

141/2016

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. Box of prismatic compass is made of :
(A) copper (B) nickel
(C) brass (D) none of these
2. The specific gravity of stone should not in any case less than :
(A) 2.5 (B) 2
(C) 1.5 (D) 1
3. The rocks which are deposited in layers and can be easily split along such layers is known as :
(A) aqueous rock (B) sedimentary rock
(C) metamorphic rock (D) basalt
4. The extend of land that gets irrigated from a water source is :
(A) duty (B) delta
(C) ayacut (D) furrouts
5. The preferable slope of a drawing board support is :
(A) 1:2 (B) 1:4
(C) 1:6 (D) 1:8
6. Laterite is chemically classified as :
(A) Calcareous rock (B) Argillaceous rock
(C) Siliceous rock (D) None of the above
7. The percentage of silica in good brick clay should vary from :
(A) 50 to 60% (B) 40 to 50%
(C) 30 to 40% (D) 20 to 30%
8. The dressing of stone is done :
(A) Immediately after quarrying (B) After seasoning
(C) After three months of quarrying (D) Just before building

9. What general name is given to the physical parts of computer?
- (A) Software (B) Firmware
(C) Hardware (D) Device drivers
10. Which of the following is hardest rock?
- (A) marble (B) diamond
(C) tale (D) quarts
11. Quick lime is a :
- (A) Product left immediately after the calcinations of pure lime stone
(B) Carbonate of lime
(C) Oxide of lime
(D) Lime quickly treated with water
12. A good quality cement should have higher percentage of :
- (A) Silica (B) Free lime
(C) Di calcium silicate (D) Tri calcium silicate
13. In a flat arch, the skew back is made to rest in an inclined position so as to make an angle of _____ with springing line.
- (A) 30° (B) 60°
(C) 50° (D) 40°
14. The lowest part of a structure which transmits the load to the soil is known as :
- (A) Super structure (B) Plinth
(C) Foundation (D) Basement
15. The compressive strength of good Portland cement and standards and mortar after 3 days of curing should not be less than :
- (A) 17.5 mN/m² (B) 7 mN/m²
(C) 21 mN/m² (D) 11.5 mN/m

16. The percentage of residue left after sieving good Portland cement in 90 micron sieve should not exceed :
- (A) 20% (B) 55%
(C) 30% (D) 10%
17. What is the number of traditional brick required for 10 m³ of brick work with standard thickness of cement mortar 1:3 to 1:5?
- (A) 4750 (B) 4850
(C) 4950 (D) 5050
18. The moisture content of timber used in building frames can be :
- (A) 2% to 5% (B) 8% to 12%
(C) 12% to 18% (D) > 20%
19. The length of a ranging rod is :
- (A) 2 to 4 mtrs (B) 2 to 3 mtrs
(C) 3 to 4 mtrs (D) 2 to 2.5 mtrs
20. The durability of concrete is proportional to :
- (A) Sand content (B) Water cement ratio
(C) Aggregate water ratio (D) Cement aggregate ratio
21. For RCC construction, the maximum size of coarse aggregate is limited to :
- (A) 15 mm (B) 20 mm
(C) 25 mm (D) 10 mm
22. According to Indian standard specifications, the temperature for curing is :
- (A) 5 C (B) 10 C
(C) 27 C (D) 42 C
23. A fixed point with known elevation is known as :
- (A) Datum point (B) Reference print
(C) Bench mark (D) First sight

24. Frog made in the bricks is :
- (A) To reduce the weight of the brick
 - (B) To form a key for holding the mortar
 - (C) To indicate manufacturing details
 - (D) To indicate the top of the brick
25. The chief ingredient of paint is :
- (A) Alcohol
 - (B) Drier
 - (C) Pigment
 - (D) Oil
26. Linseed oil in paint is used as a :
- (A) Base
 - (B) Thinner
 - (C) Carrier
 - (D) Pigment
27. The base material for distemper is :
- (A) Lime
 - (B) Clay
 - (C) Chalk
 - (D) Lime putty
28. The fall of moisture from the atmosphere to the earth surface in any form is called :
- (A) Evaporation
 - (B) Transpiration
 - (C) Precipitation
 - (D) None of these
29. The Indian Road Congress (I.R.C) was set up in :
- (A) 1930
 - (B) 1934
 - (C) 1948
 - (D) 1956
30. The central part of a tree is called :
- (A) Heart wood
 - (B) Sapwood
 - (C) Pith
 - (D) Cambium layer
31. Number of links in a 30 m metric chains :
- (A) 100
 - (B) 200
 - (C) 150
 - (D) 180

32. The workability of concrete can be increased by which of the following?
- (A) Increasing the quantity of coarse aggregate without altering the total aggregate quantity
 - (B) Decreasing the quantity of coarse aggregate without altering the total aggregate quantity
 - (C) Decreasing the quantity of fine aggregate without altering the total aggregate quantity
 - (D) None of the above
33. An isolated load bearing masonry member is known as :
- (A) Pillar
 - (B) Buttrrs
 - (C) Ramp
 - (D) Post
34. The angle of intersection of the two plane mirrors of an optical square is :
- (A) 30
 - (B) 60
 - (C) 45
 - (D) 90
35. The very first reading taken is :
- (A) Invert
 - (B) Intermediate sight
 - (C) Back sight
 - (D) Fore sight
36. The type of pile which is driven at an inclination to resist inclined force is known as :
- (A) Friction pile
 - (B) Batter pile
 - (C) Sheet pile
 - (D) Anchor pile
37. In chain surveying perpendicular to chain lines are set out by :
- (A) Theodolite
 - (B) A prismatic compass
 - (C) A dumpy level
 - (D) An optical square
38. Tachometry is best suited :
- (A) In broken grounds
 - (B) For popular areas
 - (C) Where chaining is impossible
 - (D) For extremely accurate survey
39. The contour lines can cross one another on map only in the case of :
- (A) Vertical cliff
 - (B) Valley
 - (C) Ridge
 - (D) An overhanging cliff

40. The number of steps in a flight should not be less than :
- (A) 3 No (B) 8 No
(C) 5 Nos (D) 10 Nos
41. The inclined braces used in a truss to prevent the sagging of the principal rafters are called :
- (A) King post (B) Tie beam
(C) Queen post (D) Struts
42. 1 hectre = _____ Sqm.
- (A) 10000 sqm (B) 100 sqm
(C) 1000 sqm (D) 10 sqm
43. The lines of earth's magnetic field run from :
- (A) east to west (B) south to west
(C) north to south (D) west to east
44. Smallest length that can be drawn on a map is :
- (A) 1.2 cm (B) 0.2 cm
(C) 0.6 cm (D) 1 cm
45. The number of horizontal cross wires in a study a diaphragm is :
- (A) 2 (B) 4
(C) 1 (D) 3
46. In order to determine the natural features such as valleys, rivers, lakes, etc. The surveying preferred is :
- (A) city surveying (B) location surveying
(C) cadastral surveying (D) topographical surveying
47. When 1 cm on a map represents 10 m on the ground, representative fraction on the scale is :
- (A) 1/1000 (B) 1/10
(C) 1/100 (D) 1/1

48. At the magnetic poles, the amount of dip is :
 (A) 0 (B) 45
 (C) 60 (D) 90
49. The distance travelled by a train of length 80 mtr to cross a bridge of 120 mtr is :
 (A) 120 mtr (B) 80 mtr
 (C) 160 mtr (D) 200 mtr
50. Average length of a pace is :
 (A) 50 cm (B) 80 cm
 (C) 110 cm (D) 140 cm
51. Area is expressed in _____ units.
 (A) Square units (B) Cubic units
 (C) Litres (D) Gallon
52. A foundation in the form of thick reinforced concrete slab covering. The entire area of bottom of the structure is known as :
 (A) Raft foundation (B) Combined foundation
 (C) Well foundation (D) Pile foundation
53. Volume of bucket is given by :
 (A) $\frac{4}{3}\pi r^3$ (B) $\pi r^2 h$
 (C) $\pi h(R^2 - r^2)$ (D) None of these
54. Area of equilateral triangle is :
 (A) $\frac{\sqrt{3}}{4} S^2$ (B) $\frac{b}{4}\sqrt{4a^2 - b^2}$
 (C) $\frac{1}{2}(a+b)$ (D) $\frac{h}{2}(b_1 + b_2)$
55. The theodolite is an instrument used for measuring very accurately :
 (A) horizontal and vertical angles (B) vertical angles only
 (C) linear measurements (D) horizontal angles only
56. The deflection angle may have any value between :
 (A) 0 and 180 (B) 0 and 90
 (C) 0 and 120 (D) 0 and 45

57. A line normal to the plump line at all points is known as :
- (A) Horizontal line (B) Vertical line
(C) Line of collimation (D) Level line
58. The best wood for sleeper is :
- (A) Sal (B) Teak
(C) Deodar (D) Chirr
59. An imaginary line lying throughout the surface of the ground and preserving an constant inclination to the horizontal is known as :
- (A) counter line (B) counter interval
(C) horizontal equivalent (D) contour gradient
60. Plaster of paris is obtained from the calcinations of :
- (A) bauxite (B) limestone
(C) dolomite (D) gypsum
61. A pattern of dots that appears on AutoCAD screen of computer but that does not print is called :
- (A) Snap (B) Ortho
(C) Grid (D) Limits
62. A pipe used to carry discharge from sanitary fittings like bathrooms, kitchens etc. is called :
- (A) Soil pipe (B) Waste pipe
(C) Vent pipe (D) Anti siphon age pipe
63. The part of circle bounded by an arc and its chord is known as :
- (A) Semi circle (B) Chord
(C) Segment (D) Sector
64. A couple close roof is used for span up to :
- (A) 3.5 m (B) 5 m
(C) 9 m (D) 14 m
65. The process of hardening the concrete mixes by keeping its surface moist for a certain period is called :
- (A) Floating (B) Curing
(C) Screeding (D) None of these