

210/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. The main reinforcement in a simply supported RCC member placed at :
(A) Top fibre (B) Side fibre
(C) Bottom fibre (D) None of these
2. If the load at the free end cantilever beam is increased the failure will occur at the :
(A) Free end (B) Centre
(C) Support (D) None of the above
3. Chemically, marble is known as :
(A) Siliceous rock (B) Metamorphic rock
(C) Argillaceous rock (D) Calcareous rock
4. Brick lintels are used when the span is :
(A) Less than two meter (B) Less than three meter
(C) Less than one meter (D) None of these
5. Mastic asphalt is normally used for :
(A) Sound insulation (B) Water proofing
(C) Fire proofing (D) None of these
6. Limestone comes under the category of :
(A) Aqueous rock (B) Sedimentary rock
(C) Stratified rock (D) All the above
7. Plaster of paris is obtained by calcining :
(A) Gypsum (B) Kankar
(C) Lime stone (D) None of these
8. The inner curve of an arch is known as :
(A) Spandril (B) Extrados
(C) Intrados or soffit (D) None of the above

9. The frog of a brick is normally made on its :
(A) Shorter face (B) Bottom face
(C) Longer face (D) Top face
10. The projected portion of the tread beyond the face of the riser is :
(A) Newel (B) Scotia
(C) Soffit (D) Nosing
11. Dog- legged stair is a :
(A) Half -turn stair (B) Quarter turn stair
(C) Three quarter turn stair (D) Continuous stair
12. The portion of the brick cut to form angles other than right angle in plan is known as :
(A) Queen closer (B) Squint brick
(C) Quoion brick (D) None of the above
13. The course of stone masonry provided at the top of a wall and usually ornamental in shape are known as :
(A) Corbel (B) Throughting
(C) Projecting course (D) Cornice
14. The member used in inclined position for supporting the strainer post is :
(A) Tension rod (B) Compression rod
(C) Strut (D) Tie beam
15. An arrangement for supporting an unsafe structure temporarily is known as :
(A) Pilling (B) Under pinning
(C) Scaffolding (D) Shoring
16. The area of any irregular figure plotted map is measured with :
(A) Pentagraph (B) Sextant
(C) Clinometer (D) Planimeter
17. On a diagonal scale, it is possible to read upto :
(A) One dimension (B) Two dimension
(C) Three dimension (D) Four dimension

18. Superelevation depends on :
- (A) Surface condition of the road (B) Radius of the curve
(C) Speed of the vehicle (D) (B) and (C) above
19. Contour lines close together indicate :
- (A) Gentle slope (B) Steep slope
(C) Plane ground (D) Valley
20. The whole circle bearing of a line is 120° , its reduced bearing is :
- (A) $S30^\circ E$ (B) $N60^\circ E$
(C) $N120^\circ E$ (D) $S60^\circ E$
21. The Simpson's rule for determination of area is used when the no. of offset is :
- (A) Two (B) Three
(C) Even (D) Odd
22. The zero of the graduated circle of a prismatic compass is located at :
- (A) South end (B) East end
(C) North end (D) Any one of these
23. The working edge of an alidade is known as _____ edge.
- (A) Ebonite (B) Fiducial
(C) Straight (D) Graduated
24. Which type of foundation is provided on a weak soil?
- (A) Grillage (B) Column footing
(C) Raft foundation (D) All the above
25. Vicat apparatus is used for :
- (A) Consistency test (B) Test for setting time
(C) Test for tensile strength (D) None of these
26. A hard water may contain :
- (A) Calcium carbonate (B) Magnesium Sulphate
(C) Magnesium bicarbonate (D) Any of the above

27. Bleaching powder is :
- (A) Slaked lime (B) Chloride of lime
(C) Hypo-chlorite lime (D) None of the above
28. Permanent hardness of the water can be removed by :
- (A) Adding lime (B) Adding chlorine
(C) Boiling (D) Zeolite process
29. The waste water from bathrooms, lavatory basins, kitchen etc are called
- (A) Sullage (B) Night soil
(C) Waste soil (D) None of these
30. The gas which is mainly responsible for explosion in sewers is called :
- (A) Methane (B) Ethane
(C) Carbon Monoxide (D) None of the above
31. For maximum alkalinity of water pH value should be :
- (A) Less than 7 (B) More than 7
(C) 21 (D) 14
32. One Newton is equal to :
- (A) 10^4 dynes (B) 10^5 dynes
(C) 10^6 dynes (D) 10^7 dynes
33. The moment of force is equivalent to :
- (A) The sum of the moments acting on a body
(B) The vertical sum of the moments acting on a body
(C) The algebraic sum of the moments acting on a body
(D) None of the above
34. The property of a material by which it can be beaten or rolled into plates is called :
- (A) Elasticity (B) Malleability
(C) Rigidity (D) Viscosity

35. Bending moment on a section is maximum where shear force is :
(A) 2 (B) 5
(C) 10 (D) Zero
36. Snowcem is :
(A) Mixture of lime and pigment (B) Chalk powder
(C) Coloured cement (D) None of the above
37. Bressummer process is used for the manufacture of :
(A) Pig Iron (B) Wrought Iron
(C) Cast Iron (D) Steel
38. The covering on the exposed top of the wall is called :
(A) Cornice (B) Coping
(C) Corbel (D) Cramp
39. Seasoning of timber is essential to remove :
(A) Knots from timber (B) Sap from timber
(C) Twisted fibre from timber (D) Roughness of timber
40. The horizontal member forming the bottom of the frame is called as :
(A) Transom (B) Still
(C) Rail (D) Sill
41. The maximum percentage ingredient in cement is that of :
(A) Magnesium Oxide (B) Aluminium
(C) Silica (D) Lime
42. Corrosion resistance of stainless steel is due to :
(A) Sulphur (B) Manganese
(C) Chromium (D) Chromium Vanadium
43. Alumina is :
(A) Al_2O_2 (B) Al_2SO_4
(C) $Al_2O_3Si O_3$ (D) $Al_2K_2SO_4$

44. The bearing capacity of a soil cannot be increased by :
- (A) Grouting (B) Compacting
(C) Moistening the soil (D) Withdrawal of moisture from the soil
45. The process of keeping concrete moist for several days after finishing is called :
- (A) Peering (B) Setting
(C) Curing (D) Compacting
46. Duco is the trade name for :
- (A) Bituminous paint (B) Oil paint
(C) Cellulose paint (D) Water paint
47. The members which support covering material of a sloping roof, are :
- (A) Rafters (B) Purlins
(C) Battens (D) Strut
48. The ratio of total volume of water delivered to a crop to the area on which it has been spread is called :
- (A) Delta (B) Duty
(C) Base period (D) Run off
49. Cross staff is an instrument used for :
- (A) Levelling (B) Inclination
(C) Setting out right angle (D) Measure horizontal distance
50. The horizontal angle between true meridian and magnetic meridian is known as :
- (A) Magnetic declination (B) The curvature of the earth
(C) Radiation (D) Altitude
51. Broken stones placed on earth surface for their protection against the action of water or weather :
- (A) Regulator (B) Riprap
(C) Scour (D) Silt

52. The upstream nose of a bridge pier shaped for ease and smooth flow of water past it :
- (A) Cut-water (B) Ease water
(C) Wing wall (D) Shutter
53. The property of concrete which permits the percolation or passage of water through it :
- (A) Permeability (B) Floating
(C) Cribbing (D) Ductility
54. The formation of a whitish loose powder or crust on the surface of brick walls is called :
- (A) Efflorescence (B) Extrados
(C) Haunch (D) Jambs
55. _____ is made from ordinary clay, similar to that used for bricks, burnt at a low temperature and the articles are porous and weak.
- (A) Stone ware (B) Earthen ware
(C) Terra-cotta (D) Hollow bricks
56. The waste from furnace and resembles burnt coal :
- (A) Furnace slag (B) Clinker
(C) Coke breeze (D) Asbestos
57. A polishing abrasive made artificially by mixing in certain proportions sand and carbon and heating the mixture in an electric furnace :
- (A) Carborundum (B) Emery
(C) Coke (D) Ballast
58. The increase in volume of sand or aggregate caused by the absorption of water :
- (A) Bleeding (B) Bulking
(C) Cribbing (D) Curing
59. An additional floor, gallery or balcony erected between the floor and ceiling of any storey :
- (A) Landing (B) Mezzanine floor
(C) Mosaic floor (D) Lobby

60. A small vertical window built in a sloping roof :
- (A) Dormer (B) Clarastorey
(C) Bay (D) North light
61. The process of supporting the existing structure for renewing or repairing the lower walls or foundation :
- (A) Scaffolding (B) Piling
(C) Shoring (D) Underpinning
62. Lightweight concrete weighing less than :
- (A) 1600 kg/cu.m (B) 1500 kg/cu.m
(C) 1200 kg/cu.m (D) 1000 kg/cu.m
63. The inward tilt or transverse inclination given to the cross section of a carriage way on a horizontal curve in a road is called :
- (A) Sub way (B) Camber
(C) Gradient (D) Super elevation
64. _____ arch is built over a lintel or a flat arch to relieve the latter of the superincumbent weight.
- (A) Jack arches (B) Segmental arch
(C) Relieving arch (D) None of the above
65. One H.P ,how many kilo watts?
- (A) 745.7 (B) 7457
(C) 0.7457 (D) 74.57
66. One Are is equal to _____ sq meters.
- (A) 99 (B) 200
(C) 100 (D) 10
67. The vertical distance between the dip and crown weir of a trap is known as :
- (A) Waterseal (B) Flushing is terms
(C) Water closets (D) Drains
68. A channel which is designed to irrigate during only part of the year is :
- (A) Perennial canal (B) Non-Perennial canal
(C) Penstock (D) Minor distributors

69. A junction so designed so that traffic streams are divided to enable them to pass over or under each other :
- (A) Fly over (B) Aqueduct
(C) Super passage (D) Subway
70. The stone aggregate is bound together by a binder applied to penetrate to the desired depth is called :
- (A) Asphalt (B) Macadam
(C) Gutter (D) Formation
71. The loosening of the top surface of a road by mechanical or other means :
- (A) Scarifying (B) Stepping
(C) Stripping (D) Screenings
72. The area from which rainfall flows into a drainage line, out fall or reservoir etc :
- (A) Rainfall (B) Run-off
(C) Catchments (D) Drains
73. A temporary enclosure built to exclude water from the working area and to permit free access to the area within during the construction must be undertaken below water level :
- (A) Earthen dam (B) Gravity dam
(C) Caisson (D) Cofferdam
74. Removal of sewage by a network of underground pipelines or sewers with water :
- (A) Conservancy system (B) Water carriage system
(C) Waste water system (D) One pipe system
75. A ventilating pipe connected to or close to the outlet side of a trap seal :
- (A) Soil pipe (B) Siphonage pipe
(C) Antisiphonage pipe (D) Vent pipe
76. _____ are available made of thin iron plates of flat, circular or oblong shapes in which gauge thickness are cut at the edges.
- (A) Gauge measures (B) Sheet gauges
(C) R.S joists (D) Channels

77. Purer form of coal and contains a majority of carbon, is produced from coal artificially :
- (A) Carbon steel (B) Coke
(C) Creep (D) Graphite
78. The moisture content at which a specified amount of compaction will produce the maximum dry density in a soil is :
- (A) Hygroscopic moisture (B) Optimum moisture content
(C) Fully Saturated (D) Partially Saturated
79. Rankine's formula for minimum depth of foundation is :
- (A) $h = \frac{p}{w} \left(\frac{1 - \sin \theta}{1 + \sin \theta} \right)^2$ (B) $h = \frac{w}{p} \left(\frac{1 - \sin \theta}{1 + \sin \theta} \right)^2$
(C) $h = \frac{p}{w} \left(\frac{1 + \sin \theta}{1 - \sin \theta} \right)^2$ (D) $h = \frac{p}{w} \left(\frac{1 - \sin \theta}{1 + \sin \theta} \right)$
80. A portion of masonry built into the front of the wall to strengthen it for lateral stability against thrust from an arch, roof or wind pressure :
- (A) Bressummer (B) Buttress
(C) Brick core (D) Blocking course
81. Gateway of India is located in which of the following cities?
- (A) Kolkata (B) Mumbai
(C) Delhi (D) Agra
82. Which of the following is an example of rift valley in India?
- (A) Tapti valley (B) Soan valley
(C) Narmada valley (D) Kaveri valley
83. Who raised the slogan 'Garibi Hatao'?
- (A) Jawaharlal Nehru (B) Rajiv Gandhi
(C) Lal Bahadur Sastri (D) Indira Gandhi
84. In which year NABARD was set up?
- (A) 1980 (B) 1981
(C) 1982 (D) 1983

85. Who was the first President of All India Trade Union Congress founded in 1920?
- (A) C. R. Das (B) Jawaharlal Nehru
(C) Motilal Nehru (D) Lala Lajpat Rai
86. Who declared 'Give me blood and I will give you freedom'?
- (A) Subhash Chandra Bose (B) Lala Hardayal
(C) Bhagath Singh (D) Bala Gangadhar Tilak
87. Kudi Arasu is the magazine started by whom?
- (A) E V Ramaswamy Naicker (B) Veeresalingam
(C) Jyotiba Phule (D) Subramanya Bharati
88. Kaladi, the birth place of Sankaracharya is located on the banks of which of the following rivers?
- (A) Periyar (B) Bharatapuzha
(C) Pampa (D) Chaliyar
89. Which of the following is the biggest mountain passes in Kerala?
- (A) Bodinaykannur (B) Kambam
(C) Perambadi (D) Palghat gap
90. Name the district in which Mullaperiyar Dam located?
- (A) Pathanamthitta (B) Kottayam
(C) Idukki (D) Ernakulam
91. Who was the founder of Samatva Samajam?
- (A) Vagbhatananda (B) Chattampi Swamikal
(C) Ayyankali (D) Vaikunda Swamikal
92. Name the Araya community leader who wrote 'Jatikkummi' against caste evils?
- (A) Kumaranasan (B) K. P. Vallon
(C) Pandit K. P. Karuppan (D) Velukutty

93. Which among the following is a major work of Sri Narayana Guru?
(A) Daiva Dasakam (B) Duravastha
(C) Atmavidya Kahalam (D) Jeevithakarunya Nirupanam
94. Who was the founder and proprietor of Swadeshabhimani Newspaper?
(A) Kumara Guru (B) Ananda Theerthan
(C) Vakkom Abdul Khader Moulavi (D) Ramakrishna Pillai
95. Who called Ayyankali as 'Pulaya Raja'?
(A) Tagore (B) Annie Besant
(C) EMS Nambootiripad (D) Mahatma Gandhi
96. Who won the Dada Saheb Phalke award for contribution to cinema in 2015?
(A) Shashi Kapoor (B) Gulzar
(C) Rishi Kapoor (D) Sanjay Kapoor
97. Who was the chief guest in 2015 Republic Day Celebrations in India?
(A) Mahinda Rajapaksa (B) Barak Obama
(C) Vladimir Putin (D) Nawas Sherif
98. Who was the president of Cuba, recently made a visit to Vatican after a long period of time?
(A) Fidel Castro (B) Ban Ki moon
(C) Raul Castro (D) Torrado
99. What was the motto of 2015 National Games held in Kerala?
(A) Get Set Play (B) Be Ready Play
(C) Set Ready Play (D) Go Get Play
100. 2014 World Cup Football Tournament was held in :
(A) France (B) Argentina
(C) Brazil (D) Germany