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Section : Civil Engineering

- Q.1** Xypex polymer is used in concrete for
- A. Reducing water content
 - B. Increasing setting time of cement
 - C. Water proofing
 - D. Increased strength

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834936878

- Q.2** The viscosity of fluid varies with
- A. Pressure
 - B. Density
 - C. Temperature
 - D. Temperature and Pressure

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834936928

- Q.3** Size of nail knot in timber
- A. 0 to 6mm dia
 - B. 6 to 10mm dia
 - C. 10 to 20mm dia
 - D. 20 to 40mm dia

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834936916

Q.4 Number of test results of concrete required to calculate standard deviation

- A. 5
- B. 10
- C. 20
- D. 30

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

Question ID : 5834936862

Q.5 The piezometric head is also called -----

- A. Position head
- B. Elevation head
- C. Velocity head
- D. Pressure head

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

Question ID : 5834936904

Q.6 The type of transition curve generally provided on hilly tracks is

- A.Spiral
- B.Circular
- C.Laminiscate
- D.Cubic parabola

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

Question ID : 5834936882

Q.7 Size of medium sand is

- A. 0.005 to 0.025mm
- B. 0.075 to 0.425mm
- C. 0.75 to 2mm
- D. 2.00 to 3.00mm

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

Question ID : 5834936937

Q.8 As per IS 456-2000, minimum grade of concrete for RCC work shall be

- A. M15
- B. M20
- C. M25
- D. M30

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936911

Q.9 Piezometric head is the sum of

- A. Velocity head and pressure head
- B. Datum head and velocity head
- C. Pressure head and datum head
- D. Velocity head, pressure head and datum head

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936939

Q.10 The weight of a vehicle effects

- A. Width of lanes
- B. Passing sight distance
- C. Pavement thickness
- D. Extra widening

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936884

Q.11 A cantilever beam is subjected to UDL throughout the span. Then the shape of the shear force diagram is

- A. Parabola
- B. Hyperbola
- C. Rectangle
- D. Triangle

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936866

Q.12 A building has 75 points in GRIHA rating, it is treated as

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

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

Question ID : 5834936924

Q.13 The property of material enables to absorb energy without fracture is called

- A. Hardness
- B. Toughness
- C. Fatigue
- D. Ductility

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

Question ID : 5834936902

Q.14 Self compacting concrete construction first started in

- A. Australia
- B. America
- C. Japan
- D. France

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

Question ID : 5834936923

Q.15 In a rectangular beam section, the ratio of maximum shear stress to that of average shear stress

- A. $\frac{3}{4}$
- B. $\frac{4}{3}$
- C. $\frac{2}{3}$
- D. $\frac{3}{2}$

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

Question ID : 5834936934

Q.16 The potential energy stored up in a deformed body is known as

- A. Strain energy
- B. Potential energy
- C. Resilience
- D. Deformation.

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

Question ID : 5834936901

Q.17 In a dome structure, the slab will be in

- A. Tension
- B. Compression
- C. Shear
- D. Axial

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

Question ID : 5834936871

Q.18 A liquid product in which a substantial amount of bitumen is suspended, in a finely divided condition is called

- A. Bitumen solution
- B. Bitumen paint
- C. Bitumen emulsion
- D. All of the above

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

Question ID : 5834936886

Q.19 The assumption of boussinesq equation is that the solid is -----

- A. Elastic
- B. Semi-elastic
- C. Plastic
- D. Semi-plastic

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

Question ID : 5834936887

Q.20 Load factor is defined as

- A. Ultimate load/Yield load
- B. Yield load/ultimate load
- C. Ultimate load/working load
- D. Yield load/working load

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936872

Q.21 The material in which large deformation is possible before rupture is called

- A. Plastic
- B. Brittle
- C. Ductile
- D. Elastic

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936903

Q.22 The ground water table may be lowered by which of the following methods?

- A. Vaccum method
- B. Well point system
- C. Electro osmosis method
- D. All of the mentioned

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936906

Q.23 In case of Limit state method, the concrete is subjected to

- A. Some times higher but generally lower stress level
- B. A higher stress level
- C. A lower stress level
- D. Same stress level

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936868

Q.24 The maximum allowable tolerance for formwork in construction of footings as per IS

456 is

- A. 60mm
- B. 50mm
- C. 40mm
- D. 25mm

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936865

Q.25 Pitot static tube measure

- A. Stagnation pressure
- B. Static pressure
- C. Dynamic pressure
- D. Hydraulic pressure

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936932

Q.26 The unit of strain are

- A. N
- B. N/Sq.mm
- C. N.mm
- D. None

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936900

Q.27 The amount of bleaching powder containing 20 % available chlorine needed to chlorinate the water supply of population of 10,000 at 100 litres per day consumption at the rate of 2 ppm

- A. 0.2 Kg
- B. 5 Kg
- C. 10 Kg
- D. 20Kg

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

Question ID : 5834936896

Q.28 Fire resistant brick – Major component of material is

- A. Fe_2O_3
- B. Al_2O_3
- C. Al_3O_4
- D. Fe_3O_4

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

Question ID : 5834936921

Q.29 Aeration in water treatment removes

- A. Chlorides
- B. Nitrates
- C. Iron and Manganese
- D. Nickel and Cadmium

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

Question ID : 5834936898

Q.30 The uniformity co-efficient of sand used in Filter bed of slow sand filter is

- A. 0.5 to 1.00
- B. 1.0 to 2.0
- C. 2.0 to 3.0
- D. 3.0 to 5.0

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

Question ID : 5834936899

Q.31 Ferrocement is a composite material

- A. Cement mortar with Iron content
- B. Cement mortar with Steel fibres
- C. Cement mortar with wire mesh
- D. Cement mortar with Glass fibres

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

Question ID : 5834936926

Q.32 Bitumen of grade 80/100. The first and second numbers refers to

- A. Softening point and penetration
- B. Penetration and flash point
- C. Penetration and softening point
- D. Flash point and softening point

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

Question ID : 5834936914

Q.33 The permissible stresses for main structural steel members under dynamic loads should be increased by

- A. 20%
- B. 25%
- C. 30%
- D. 33.33%

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

Question ID : 5834936909

Q.34 Basic wind speed considered for design of structures in Hyderabad as per IS code

- A. 33m/sec
- B. 44m/sec
- C. 55m/sec
- D. 60m/sec

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

Question ID : 5834936880

Q.35 Approximate proportion of dry cement mortar required for brick work is

- A. 50 %
- B. 30%
- C. 40%
- D. 60%

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936918

Q.36 The distance between the center's of adjacent rivets in the same row is called

- A. Lap
- B. Pitch
- C. Gauge
- D. Staggered pitch

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936908

Q.37 Width of carriageway for a single lane is to be

- A. 7.5 m
- B. 5.5 m
- C. 4.5 m
- D. 3.75 m

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936883

Q.38 Which one of the concrete is most suitable in extreme cold climate?

- A. Ready mix concrete
- B. Vacuum concrete
- C. Ferrocement concrete
- D. Air entrained concrete

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936879

Q.39 The minimum diameter of longitudinal reinforcement bar in a column as per IS 456 is

- A. 10mm
- B. 12mm
- C. 16mm
- D. 20mm

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936863

Q.40 In an internal focusing type of telescope the lens provided is

- A. Concave
- B. Convex
- C. Plano convex
- D. Plano concave

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936929

Q.41 As per IS456-2000, the maximum cement content in RCC shall be

- A. 400 Kg/Cum
- B. 450 Kg/Cum
- C. 500 Kg/cum
- D. 600 Kg/cum

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936940

Q.42 Contact pressure for flexible footing on any type of soil is

- A. Uniform
- B. Varies with maximum at centre
- C. Varies with maximum edges
- D. No specific trend of variation

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936891

Q.43 According to IS code, the weight of the timber is to be reckoned at a moisture content of

- A. 0
- B. 4%
- C. 8%
- D. 12%

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

Question ID : 5834936919

Q.44 Blue baby disease in children is caused by the presence of

- A. Chlorides
- B. Fluorides
- C. Sulphates
- D. Nitrates

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

Question ID : 5834936893

Q.45 The compaction process can be accomplished by ----- process.

- A. Rolling
- B. Tampering
- C. Vibration
- D. All of the mentioned

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

Question ID : 5834936888

Q.46 The point of generation of earthquake below earth is called

- A. Epicentre
- B. Hypocentre
- C. Focal depth
- D. None of the above

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

Question ID : 5834936876

Q.47 Nominal mix may be used for grades of concrete

- A. M20 or lower
- B. M15 or lower
- C. M25 or lower
- D. M10 or lower

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936864

Q.48 If the hydraulic gradient is unity, then what is the ratio of flow across unit area of soil called?

- A. Co-efficient of discharge
- B. Co-efficient of viscosity
- C. Co-efficient of seepage
- D. Co-efficient of permeability

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936890

Q.49 A canal which is aligned at right angles to contour is called

- A. Contour canal
- B. Watershed canal
- C. Branch canal
- D. Side slope canal

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936931

Q.50 Synthetic rubber used for elastomeric bearings should have respectively hardness and ultimate tensile elongation of

- A. 100 and 500%
- B. 55 and 400%
- C. 175 and 300%
- D. 200 and 350%

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936938

Q.51 Aluminium powder is used as an admixture in the production of

- A. High strength concrete
- B. High density concrete
- C. Light weight concrete
- D. Prestressed precast concrete

Ans  1. A

 2. B

 3. C

 4. D

Question ID : **5834936922**

Q.52 What is the minimum percentage of steel for water tanks as per IS 3370?

- A. 0.25 % of cross-sectional area
- B. 0.30% of cross-sectional area
- C. 0.4% of cross-sectional area
- D. 0.5% of cross-sectional area

Ans  1. A

 2. B

 3. C

 4. D

Question ID : **5834936877**

Q.53 Type of torsion produced in Reinforced Concrete members subjected to loads is classified into

- A. 4 types
- B. 3 types
- C. 2 types
- D. 1 type

Ans  1. A

 2. B

 3. C

 4. D

Question ID : **5834936873**

Q.54 The process of turning telescope about vertical axis in horizontal plane is called

- A. Transiting
- B. Reversing
- C. Plunging
- D. Swinging

Ans  1. A

 2. B

 3. C

 4. D

Question ID : **5834936927**

Q.55 For coastal environment best suited cement is

- A. Rapid hardening cement
- B. Ordinary Portland cement
- C. High alumina cement
- D. Blast furnace slag cement

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

Question ID : 5834936912

Q.56 Maximum spacing of shear reinforcement shall be not more than [assume depth of beam as d]

- A. 0.5 d
- B. 0.75 d
- C. D
- D. None of above

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

Question ID : 5834936867

Q.57 What is the maximum percentage of steel for columns as per IS 456?

- A. 3% of cross-sectional area
- B. 4% of cross-sectional area
- C. 5% of cross-sectional area
- D. 6% of cross-sectional area

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

Question ID : 5834936870

Q.58 The structure of Illite is similar to that of -----crystal.

- A. Kaolinite
- B. Dickite
- C. Montmorillonite
- D. Attapulgite

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

Question ID : 5834936892

Q.59 Chlorine in water is determined by

- A. EDTA method
- B. Winkler's method
- C. Orthotolidine test
- D. Mohr Method

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

Question ID : 5834936894

Q.60 Carbon content in TMT bars Fe 500 grade shall not exceed

- A. 0.4%
- B. 0.3%
- C. 0.5%
- D. 0.2%

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

Question ID : 5834936917

Q.61 Product of hydration of cement with water

- A. Metakaoline
- B. Billimorite
- C. Tobermorite
- D. Calcium Gel

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

Question ID : 5834936920

Q.62 Water absorption of country bricks shall be not more than

- A. 5%
- B. 10%
- C. 20%
- D. 30%

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

Question ID : 5834936915

Q.63 Prestressing losses in post-tensioned and pre-tensioned beams are respectively the following:

- A. 15% and 20%
- B. 25% and 30%
- C. 35% and 40%
- D. 5% and 10%

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936910

Q.64 A commonly used hand pump is

- A. Centrifugal pump
- B. Rotary pump
- C. Reciprocating pump
- D. Axial flow pump

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936936

Q.65 What is minimum cement content permitted for RCC structures constructed in “Extreme” exposure conditions as per IS 456?

- A. 320 Kg/cum
- B. 300 Kg/cum
- C. 350 Kg/cum
- D. 360 Kg/cum

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834936874

Q.66 Altitude of a point is the vertical distance above

- A. Reference datum
- B. Ground level
- C. Mean sea level
- D. None of the above

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

Question ID : 5834936907

Q.67 The factor used to obtain design seismic force depending upon functional use of structure is called

- A. Zone factor
- B. Importance factor
- C. Reduction factor
- D. None of the above.

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

Question ID : 5834936869

Q.68 The graphical method for the determination of earth pressure is

- A. Rebhann's method
- B. Taylors method
- C. Mohr's diagram method
- D. New mark influence chart method

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

Question ID : 5834936941

Q.69 The unevenness index for a good pavement surface of high speed is

- A. 1500mm/Km
- B. 2500mm/Km
- C. 3500mm/Km
- D. 4500mm/Km

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

Question ID : 5834936885

Q.70 The speed of pressure wave through pipe depends on

- A. Length of pipe
- B. Diameter of pipe
- C. Bulk modulus of fluid
- D. Original head

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

Question ID : **5834936933**

Q.71 Rate of filtration of a Rapid sand filter is

- A. 300 litres per Sq.m per minute
- B. 400 litres per Sq.m per minute
- C. 100 litres per Sq.m per hour
- D. 100 litres per Sq.m per minute

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

Question ID : **5834936897**

Q.72 Parallax bar is used to measure

- A. Parallax
- B. Parallax difference
- C. Difference in elevation
- D. Relief displacement

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

Question ID : **5834936930**

Q.73 Turbidity of water shall not exceed

- A. 2 NTU
- B. 5 NTU
- C. 10 NTU
- D. 15 NTU

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

Question ID : **5834936895**

Q.74 Minimum centre to centre spacing of friction piles of diameter “D” as per BIS code is

- A. 2D
- B. 2.5D
- C. 3D
- D. 4D

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

Question ID : 5834936881

Q.75 According to IS standards, the grading of Fine aggregate is divided into

- A. 2 zones
- B. 4 zones
- C. 3 zones
- D. 6 zones

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

Question ID : 5834936913

Q.76 The ratios of pressures between two points A and B at depth of 0.5m and 2m below a constant level of water in a tanks is

- A. 1: $\sqrt{2}$
- B. 1 :2
- C. 1:4
- D. 1:16

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

Question ID : 5834936905

Q.77 . Basic wind speed considered for design of structures in Chennai as per IS code

- A. 33 m/sec
- B. 44m/sec
- C. 50m/sec
- D. 65m/sec

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

Question ID : 5834936875

Q.78 Superplasticizers made with polycarboxylate ethers aims at reduction of water in concrete

- A. 15 to 22%
- B. 10 to 15%
- C. 35 to 40%
- D. 45 to 50%

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

Question ID : 5834936925

Q.79 Effective length of a columns length L with both ends effectively held in position but not restrained against rotation is

- A. 0.5 L
- B. L
- C. 2L
- D. 1.5L

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

Question ID : 5834936935

Q.80 Which of the following type of foundation can be provided for a buildings when the soil at shallow depth is having very poor bearing capacity?

- A. Isolated column footing
- B. Well foundation
- C. Pile foundation
- D. Masonry footing

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

Question ID : 5834936889