

096/2016

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. The term used to indicate dry refuse which includes decayed fruits, paper pieces, grass etc :
(A) Sewage (B) Garbage
(C) Sullage (D) None of the above
2. The ratio between the total covered area of all floors of a building to the plot area :
(A) Open space index (B) Plinth area ratio
(C) Coverage percentage (D) Floor area ratio
3. The adjustments required to be made at each of the surveying stations before making observation are called :
(A) Permanent adjustment (B) Compensating adjustment
(C) Temporary adjustment (D) Perfect adjustment
4. The continuous thin line connecting a dimensional value or some information relating to a feature in an engineering drawing is :
(A) Extension line (B) Dimension line
(C) Break line (D) Leader line
5. The planning of two or more related rooms in proximity of each other to minimize the length of circulation and improves the comfort :
(A) Aspect (B) Circulation
(C) Roominess (D) Grouping
6. The abbreviated form of complex compound of cement C_3S, C_2S, C_3A and C_4AF are also called :
(A) Aspdin's compounds (B) Bogue's compounds
(C) Vicat's compound (D) James Frost's compounds
7. The course of stone placed immediately below the cornice to improve the appearance of external face of the wall is :
(A) Frieze (B) String course
(C) Corbel (D) Blocking course

8. The ability of a material to resist fracture due to high impact like hammer blows is:
- (A) Toughness (B) Hardness
(C) Brittleness (D) Ductility
9. The channel or pipe which carries water away from the power house after it has been passed through the turbine is :
- (A) Main canal (B) Penstock
(C) Regulator (D) Tail-race
10. When cast-iron pipes are used to convey water with high pressure ————— joints are used.
- (A) Flanged (B) Expansion
(C) Bell-and-spigot (D) None of the above
11. The arrangements made at the situations where two or more roads meet or cross one another, such a way that one road over or under another by means of a bridge is :
- (A) Roundabouts (B) Grade separations
(C) Grade intersections (D) None of the above
12. A point P is 5 cm above the $H.P$ and 3 cm in front of $V.P$, what will be the distance between the top and front view (P and P') after completing the projection drawing :
- (A) 2 cm (B) 15 cm
(C) 8 cm (D) None of the above
13. The bridge constructed such a way that, its centre line is not at right angle to the stream flow is :
- (A) Angle bridge (B) Square bridge
(C) Skew bridge (D) Tilting bridge
14. The depth of an arch at the crown is more than that at the springing line and the shape of the intrados is a semi circle, then it is called :
- (A) Florentine arch (B) Venetian arch
(C) Horse - shoe arch (D) Stilled arch
15. When the cutting plane is inclined to the axis of the right circular cone and parallel to one of its generators, the section obtained is :
- (A) Rectangular hyperbola (B) Parabola
(C) Ellipse (D) Hyperbola

16. The yards, which used to isolate goods wagons received from various centres in the order of station at which they are to be sent?
- (A) Locomotive yards (B) Marshalling yards
(C) Passenger yards (D) Goods yards
17. The difference in level of the water surface between upstream and downstream of a bridge :
- (A) Vent way (B) Free board
(C) Causeway (D) Afflux
18. Among the following which is a constituents or components of rolling stock of railways :
- (A) Wagons (B) Plate laying
(C) Fixtures and fasteners (D) Stations and yards
19. Which one of the following is adopted as narrow gauge in Indian railway?
- (A) 0.762 metre (B) 1.767 metre
(C) 0.626 metre (D) 1.067 metre
20. The part of a circle bounded by an arc and its chord is :
- (A) Sector (B) Segment
(C) Semi-circle (D) Arch
21. The ratio of lateral strain to the linear strain within the elastic limit :
- (A) Modulus of rigidity (B) Modulus of elasticity
(C) Poisson's ratio (D) None of the above
22. The rails are connected at their ends by means of :
- (A) Chairs and keys (B) Fish-plates
(C) Spikes (D) Bearing-plates
23. The seclusion or isolation of an individual or a couple or a group from the rest of the inmates of the house is :
- (A) Aspect (B) Privacy
(C) Roominess (D) Prospect
24. The planes of projections lie between the object and the observer is in :
- (A) Third angle projection (B) Fourth angle projection
(C) First angle projection (D) Second angle projection

25. The ratio of ultimate bearing capacity to safe bearing capacity is :
- (A) Frictional resistance (B) Allowable bearing capacity
(C) Compaction factor (D) Factor of safety
26. The most suitable cement used for under water or running water concrete is :
- (A) Rapid hardening cement (B) Acid resistance cement
(C) White cement (D) Quick setting cement
27. The windows usually provided near the top of the main roof and are made to open in the adjoining verandah or lean to roof for proper ventilation is :
- (A) Clerestorey windows (B) Dormer windows
(C) Lantern lights (D) Casement windows
28. The defects in timber, which is caused by over maturity or by bad ventilation during storage?
- (A) Druxiness (B) Radial shakes
(C) Rupture (D) Foxiness
29. As per NBC, The maximum height of boundary wall, without any special permission and condition is :
- (A) 1.50 metre (B) 1.80 metre
(C) 1.20 metre (D) 2.10 metre
30. The roof slopes in the four directions, but each slope has a break is :
- (A) Deck roof (B) Mansard roof
(C) Gambrel roof (D) Hip roof
31. If the diameter of a sphere is 3 cm, then the volume of the sphere is _____ cm^3 .
- (A) 20.25π (B) 9.00π
(C) 18.00π (D) 4.50π
32. The innermost central portion or core of the tree :
- (A) Medulla (B) Heart wood
(C) Inner bark (D) None of the above

33. Trimmed size of 'A1' drawing paper :
- (A) 210 mm × 297 mm (B) 420 mm × 594 mm
(C) 594 mm × 841 mm (D) 297 mm × 420 mm
34. The small room generally provided adjacent to dining room for keeping cooked food :
- (A) Loft (B) Store
(C) Panty (D) None of the above
35. The traffic way provided in such a way that during floods, water is allowed to flow across the communication route :
- (A) Super passage (B) Cause way
(C) Fly over (D) Bye pass
36. The bond in which the brick are arranged at 45° in opposite direction from the central line of the wall thickness is :
- (A) Silverlock's bond (B) Zig zag bond
(C) Diagonal bond (D) Herring bone bond
37. The lower half portion of an arch between crown and skewback :
- (A) Springer (B) Spandril
(C) Haunch (D) Impost
38. The weight per metre length of 20 mm diameter steel bar is around :
- (A) 1.58 kg (B) 3.55 kg
(C) 0.89 kg (D) 2.46 kg
39. The edge of roof covering materials which projects beyond the gable end of the sloped roof, running between the eaves and ridge is :
- (A) Valley (B) Hipped end
(C) Verge (D) Dragon tie
40. Eccentricity of ellipse is always :
- (A) Less than one (B) Greater than one
(C) Equal to one (D) Equal to zero

41. The total depth of water, in cm, required by a crop to come to maturity is called :
(A) Duty (B) Delta
(C) Base (D) None of the above
42. When the bed level of the canal is higher than the highest flood level of the drainage, the cross drainage work is :
(A) Aqueduct (B) Super passage
(C) Cause way (D) Level crossing
43. Which one of the following cement is most suitable for mass concrete work?
(A) Rapid hardening Portland cement (B) Quick setting cement
(C) Low heat Portland cement (D) Acid resistance cement
44. The method of termination of the wall such a way that the bricks left projecting in alternate courses for the bonding future horizontal masonry construction :
(A) Frog (B) Thresh hold
(C) Lacing course (D) Toothing
45. The decrease or loss in the value of a property due to its use, life, wear and tear etc :
(A) Scrap value (B) Depreciation
(C) Sinking fund (D) Rateable value
46. The fund which is gradually accumulated by way of periodic on annual deposit for the replacement of the building at the end of its useful life :
(A) Obsolescence (B) Annuity
(C) Salvage value (D) Sinking fund
47. The value at the end of the utility period without being dismantled :
(A) Salvage value (B) Scrap value
(C) Book value (D) Obsolescence
48. Which of the following ingredient of cement increase the initial setting time?
(A) Calcium oxide (B) Alumina
(C) Calcium sulphate (D) Magnesia

49. The inclined member of a mason's scaffolding, which offer strength and stability and fixed to the ground is?
- (A) Standards (B) Braces
(C) Rakers (D) Ledgers
50. Plate load test determines :
- (A) Size of foundation (B) Ultimate bearing capacity of soil
(C) Depth of foundation (D) Safe bearing capacity of soil
51. The radiating or tapering or angular steps used for changing the direction of flight in a stair :
- (A) Commodes (B) Bullnose steps
(C) Splayed steps (D) Winders
52. The spikes used on high speed trunk routes to obtain better life by resisting lateral thrust :
- (A) Standard spikes (B) Screw spikes
(C) Elastic spikes (D) Dog spikes
53. The projection of the lower step from the vertical face of the upper step in a stepped footing :
- (A) Lap (B) Chajja
(C) Offset (D) None of the above
54. The designation of door '10 DT 21' means :
- (A) A door opening of 1000 mm × 2100 mm with double shutter
(B) A door with two shutters having a shutter size of 1000 mm × 2100 mm
(C) A door opening of 1000 mm × 2100 mm with single shutter
(D) A door frame of section size 21 cm × 10 cm with double shutter
55. The amount of deviation of the magnetic needle of a compass from its normal position is :
- (A) Dip of needle (B) Magnetic declination
(C) Local attraction (D) Arbitrary bearing
56. The units of measurement in MKS system for 'sawing of timber' :
- (A) Running metre (B) Square metre
(C) Cubic metre (D) Number of days

57. The pipe through which human excreta flows :
- (A) Waste pipe (B) Vent pipe
(C) Rain water pipe (D) Soil pipe
58. A cut provided in the door frame to receive the shutter :
- (A) Louver (B) Horn
(C) Rebate (D) Mortise
59. The capacity for doing work :
- (A) Speed (B) Power
(C) Energy (D) None of the above
60. The under surface of a stair is :
- (A) Waist (B) Soffit
(C) Head room (D) None of the above
61. The method of timbering of trenches used for supporting the sides of a soft ground of depth not exceeding 10 metre and providing an offset at the end of the each stage is :
- (A) Stay bracing (B) Box sheeting
(C) Runner system (D) Vertical sheeting
62. The defects due to seasoning, which indicate by the curvature formed in the direction of length of timber :
- (A) Bow (B) Cup
(C) Twist (D) Split
63. The liquid substances which hold the ingredients of the paint in liquid suspension and helps them to spread evenly on the surface to be painted :
- (A) Base (B) Solvent
(C) Drier (D) Vehicle
64. The last staff reading taken by a level just before the shifting :
- (A) Back sight (B) Fore sight
(C) Intermediate sight (D) Change point

65. In 'AutoCAD' drawing function key _____ is used for ORTHO mode on and off.
- (A) F8 (B) F1
(C) F10 (D) F3
66. The vertical member of metal or wood, supporting the handrail of a stair :
- (A) Scotia (B) Stringers
(C) Header (D) Baluster
67. If the bearing of two lines AB and AC are N 43°15'E and S 45° 45'E respectively, then the included angle between these lines is :
- (A) 89° 00' (B) 2° 30'
(C) 91° 00' (D) None of these
68. The projecting course at the upper part of a pier or an abutment of an arch to stress the springing line is :
- (A) Nosing (B) Spandril
(C) Skewback (D) Impost
69. The triangular shaped portion of Masonry at the end of a sloped roof :
- (A) Gable (B) Hipped end
(C) Mitred closer (D) Buttress
70. The temporary enclosure constructed in a river for excluding water during construction:
- (A) Well foundation (B) Box caisson
(C) Cofferdam (D) None of the above
71. The formation of conical hole in the plastered surface due to the presence of some particles which expand on setting, such defects of plastering is :
- (A) Popping (B) Peeling
(C) Cracking (D) Flaking
72. The increase in volume of sand due to the presence of surface moisture upto some extent is :
- (A) Pounding (B) Bulking
(C) Bleeding (D) Segregation

73. Instrument used for determining the 'soundness' of cement is :
- (A) Le Chatelier apparatus (B) Wagner's turbidimeter
(C) Vicat apparatus (D) None of the above
74. The centre of the arch lies above the springing line, the arch is called :
- (A) Florentine arch (B) Horse shoe arch
(C) Venetian arch (D) Segmental arch
75. The ratio of isometric length to its true length is nearly :
- (A) 0.086 (B) 1.222
(C) 0.815 (D) 0.185
76. The AutoCAD command which used to creates multiple copies of selected objects in rectangular or polar form :
- (A) Offset (B) Array
(C) Oops (D) None of the above
77. The diameter and height of a cylinder is 4 cm, then the volume of cylinder in cubic centimetre is :
- (A) 9.00π (B) 64.00π
(C) 16.00π (D) None of the above
78. As per the present Kerala municipality building rule the minimum width of stair for group B (Educational building) is :
- (A) 120 cm (B) 180 cm
(C) 100 cm (D) 150 cm
79. A trap which is provided for preventing the entry of sewer gases from public line into the house drains :
- (A) Floor trap (B) Nahni trap
(C) Gully trap (D) Intercepting trap
80. The line joining some fixed points on the main survey lines for the purpose of locating interior details :
- (A) Base line (B) Check line
(C) Tie line (D) Offsets
81. Who was the first secretary of the Malabar district congress committee?
- (A) C. Kunhirama Menon (B) K.P. Kesava Menon
(C) Rama Iyer (D) K. Madhavan Nair

82. Which among the following newspaper started publishing in the year 1924?
 (A) Al-Amin (B) Mathenbhumi
 (C) Kerala Kaumudi (D) Kerala Darpanam
83. The famous electricity agitation of 1936 was held at :
 (A) Trivandrum (B) Thrissur
 (C) Idukki (D) Palakkad
84. Kizhariyur Bomb case was associated with :
 (A) Punnapra - Vayalar Uprisings (B) Quit India movement
 (C) Civil Dis-Obedience movement (D) Kayyur struggle
85. Which political organisation was formed in the year 1941?
 (A) All Kerala Peasant Union (B) All Kerala Karshaka Sangham
 (C) Cochin state Praja Mandal (D) Kerala trade union congress
86. The Travancore state manual was compiled by :
 (A) Pachu Muthatu (B) G.P. Pillai
 (C) V. Nagam Aiyah (D) K.P. Kesava Menon
87. 'Samkshepa Vedartham' was published from :
 (A) Ganeva (B) Paris
 (C) Amsterdam (D) Rome
88. Tennis Davis cup 2015 was won by :
 (A) Belgium (B) France
 (C) USA (D) Britain
89. Former Kerala Chief Minister EMS died in the year :
 (A) 1997 (B) 1999
 (C) 1996 (D) 1998
90. 'Samatva Samajam' was associated with :
 (A) Vagbhatanda (B) K. Kelappan
 (C) Vaikunta Swamikal (D) Ayyankali
91. Who established schools in Nagarcoil in the beginning of the 19th Century?
 (A) Rev. Francis (B) Rev. Bailey
 (C) Ringle Tab (D) Thoma Kathanar

92. Who is the author of the book 'Malabar Kalapam'?
- (A) K. Madhavan Nair (B) K.N. Panikker
(C) K.M. Panikker (D) K. Narayanan Nair
93. Pazhassi Raja was died on :
- (A) 30 November 1805 (B) 30 October 1805
(C) 31 October 1805 (D) 31 March 1805
94. 'Atma Katha' is the autobiography of :
- (A) C. Kesavan (B) K.M. Panikker
(C) E.V. Krisha Pillai (D) P.K. Narayana Pillai
95. Who among the following was not a leader of Nivarthana Agitation?
- (A) N.V. Joseph (B) K.P.R. Gopalan
(C) T.M. Varghese (D) C. Kesavan
96. A famous traveller Ibn Batuta belongs to :
- (A) Persia (B) Syria
(C) Algeria (D) Morocco
97. Durgapur steel plant was set up with the assistance of :
- (A) France (B) Germany
(C) Spain (D) Britain
98. The leader of Kurichya revolt of 1812 :
- (A) Thalakkal Chandu (B) Edachena Kunkan
(C) Raman Nambi (D) Kannan Moopan
99. Malabar was joined with the Madras presidency in the year :
- (A) 1800 (B) 1792
(C) 1799 (D) 1798
100. Kunhi Kannan was the original name of :
- (A) Ananda Therthar (B) Vagbhatananda
(C) Brahmananda Sivayogi (D) Ayyankali