

82/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. _____ is provided on the road edge to serve as a emergency lane for vehicles compelled to taken out of the pavement.
(A) Kerb (B) Shoulder
(C) Carriage way (D) Gradient
2. The brick laid with its breadth parallel to the face of a wall is known as :
(A) Stretcher bond (B) Zigzag bond
(C) Garden wall bond (D) Header bond
3. Bearing pile is situated in :
(A) Hard stratum (B) Water
(C) Above ground level (D) None of these
4. The camber provided for gravel road is :
(A) 1 in 20 (B) 1 in 45
(C) 1 in 24 (D) 1 in 30
5. Rabi crop are sown and harvested in the month of :
(A) April and September (B) October and March
(C) February and June (D) January and May
6. The rate of rise or fall of formation level of a road along its alignment is called :
(A) Kerb (B) Camber
(C) Gradient (D) Road alignment
7. Which is the ratio of M200 grade concrete given below?
(A) 1:2:4 (B) 1:1:2
(C) 1:1 $\frac{1}{2}$:3 (D) 1:3:6

8. What is the clear cover required for beam?
- (A) 25 mm (B) 20 mm
(C) 40 mm (D) 15 mm
9. The centre to centre distance between two adjacent supports of a bridge is called :
- (A) Total span (B) Clear span
(C) Span (D) Length of bridge
10. The over burned, irregular shape, dark colour brick is known as :
- (A) IIIrd class brick (B) IVth class brick
(C) Ist class brick (D) IInd class brick
11. The depth of foundation is greater than its width is known as :
- (A) Deep foundation (B) Shallow foundation
(C) Footing (D) Grillage foundation
12. Which is the process of taking out stones from natural bed of rock?
- (A) Cutting (B) Quaring
(C) Blending (D) Swaing
13. The roads connecting village with towns or cities are classified as :
- (A) Other district road (B) State highway
(C) Village road (D) Minor district road
14. A canal is generally lined :
- (A) When it is in cutting
(B) When it is on embankment
(C) When it is partly in cutting and partly in embankment
(D) When bed and banks of the canal consist of highly impervious soil
15. The dam is made of earth is known as :
- (A) Cofferdam (B) Earthen dam
(C) Timber dam (D) None of these

16. A passometer :
- (A) Arc measuring (B) Number of paces covered
(C) Length of line (D) Countering
17. As per 1 RC maximum width of a vehicle should be :
- (A) 3.8 metre (B) 4 metre
(C) 2.44 metre (D) 8 metre
18. Cost of building by plinth area method is plinth area \times :
- (A) Cube rate (B) Rate
(C) Plinth area rate (D) None of these
19. Curing period of Damp proof course is :
- (A) 3 days (B) 15 days
(C) 10 days (D) 7 days
20. When the cost of the estimate exceeds 10% or more _____ estimate is prepared.
- (A) revised (B) detailed
(C) cube rate (D) plinth area
21. The limit of water level in a still lake represents :
- (A) Horizontal surface (B) Counter line
(C) Level surface (D) Contour gradient
22. The portion of traffic way that is used by pedestrians is only called :
- (A) Side walk (B) Foot way
(C) Foot path (D) Crown
23. The initial setting time of cement should not be less than :
- (A) 10 hours (B) 5 minutes
(C) 30 minutes (D) All of these
24. Seasoning of timber is the process of :
- (A) Removal of sap (B) Drying of timber
(C) Removal of moisture (D) All of these

25. Under surface of an arch is called :
- (A) Crown (B) Intrados
(C) Soffit (D) Skew back
26. The size of title block for all size of drawing sheet is 185 MM x _____ MM.
- (A) 65 (B) 100
(C) 50 (D) All of these
27. Grillage foundation is classified as a _____ foundation.
- (A) Deep foundation (B) Stepped foundation
(C) Footing (D) Shallow foundation
28. A track is considered as high speed track when the speed of running train :
- (A) 120 km/hr or more (B) 50 km/hr or more
(C) 70 km/hr or more (D) 90 km/hr or more
29. When the canal run above the drain :
- (A) Canal siphon (B) Aqueduct
(C) Super passage (D) None of these
30. The initial setting of cement is extended using :
- (A) Sand (B) Earth
(C) Gypsum (D) None of these
31. Arrangement of brick in layer which does not continuous vertical joint is known as :
- (A) Stone masonry (B) Bond
(C) Brick masonry (D) None of these
32. Unit of bearing capacity of soil :
- (A) Kg/cm² (B) mm
(C) kg (D) sqm
33. Which test is conducted to check the proper grinding of cement?
- (A) Chemical (B) Setting time
(C) Soundness (D) Fineness

34. Which substance is used as termite proofing material?
(A) DPV (B) PVC
(C) BHC (D) None of these
35. Which substance is prepared from resins?
(A) Varnish (B) Paint
(C) Destember (D) None of these
36. Isometric drawing are at _____ degree from place.
(A) 15° (B) 5°
(C) 45° (D) 30°
37. The wall constructed on both sides of the abutments are called :
(A) Wing wall (B) approach
(C) Wheel guards (D) All of these
38. Main reinforcement for cantilever beam is place at the _____ position.
(A) Bottom (B) Top
(C) Middle (D) None of these
39. The width of a step is called :
(A) rise (B) hand rail
(C) thread (D) crown
40. _____ is provided over opening of walls.
(A) Stair (B) Lintel
(C) Step (D) None of these
41. 1M3 of brick masonry contains _____ no. of bricks.
(A) 750 (B) 1000
(C) 500 (D) 10000
42. Dimension line should be placed at about _____ mm from the outlines.
(A) 8 (B) 6
(C) 10 (D) 5

43. Drawing of building are drawn using :
- (A) Enlarging (B) Reducing
(C) Full scale (D) None of these
44. A temporary structure erected to a wall for work :
- (A) Scaffold (B) String
(C) DPC (D) Shoring
45. The centre stone of an arch is called :
- (A) Intrados (B) Crown
(C) Extrados (D) Skew back
46. The handrail stair case is supported by :
- (A) flight (B) spring
(C) thread (D) balusters
47. The minimum height of parapet for small culvert is :
- (A) 30 cm (B) 40 mm
(C) 50 cm (D) 60 cm
48. Rectangular tunnels are generally used for :
- (A) carry water (B) carrying water under pressure
(C) pedestrians (D) carry road and railways
49. Among the following which one is not an example for suspension bridge?
- (A) Flying bridge (B) Ramp bridge
(C) Sling bridge (D) Trestel suspension bridge
50. Tool for threading pipes :
- (A) chisel (B) dies
(C) hammer (D) screw
51. Which is the passage for the flow of surplus water in a weir?
- (A) rectangular (B) head work
(C) weir (D) spillway

52. Shapes in tunnels :
- (A) Circular (B) Rectangular
(C) Horse shoe (D) All of these
53. Which is the rain water of locality?
- (A) Refuse (B) Storm water
(C) Cold water (D) None of these
54. The relation between duty D in hectare leumec depth of water A in meters and base period B in days is given by :
- (A) $\Delta = 8.64 B/D$ (B) $\Delta = 8.64 D/B$
(C) $\Delta = 8.64 BD$ (D) $\Delta = 8.64 /BD$
55. Which test is conducted by bearing capacity of soil?
- (A) vical apparatus (B) plate load test
(C) soundness (D) none of these
56. The slide slope of embankment for railway track is taken as :
- (A) 4:1 (B) 1:2
(C) 2:1 (D) 1:4
57. From the septic tank effluents are discharged into :
- (A) sump (B) effluent treatment plant
(C) in the view (D) soak pit
58. The total depth of water required to be supplied during the entire period of crop is known as :
- (A) Delta (B) Rabi
(C) Alpha (D) Base period
59. R.C.C stands for :
- (A) Reinforced Cast Cement (B) Reinforced Concrete Cement
(C) Raw Cement Concrete (D) None of these
60. The unit of earth work excavation :
- (A) m (B) cm
(C) m^3 (D) none of these

61. The minimum diameter of a sewer pipe should be :
- (A) 1 cm (B) 5 cm
(C) 10 cm (D) 15 cm
62. The grade of concrete M200 is means that the compressive strength of 15 cm cube offer 28 days should be :
- (A) 100 kg 1 square cm (B) 180 k/square cm
(C) 200 kg/square cm (D) 180 kg/square cm
63. Which value is the value of dismantled materials?
- (A) Market value (B) Salvage value
(C) Scrap value (D) Book value
64. Method of valuation :
- (A) Rental 1 method
(B) Direction compaction with the capital value
(C) Valuation based on profit
(D) All of these
65. Conversion factor to convert wet mortar into dry mortar is :
- (A) 1.2 (B) 1.54
(C) 1.25 (D) None of these
66. A Solid metal cylinder of radius 14 cm and height 21 cm is melted and recast into spheres each of radius 3.5 cm. Calculate the number of spheres :
- (A) 0.343 (B) 72
(C) 24 (D) 36
67. The area of a sector is 22 cm^2 , find the perimeter of angle of sector is 30° :
- (A) 84.12 cm (B) 23.12 cm
(C) 9.16 cm (D) 18.32 cm
68. The diagonals of a rhombos are 36 cm and 24 cm, find its area :
- (A) 812 cm^2 (B) 864 cm^2
(C) 672 cm^2 (D) 432 cm^2

69. A bucket of base dia 24 cm, top dia 40 cm and height 30 cm is filled with water find the weight of water :
- (A) 25.34 kg (B) 34.45 kg
(C) 32.42 kg (D) 18.48 kg
70. Find the area of a sector of a circle whose radius is 14 cm and the length of the arc of sector is 28 cm :
- (A) 44 cm^2 (B) 360 cm^2
(C) 196 cm^2 (D) 302 cm^2
71. Find the volume of a hemisphere of diameter 17 cm :
- (A) 972 CC (B) 1156 CC
(C) 2572 CC (D) 1286 CC
72. Length of an arc of sector is given by :
- (A) $\frac{2\pi r \times Q}{360}$ (B) $\frac{\pi r^2 \times Q}{360}$
(C) $\frac{2\pi r \times Q}{180}$ (D) $\frac{\pi r^2 \times Q}{180}$
73. The volume of a hemisphere is :
- (A) $\frac{V\pi r^3}{12}$ (B) $\frac{2\pi r^3}{3}$
(C) $\frac{4\pi r^3}{3}$ (D) $\frac{\pi r^3}{6}$
74. Surface area of a cube with side 'a' cm is :
- (A) a^3 (B) a^2
(C) $3a^2$ (D) $6a^2$
75. The volume of right cone having base radius r and height h is given as :
- (A) $1/3\pi r^3$ (B) $\pi r^2 h$
(C) $4/3\pi r^3$ (D) $2/3\pi r^3$

76. The volume of cylinder with radius r and height h is given by :
- (A) $\pi r^2 h$ (B) $1/3 \pi r^2 h$
(C) $\pi r^2 h/3$ (D) $2/3 \pi r^2$
77. The volume of a cube with side a is given by :
- (A) a^2 (B) a^3
(C) $6a^2$ (D) $6a^3$
78. Volume of a cube with side 7 cm is :
- (A) 49 (B) 294
(C) 343 (D) 140
79. Find the side of a square plot whose area is 38.44 m^2 :
- (A) 5.6 m (B) 3.8 m
(C) 6.9 m (D) 6.2 m
80. Find the area of right angled triangle having base 10 cm and height 5 cm :
- (A) 50 cm^2 (B) 25 cm^2
(C) 100 cm^2 (D) 15 cm^2
81. The largest producer of mango :
- (A) China (B) India
(C) Thailand (D) Pakistan
82. Indian state having largest deposit of Bauxite :
- (A) Orissa (B) Gujarat
(C) Maharashtra (D) Jharkhand
83. Alamatti dam is on the river :
- (A) Krishna (B) Cauveri
(C) Amaravati (D) Godavari