**

Q.4 Which is the state animal of Uttarakhand?

Ans
1. Chinkara
2. Barasingha
3. Spotted deer
4. Musk deer

Question ID : **1501838751**
Status : **Answered**
Chosen Option : **3**

Q.5 In which state of India is the ancient site Kalibangan, of Indus Valley civilisation, situated?

Ans
1. Gujarat
2. Punjab
3. Rajasthan
4. Haryana

Question ID : **1501838756**
Status : **Answered**
Chosen Option : **2**

Q.6 In which city are the Summer Olympic Games, 2020, going to be held?

Ans
1. Seoul

2. New York
3. Paris
4. Tokyo

Question ID : **1501838748**
Status : **Answered**
Chosen Option : **4**

Q.7 Which of the following are present in higher amount in hard water?

Ans
1. Calcium and sodium
2. Calcium and magnesium
3. Sodium and manganese
4. Sodium and magnesium

Question ID : **1501838747**
Status : **Answered**
Chosen Option : **2**

Q.8 _____ has the sole right to mint coins in India.

Ans
1. The Reserve Bank of India
2. The Union Finance Minister
3. The Government of India
4. The Union Commerce and Industry Ministry

Question ID : **1501838754**
Status : **Answered**
Chosen Option : **1**

Q.9 Who among the following gives decision on questions as to disqualifications of members of a House of the Legislature of a State under Article 192 of the Constitution of India?

Ans
1. The Chief Justice of India
2. The Speaker of the Legislative Assembly
3. The Governor of a state
4. The President of India

Question ID : **1501838758**
Status : **Answered**
Chosen Option : **4**

Q.10 In which railway station of South Africa was Mahatma Gandhi evicted from the first class compartment of the train in 1893 due to racial discrimination?

Ans
1. Rustenburg
2. Johannesburg
3. Pietermaritzburg
4. Polokwane

Question ID : **1501838755**
Status : **Answered**
Chosen Option : **2**

Q.11 Article 176 of the Constitution of India deals with special address by:

Ans
1. the President
2. the Chief Minister
3. the Governor
4. the Speaker of the Legislative Assembly

Question ID : **1501838744**
Status : **Answered**
Chosen Option : **3**

Q.12 Which of the following lakes is located in Kerala?

Ans
1. Kolleru Lake
2. Chilika Lake
3. Vembanad Lake
4. Loktak Lake

Question ID : **1501838752**
Status : **Answered**
Chosen Option : **1**

Q.13 Which of the following countries have agreed to form a joint reaction force on the border for fighting terrorism?
(A) China
(B) Afghanistan
(C) Pakistan
(D) Iran

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

Question ID : **1501838739**
Status : **Answered**
Chosen Option : **4**

Q.14 Consider the following statements.

1. Article 330 of the Constitution of India deals with the reservation of seats for Scheduled Castes and Scheduled Tribes in the Lok Sabha.
2. The President nominates 2 members of the Anglo-Indian community to the Lok Sabha under Article 331 of the Constitution of India.
3. The President nominates 1 member of the Anglo-Indian community to the Legislative Assembly of a state under Article 333 of the Constitution of India.

Which of the above statements are correct?

Ans
1. 1 and 3 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Question ID : **1501838742**
Status : **Answered**
Chosen Option : **4**

Q.15 What was Albert Einstein awarded Nobel Prize for?

Ans
1. Theory of magnetism ✗
2. Laws of gravitation ✗
3. Laws of relativity ✗
4. Laws of photo electric effect ✓

Question ID : **1501838745**
Status : **Answered**
Chosen Option : **3**

Q.16 Which city has been named as the World Book Capital 2020 by UNESCO?

Ans
1. Kuala Lumpur ✓
2. Dhaka ✗
3. Jakarta ✗
4. Seoul ✗

Question ID : **1501838740**
Status : **Answered**
Chosen Option : **4**

Q.17 Article 371B of the Constitution of India deals with special provision with respect to the state of:

Ans
1. Nagaland ✗
2. Manipur ✗
3. Jharkhand ✗
4. Assam ✓

Question ID : **1501838757**
Status : **Answered**
Chosen Option : **1**

Q.18 The Economic Survey of India is presented by the:

Ans
1. Dy. Chairman, NITI Ayog ✗
2. Chief Economic Adviser ✗
3. Finance Minister ✓
4. Chairman, NITI Ayog ✗

Question ID : **1501838753**
Status : **Answered**
Chosen Option : **3**

Q.19 In which year did the Indian hockey team last win an Olympic medal?

Ans
1. 1988 ✗
2. 2004 ✗
3. 1980 ✓
4. 1996 ✗

Question ID : **1501838749**
Status : **Answered**

Chosen Option : **2**

Q.20 What is the term used to refer to pollination by wind?

Ans

1. Siciophily ✗
2. Endophily ✗
3. Anemoplasty ✗
4. Anemophily ✓

Question ID : **1501838746**
Status : **Answered**
Chosen Option : **2**

Section : **General English**

Q.1 Select the most appropriate option to complete the sentence.

Rahul said that he _____ by a policeman last night.

Ans

1. was stopping ✗
2. had been stopped ✓
3. has been stopping ✗
4. is being stopped ✗

Question ID : **1501838776**
Status : **Answered**
Chosen Option : **2**

Q.2 Select the correctly spelt word.

Ans

1. Ilogical ✗
2. Irreplaceable ✓
3. Appearence ✗
4. Grammer ✗

Question ID : **1501838770**
Status : **Answered**
Chosen Option : **4**

Q.3 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. Reena studied hard for her maths exam.
B. However, Reena completed the paper well in time as she was well prepared.
C. Most of the students could not attempt all the questions.
D. The examination paper was tough.

Ans

1. BACD ✗
2. ACBD ✗
3. ADCB ✓
4. DCBA ✗

Question ID : **1501838794**
Status : **Answered**
Chosen Option : **3**

Q.4 Select the INCORRECTLY spelt word.

Ans
1. Finite ✗
2. Flounder ✗
3. Founten ✓
4. Fiery ✗

Question ID : **1501838774**
Status : **Answered**
Chosen Option : **3**

Q.5 Select the most appropriate option to fill in the blank.

Where have you _____the book? I can't find it.

Ans
1. hiding ✗
2. hide ✗
3. hides ✗
4. hidden ✓

Question ID : **1501838779**
Status : **Answered**
Chosen Option : **4**

Q.6 Select the option that best gives the meaning of the underlined words.

The large canvas in which the rules and policies are laid out must be looked at carefully.

Ans
1. Framework ✓
2. Outline ✗
3. Fitting ✗
4. Box ✗

Question ID : **1501838767**
Status : **Answered**
Chosen Option : **1**

Q.7 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. When the secretary informed them that he would not be back soon, they left.
B. They seemed very agitated and wanted to meet him.
C. Some ladies gathered outside the Association President's office.
D. They waited for two hours.

Ans
1. CDBA ✗
2. CADB ✗
3. CDAB ✗
4. CBDA ✓

Question ID : **1501838796**
Status : **Answered**
Chosen Option : **4**

Q.8 Select the INCORRECTLY spelt word.

Ans
1. Business
2. Altitude
3. Atitude
4. Intimacy

Question ID : **1501838773**
Status : **Answered**
Chosen Option : **3**

Q.9 Select the most appropriate option to fill in the blank.

A major fire _____ at a chemical factory in Delhi on Thursday afternoon.

Ans
1. broke off
2. broke away
3. broke out
4. broke in

Question ID : **1501838775**
Status : **Answered**
Chosen Option : **3**

Q.10 Parts of a sentence are given below in jumbled order. Arrange the parts in the right order to form a meaningful sentence.

A. internet has changed the lives
B. on any matter
C. to search information
D. of most people as it has enabled them

Ans
1. CBAD
2. ABDC
3. ADCB
4. BADC

Question ID : **1501838791**
Status : **Answered**
Chosen Option : **1**

Q.11 Parts of a sentence are given below in jumbled order. Arrange the parts in the right order to form a meaningful sentence.

A. for allegedly snatching a gold chain from
B. a mob chased a biker
C. a woman who was going to the metro station
D. and lynched him

Ans
1. CABD
2. CBDA
3. BDAC
4. BCDA

Question ID : **1501838789**
Status : **Answered**
Chosen Option : **3**

Q.12 Select the most appropriate ANTONYM of the given word.

AMBIGUOUS

Ans
1. Unclear

✔ 2. Clear
✘ 3. Bright
✘ 4. Faded

Question ID : **1501838763**
Status : **Answered**
Chosen Option : **1**

Q.13 Select the most appropriate ANTONYM of the given word.

KNOWLEDGE

Ans ✔ 1. Ignorance
✘ 2. Intelligence
✘ 3. Assurance
✘ 4. Education

Question ID : **1501838762**
Status : **Answered**
Chosen Option : **1**

Q.14 Select the most appropriate option to fill in the blank.

"Why did you _____ the hall before the seminar was over?" the teacher asked the pupil.

Ans ✘ 1. left
✔ 2. leave
✘ 3. leaving
✘ 4. exited

Question ID : **1501838778**
Status : **Answered**
Chosen Option : **2**

Q.15 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. Rishi enjoyed the movie while Sanjay found it boring.
B. "Let's see a movie today", said Rishi to his friend Sanjay.
C. They went to see an English movie which had subtitles in Hindi.
D. Sanjay decided he would not see an English movie again.

Ans ✘ 1. DABC
✔ 2. BCAD
✘ 3. DCBA
✘ 4. BADC

Question ID : **1501838795**
Status : **Answered**
Chosen Option : **2**

Q.16 Select the option that best gives the meaning of the underlined words.

"Life is a big <u>story which does not have answers</u>," said the wise old man.

Ans ✘ 1. Anecdote

2. Mystery
3. Novel
4. Folktale

Question ID : **1501838768**
Status : **Answered**
Chosen Option : **2**

Q.17 Select the correctly spelt word.

Ans
1. Featurred
2. Phishing
3. Formulla
4. Fisure

Question ID : **1501838771**
Status : **Answered**
Chosen Option : **4**

Q.18 Select the most appropriate synonym of the given word.

ELEGANT

Ans
1. Unappealing
2. Insignificant
3. Heavy
4. Stylish

Question ID : **1501838759**
Status : **Answered**
Chosen Option : **2**

Q.19 Select the most appropriate synonym of the given word.

PERTINENT

Ans
1. Small
2. Foolish
3. Relevant
4. Large

Question ID : **1501838761**
Status : **Answered**
Chosen Option : **2**

Q.20 Parts of a sentence are given below in jumbled order. Arrange the parts in the right order to form a meaningful sentence.

A. were hit from the back by a truck and
B. three people who
C. were riding on a motorbike
D. they fell on the road

Ans
1. DACB
2. DABC
3. BCAD

✗ 4. BACD

Question ID : **1501838792**
Status : **Answered**
Chosen Option : **3**

Q.21 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. It is more a matter of a person's attitude to life.
B. Optimism is not a complicated philosophy or school of thought.
C. While an optimist always look at things with hope, a pessimist sees the dark and bad side of things.
D. Such a person takes a bright and positive view of life.

Ans
✓ 1. BADC
✗ 2. BCDA
✗ 3. CADB
✗ 4. CBDA

Question ID : **1501838798**
Status : **Answered**
Chosen Option : **2**

Q.22 Select the most appropriate option to fill in the blank.

The train _____at a very high speed when the accident happened.

Ans
✗ 1. has run
✗ 2. is running
✗ 3. was ran
✓ 4. was running

Question ID : **1501838780**
Status : **Answered**
Chosen Option : **4**

Q.23 Select the most appropriate question tag to fill in the blank.

You have bought the tickets for the play, _____?

Ans
✓ 1. haven't you
✗ 2. aren't you
✗ 3. wasn't it
✗ 4. hadn't you

Question ID : **1501838788**
Status : **Answered**
Chosen Option : **1**

Q.24 Select the most appropriate option to fill in the blank.

Aanya can speak French _____, but she can't speak German.

Ans
✗ 1. greatly
✓ 2. fluently

3. specially

4. poorly

Question ID : **1501838784**
Status : **Answered**
Chosen Option : **2**

Q.25 Select the most appropriate option to fill in the blank.

The teacher told the students that they _____ have been more careful while crossing the river.

Ans
1. should
2. shall
3. would
4. can

Question ID : **1501838786**
Status : **Answered**
Chosen Option : **1**

Q.26 Parts of a sentence are given below in jumbled order. Arrange the parts in the right order to form a meaningful sentence.

A. when he grows up
B. and wants to play for his country
C. Rahul, who loves cricket
D. is being coached at the Vasant Vihar Club

Ans
1. ACDB
2. CBAD
3. ABCD
4. CABD

Question ID : **1501838793**
Status : **Answered**
Chosen Option : **2**

Q.27 Select the most appropriate option to fill in the blank.

"Excuse me, do you speak English?" I asked some passersby _____ Paris when I visited it last year.

Ans
1. of
2. in
3. with
4. for

Question ID : **1501838781**
Status : **Answered**
Chosen Option : **2**

Q.28 Select the most appropriate ANTONYM of the given word.

MIGHTY

Ans
1. Big
2. Slight
3. Large
4. Gigantic

Question ID : **1501838764**
Status : **Answered**
Chosen Option : **2**

Q.29 Select the correctly spelt word.

Ans
1. Trigered ✗
2. Faught ✗
3. Aplication ✗
4. Bloated ✓

Question ID : **1501838769**
Status : **Answered**
Chosen Option : **4**

Q.30 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. We found it unusually cold there.
B. We rushed to a garment shop to buy some warm clothing.
C. We arrived at Shimla.
D. We realised we had not carried our woollens with us.

Ans
1. CADB ✓
2. BCDA ✗
3. ACDB ✗
4. CBAD ✗

Question ID : **1501838797**
Status : **Answered**
Chosen Option : **1**

Q.31 Select the most appropriate option to fill in the blank.

Heat wave conditions are _____ being reported from many parts of the country.

Ans
1. tomorrow ✗
2. yesterday ✗
3. now ✓
4. earlier ✗

Question ID : **1501838777**
Status : **Answered**
Chosen Option : **3**

Q.32 Select the most appropriate option to fill in the blank.

I have understood the situation. You _____ repeat what you just said.

Ans
1. can't ✗
2. needn't ✓
3. wouldn't ✗
4. couldn't ✗

Question ID : **1501838785**
Status : **Answered**

Chosen Option : **2**

Q.33 Select the option that best gives the meaning of the underlined words.

Let's look at our <u>areas of weakness</u> before we point fingers at others.

Ans
1. Strengths ✗
2. Descriptions ✗
3. Performance ✗
4. Inadequacies ✓

Question ID : **1501838766**
Status : **Answered**
Chosen Option : **3**

Q.34 Select the option that best gives the meaning of the underlined words.

Radha is a person who is <u>talented in many different facets of life</u> and can easily win over people.

Ans
1. Versatile ✓
2. Ambitious ✗
3. Impressive ✗
4. Famous ✗

Question ID : **1501838765**
Status : **Answered**
Chosen Option : **2**

Q.35 Select the INCORRECTLY spelt word.

Ans
1. Psychology ✗
2. Caution ✗
3. Acclimatise ✗
4. Immidiately ✓

Question ID : **1501838772**
Status : **Answered**
Chosen Option : **4**

Q.36 Select the most appropriate question tag to fill in the blank.

You and I have similar likes and dislikes, _____?

Ans
1. wasn't it ✗
2. isn't it ✓
3. hasn't it ✗
4. aren't it ✗

Question ID : **1501838787**
Status : **Answered**
Chosen Option : **2**

Q.37

Select the most appropriate option to fill in the blank.

The _____ you go in the mountains, the lesser the oxygen level.

Ans
1. more higher
2. more high
3. highest
4. higher ✔

Question ID : **1501838783**
Status : **Answered**
Chosen Option : **4**

Q.38 Parts of a sentence are given below in jumbled order. Arrange the parts in the right order to form a meaningful sentence.

A. I had given up hope
B. all of a sudden
C. and thought my chain was stolen
D. when I found it

Ans
1. ADCB
2. ACDB ✔
3. BACD
4. BCAD

Question ID : **1501838790**
Status : **Answered**
Chosen Option : **1**

Q.39 Select the most appropriate option to fill in the blank.

I found my purse lying _____the dressing table.

Ans
1. between
2. among
3. beside ✔
4. within

Question ID : **1501838782**
Status : **Answered**
Chosen Option : **4**

Q.40 Select the most appropriate synonym of the given word.

MASSIVE

Ans
1. Gigantic ✔
2. Respectable
3. Fearful
4. Puny

Question ID : **1501838760**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the following passage and answer the questions that follow.

Captain Laxmi Sehgal is one of the lion hearted women India ever had. She picked up the Gun for the Indian National Army (INA) founded by Netaji Subhas Chandra Bose and led it like a tigress during the struggle for Indian freedom.
Laxmi Sehgal was born in 1914 to a traditional Tamil family. She got her first patriotic lessons from her mother who was a member of the Congress herself. She completed her degree in medicine from the Madras Medical College and went to Singapore for a career as a doctor. However, something very different was waiting for her there. Singapore at that time, was ruled by the British and they had to surrender when the Japanese invaded the country. Thousands of Indians were taken as prisoners. At this juncture, Netaji invited the Indian prisoners to join the INA and fight against the British. Laxmi was one of them and Netaji was impressed by her courage and asked her to lead the Rani Jhansi Regiment. She fought like a tigress against the British in the jungles of Burma.
Lakshmi Sehgal stands out largely due to her belief in using violence if necessary to get India her freedom. She fought the British at every opportunity she got and was placed under house arrest for two years, but still passively resisted the British.
Until her death in 2012 Captain Laxmi Sehgal had the same indomitable attitude after India became independent and, while practicing as a doctor in Kanpur, she continued working for the betterment of society.

Relief camps were organised by her during the Bangladesh crisis for refugees in Calcutta.
She played a key role in providing medical facilities to the victims of the Bhopal gas tragedy. She also worked to restore peace after the 1984 anti-Sikh riots. In a campaign against the Miss World competition in Bangalore, she was arrested.
She wrote an autobiography which details her inspiring life and features some never-seen-before pictures.

SubQuestion No : 41

Q.41 Working for the refugees of Bangladesh or Bhopal tragedy victims shows which of the following traits of her character?

Ans
✔ 1. Social welfare was dear to her.
✘ 2. She was a freedom fighter till the end.
✘ 3. She liked working for fame and name.
✘ 4. She disliked treating patients even in old age.

Question ID : **1501838804**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the following passage and answer the questions that follow.

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She wrote an autobiography which details her inspiring life and features some never-seen-before pictures.

SubQuestion No : 42

Q.42 Lakshmi is called 'lion hearted' because she:

Ans
1. was afraid of lions ✗
2. had a strong build like a lion ✗
3. could kill a lion with a gun ✗
4. had the courage of a lion ✓

Question ID : **1501838800**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the following passage and answer the questions that follow.

Captain Laxmi Sehgal is one of the lion hearted women India ever had. She picked up the Gun for the Indian National Army (INA) founded by Netaji Subhas Chandra Bose and led it like a tigress during the struggle for Indian freedom.
Laxmi Sehgal was born in 1914 to a traditional Tamil family. She got her first patriotic lessons from her mother who was a member of the Congress herself. She completed her degree in medicine from the Madras Medical College and went to Singapore for a career as a doctor. However, something very different was waiting for her there. Singapore at that time, was ruled by the British and they had to surrender when the Japanese invaded the country. Thousands of Indians were taken as prisoners. At this juncture, Netaji invited the Indian prisoners to join the INA and fight against the British. Laxmi was one of them and Netaji was impressed by her courage and asked her to lead the Rani Jhansi Regiment. She fought like a tigress against the British in the jungles of Burma.
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She played a key role in providing medical facilities to the victims of the Bhopal gas tragedy. She also worked to restore peace after the 1984 anti-Sikh riots. In a campaign against the Miss World competition in Bangalore, she was arrested.
She wrote an autobiography which details her inspiring life and features some never-seen-before pictures.

SubQuestion No : 43

Q.43 Captain Laxmi Sehgal had an 'indomitable attitude'. This means she was:

Ans
1. kind hearted ✗
2. dominating ✗
3. helpful ✗
4. fearless ✓

Question ID : **1501838803**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the following passage and answer the questions that follow.

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Laxmi Sehgal was born in 1914 to a traditional Tamil family. She got her first patriotic lessons from her mother who was a member of the Congress herself. She completed her degree in medicine from the Madras Medical College and went to Singapore for a career as a doctor. However, something very different was waiting for her there. Singapore at that time, was ruled by the British and they had to surrender when the Japanese invaded the country. Thousands of Indians were taken as prisoners. At this juncture, Netaji invited the Indian prisoners to join the INA and fight against the British. Laxmi was one of them and Netaji was impressed by her courage and asked her to lead the Rani Jhansi Regiment. She fought like a tigress against the British in the jungles of Burma.
Lakshmi Sehgal stands out largely due to her belief in using violence if necessary to get India her freedom. She fought the British at every opportunity she got and was placed under house arrest for two years, but still passively resisted the British.
Until her death in 2012 Captain Laxmi Sehgal had the same indomitable attitude after India became independent and, while practicing as a doctor in Kanpur, she continued working for the betterment of society.

Relief camps were organised by her during the Bangladesh crisis for refugees in Calcutta.
She played a key role in providing medical facilities to the victims of the Bhopal gas tragedy. She also worked to restore peace after the 1984 anti-Sikh riots. In a campaign against the Miss World competition in Bangalore, she was arrested.
She wrote an autobiography which details her inspiring life and features some never-seen-before pictures.

SubQuestion No : 44

Q.44 When the writer says, "However, something very different was waiting for her there," he means she would:

Ans
1. ✗ become a famous doctor
2. ✓ participate in the struggle for India's independence
3. ✗ become an active politician
4. ✗ be imprisoned and face hardships

Question ID : **1501838802**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the following passage and answer the questions that follow.

Captain Laxmi Sehgal is one of the lion hearted women India ever had. She picked up the Gun for the Indian National Army (INA) founded by Netaji Subhas Chandra Bose and led it like a tigress during the struggle for Indian freedom.
Laxmi Sehgal was born in 1914 to a traditional Tamil family. She got her first patriotic lessons from her mother who was a member of the Congress herself. She completed her degree in medicine from the Madras Medical College and went to Singapore for a career as a doctor. However, something very different was waiting for her there. Singapore at that time, was ruled by the British and they had to surrender when the Japanese invaded the country. Thousands of Indians were taken as prisoners. At this juncture, Netaji invited the Indian prisoners to join the INA and fight against the British. Laxmi was one of them and Netaji was impressed by her courage and asked her to lead the Rani Jhansi Regiment. She fought like a tigress against the British in the jungles of Burma.
Lakshmi Sehgal stands out largely due to her belief in using violence if necessary to get India her freedom. She fought the British at every opportunity she got and was placed under house arrest for two years, but still passively resisted the British.
Until her death in 2012 Captain Laxmi Sehgal had the same indomitable attitude after India became independent and, while practicing as a doctor in Kanpur, she continued working for the betterment of society.

Relief camps were organised by her during the Bangladesh crisis for refugees in Calcutta.
She played a key role in providing medical facilities to the victims of the Bhopal gas tragedy. She also worked to restore peace after the 1984 anti-Sikh riots. In a campaign against the Miss World competition in Bangalore, she was arrested.
She wrote an autobiography which details her inspiring life and features some never-seen-before pictures.

SubQuestion No : 45

Q.45 She got her first inspiration to fight for the country's freedom from:

Ans
✗ 1. prisoners of war whom she met in Singapore
✗ 2. the Japanese who invaded Singapore
✗ 3. Subhas Chandra Bose who was fighting against the British
✓ 4. her mother who worked for the Congress

Question ID : **1501838801**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the following passage and answer the questions that follow.

The entire cosmos exists in a state of mutual dependence and support.

Living in accordance with this principle of universal harmony is what is known as dharma. The sorrow of every living being in this world is our own sorrow, and the happiness of every living being is our own happiness. In harming others, we harm ourselves. Similarly, when we help others, we are helping ourselves.

A man sits with a candle in front of his house at night. A sudden wind blows out the candlelight. It is only then that his eyes are opened to the beauty of the smiling full moon and the cool moonlight. Similarly, when we give up our selfishness, the bliss we receive in return is great.

We should strive to reach a state in which we are able to view all beings of the world, both animate and inanimate, as a part of our own Self. Just as the right hand reaches out to aid the left hand when it is injured, the ability to feel the sufferings of all beings as our own, and an intense yearning to comfort them, should awaken within us.... The goal of all religions is one — purification of the human mind. To overcome our selfishness, to love and serve our fellow beings, to rise to the level of universal consciousness — these goals are common to all religions. The core of religion is to foster these human values and awaken the innate divinity in people.

Though the founders of all religions realised and practiced the noblest ideals in their lives, their followers have often not lived up to those ideals. Instead of focussing on the essence of the religious principles of love and compassion, they focus on the external rituals and traditions, which vary from religion to religion, which does more harm than good.

SubQuestion No : 46

Q.46 It is only when we stop thinking about our own welfare will we:

Ans

✗ 1. hurt ourselves

✗ 2. find sorrow all around

✓ 3. find real happiness

✗ 4. find ourselves at a great loss

Question ID : **1501838807**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the following passage and answer the questions that follow.

The entire cosmos exists in a state of mutual dependence and support.

Living in accordance with this principle of universal harmony is what is known as dharma. The sorrow of every living being in this world is our own sorrow, and the happiness of every living being is our own happiness. In harming others, we harm ourselves. Similarly, when we help others, we are helping ourselves.

A man sits with a candle in front of his house at night. A sudden wind blows out the candlelight. It is only then that his eyes are opened to the beauty of the smiling full moon and the cool moonlight. Similarly, when we give up our selfishness, the bliss we receive in return is great.

We should strive to reach a state in which we are able to view all beings of the world, both animate and inanimate, as a part of our own Self. Just as the right hand reaches out to aid the left hand when it is injured, the ability to feel the sufferings of all beings as our own, and an intense yearning to comfort them, should awaken within us.... The goal of all religions is one — purification of the human mind. To overcome our selfishness, to love and serve our fellow beings, to rise to the level of universal consciousness — these goals are common to all religions. The core of religion is to foster these human values and awaken the innate divinity in people.

Though the founders of all religions realised and practiced the noblest ideals in their lives, their followers have often not lived up to those ideals. Instead of focussing on the essence of the religious principles of love and compassion, they focus on the external rituals and traditions, which vary from religion to religion, which does more harm than good.

SubQuestion No : 47

Q.47 In this sentence, '…an intense yearning to comfort them, should awaken within us…', the phrase 'intense yearning' means:

Ans
1. ✗ sense of anger
2. ✓ great desire
3. ✗ desire to wake up
4. ✗ being proud

Question ID : **1501838808**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the following passage and answer the questions that follow.

The entire cosmos exists in a state of mutual dependence and support.

Living in accordance with this principle of universal harmony is what is known as dharma. The sorrow of every living being in this world is our own sorrow, and the happiness of every living being is our own happiness. In harming others, we harm ourselves. Similarly, when we help others, we are helping ourselves.

A man sits with a candle in front of his house at night. A sudden wind blows out the candlelight. It is only then that his eyes are opened to the beauty of the smiling full moon and the cool moonlight. Similarly, when we give up our selfishness, the bliss we receive in return is great.

We should strive to reach a state in which we are able to view all beings of the world, both animate and inanimate, as a part of our own Self. Just as the right hand reaches out to aid the left hand when it is injured, the ability to feel the sufferings of all beings as our own, and an intense yearning to comfort them, should awaken within us.... The goal of all religions is one — purification of the human mind. To overcome our selfishness, to love and serve our fellow beings, to rise to the level of universal consciousness — these goals are common to all religions. The core of religion is to foster these human values and awaken the innate divinity in people.

Though the founders of all religions realised and practiced the noblest ideals in their lives, their followers have often not lived up to those ideals. Instead of focussing on the essence of the religious principles of love and compassion, they focus on the external rituals and traditions, which vary from religion to religion, which does more harm than good.

SubQuestion No : 48

Q.48 Living in accordance with this principle of universal harmony is what is known as dharma. What principle is referred in this sentence?

Ans

✗ 1. Helping ourselves is extremely essential and is a universal law of life.

✗ 2. The entire world is very big and different life forms exist here.

✓ 3. That all life forms are interdependent and must live as one.

✗ 4. Universally, all living beings help and love each other.

Question ID : **1501838806**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the following passage and answer the questions that follow.

The entire cosmos exists in a state of mutual dependence and support.

Living in accordance with this principle of universal harmony is what is known as dharma. The sorrow of every living being in this world is our own sorrow, and the happiness of every living being is our own happiness. In harming others, we harm ourselves. Similarly, when we help others, we are helping ourselves.

A man sits with a candle in front of his house at night. A sudden wind blows out the candlelight. It is only then that his eyes are opened to the beauty of the smiling full moon and the cool moonlight. Similarly, when we give up our selfishness, the bliss we receive in return is great.

We should strive to reach a state in which we are able to view all beings of the world, both animate and inanimate, as a part of our own Self. Just as the right hand reaches out to aid the left hand when it is injured, the ability to feel the sufferings of all beings as our own, and an intense yearning to comfort them, should awaken within us.... The goal of all religions is one — purification of the human mind. To overcome our selfishness, to love and serve our fellow beings, to rise to the level of universal consciousness — these goals are common to all religions. The core of religion is to foster these human values and awaken the innate divinity in people.

Though the founders of all religions realised and practiced the noblest ideals in their lives, their followers have often not lived up to those ideals. Instead of focussing on the essence of the religious principles of love and compassion, they focus on the external rituals and traditions, which vary from religion to religion, which does more harm than good.

SubQuestion No : 49

Q.49 What does the writer NOT approve of?

Ans
✔ 1. Outward show of religious beliefs and practices
✘ 2. Telling followers to live a life of ideals
✘ 3. Practicing the high ideals taught by their heads
✘ 4. Spreading love and compassion among followers

Question ID : **1501838810**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the following passage and answer the questions that follow.

The entire cosmos exists in a state of mutual dependence and support.

Living in accordance with this principle of universal harmony is what is known as dharma. The sorrow of every living being in this world is our own sorrow, and the happiness of every living being is our own happiness. In harming others, we harm ourselves. Similarly, when we help others, we are helping ourselves.

A man sits with a candle in front of his house at night. A sudden wind blows out the candlelight. It is only then that his eyes are opened to the beauty of the smiling full moon and the cool moonlight. Similarly, when we give up our selfishness, the bliss we receive in return is great.

We should strive to reach a state in which we are able to view all beings of the world, both animate and inanimate, as a part of our own Self. Just as the right hand reaches out to aid the left hand when it is injured, the ability to feel the sufferings of all beings as our own, and an intense yearning to comfort them, should awaken within us.... The goal of all religions is one — purification of the human mind. To overcome our selfishness, to love and serve our fellow beings, to rise to the level of universal consciousness — these goals are common to all religions. The core of religion is to foster these human values and awaken the innate divinity in people.

Though the founders of all religions realised and practiced the noblest ideals in their lives, their followers have often not lived up to those ideals. Instead of focussing on the essence of the religious principles of love and compassion, they focus on the external rituals and traditions, which vary from religion to religion, which does more harm than good.

SubQuestion No : 50

Q.50 What state of mind does the writer want us to have?

Ans

✔ 1. Understand the sufferings of all life forms.

✘ 2. Realise that all life is around us.

✘ 3. Realise that human beings are superior to animals.

✘ 4. Realise that we should live a life of principles.

Question ID : **1501838809**
Status : **Answered**
Chosen Option : **4**