

115/2014

1. The curvature of earth's surface, is taken in to account only if the extent of survey is more than :  
(A) 100 sq. km.      (B) 160 sq. km.      (C) 300 sq. km.      (D) 260 sq. km.
2. The main principle of surveying is to work :  
(A) from part to the whole      (B) from whole to the part  
(C) from higher level to lower level      (D) from lower level to higher level
3. A well conditioned triangle has no angle less than :  
(A)  $20^\circ$       (B)  $30^\circ$       (C)  $45^\circ$       (D)  $60^\circ$
4. The imaginary line passing through the intersection of cross hairs and the optical center of the objective, is known as :  
(A) Line of collimation      (B) Line of sight  
(C) Axis of the telescope      (D) None of these
5. A relatively fixed point of known elevation above datum, is called :  
(A) Datum point      (B) Reduced level      (C) Reference point      (D) Bench mark
6. The boundary of water of a still lake represents :  
(A) Level surface      (B) Horizontal surface  
(C) Contour line      (D) Concave surface
7. Closed contours of decreasing values towards their center, represents :  
(A) a hill      (B) a depression      (C) a saddle      (D) a river bed
8. To orient a plane table at a point with two inaccessible points, the method generally adopted, is :  
(A) Intersection      (B) Resection  
(C) Radiation      (D) Two point problem

9. The smaller horizontal angle between the true meridian and the survey line, is known as :  
(A) Azimuth (B) Declination (C) Bearing (D) Dip
10. The whole circle bearing of a line is  $120^\circ$ , its reduced bearing is :  
(A) S  $20^\circ$  E (B) S  $60^\circ$  E (C) N  $120^\circ$  E (D) N  $60^\circ$  E
11. The most reliable estimate is :  
(A) Preliminary estimate (B) Plinth area estimate  
(C) Detailed estimate (D) Cube rate estimate
12. Pick up the item of work not included in the plinth area estimate :  
(A) Verandah area (B) Wall thickness (C) Room area (D) W.C. area
13. The minimum width of a septic tank is taken as :  
(A) 70 cm (B) 75 cm (C) 80 cm (D) 90 cm
14. For 100 sq. m. cement concrete (1 : 2 : 4) 4 cm thick floor, the quantity of cement required, is :  
(A)  $0.98 \text{ m}^3$  (B)  $1.00 \text{ m}^3$  (C)  $0.90 \text{ m}^3$  (D)  $0.94 \text{ m}^3$
15. According to ISI method of measurement, the order of the sequence is :  
(A) Length, breadth, height (B) Breadth, length, height  
(C) Height, breadth, length (D) Length, height, breadth
16. Galvanising means covering iron with a thin coat of :  
(A) Tin (B) Zinc (C) Glaze (D) Coal tar
17. For manufacture of stainless steel, steel is mixed with :  
(A) Chromium (B) Nickel (C) Tungsten (D) None of these

18. The commonly used raw material of cement is :  
 (A) Slate (B) Sand stone (C) Lime stone (D) Basalt
19. Age of a tree may be ascertained by :  
 (A) Radius of its stem (B) Circumference of its stem  
 (C) Number of branches (D) Number of annual rings
20. For one cubic meter of brick masonry, number of bricks required is :  
 (A) 400 (B) 500 (C) 425 (D) 450
21. The rocks formed from molten magma, are called :  
 (A) Sedimentary rocks (B) Metamorphic rocks  
 (C) Igneous rocks (D) None of these
22. A good quality stone absorbs water less than :  
 (A) 5% (B) 10% (C) 15% (D) 20%
23. Reciprocal ranging is adopted when the following is encountered :  
 (A) A dense forest (B) A hillock (C) A river (D) A tall building
24. If bearing of AB =  $40^\circ$ , bearing of BC =  $300^\circ$ , then angle ABC is :  
 (A)  $80^\circ$  (B)  $260^\circ$  (C)  $180^\circ$  (D)  $100^\circ$
25. The magnetic bearing of a line is N  $88^\circ$  E. Its true bearing is S  $89^\circ$  E. Therefore, its magnetic declination is :  
 (A)  $2^\circ$  W (B)  $3^\circ$  E (C)  $3^\circ$  W (D)  $1^\circ$  W
26. A freely floating needle slightly gets inclined to the horizontal anywhere except on the equator, it is called :  
 (A) Dip (B) Declination (C) Local attraction (D) Secular variation

27. Isogonic lines are the lines having the same :  
(A) Elevation      (B) Bearing      (C) Declination      (D) Dip
28. An example for a level surface is :  
(A) Surface of earth      (B) Surface of sea  
(C) Surface of a reservoir      (D) Surface of a still lake
29. Invar tapes are made of an alloy of :  
(A) Nickel and steel      (B) Copper and steel  
(C) Tin and steel      (D) Aluminium and steel
30. The least count of prismatic compass is :  
(A) 10'      (B) 30'      (C) 15'      (D) 20"
31. ABCD is a square, bearing of AB =  $40^\circ$ . Hence bearing of DC is :  
(A)  $40^\circ$       (B)  $130^\circ$       (C)  $220^\circ$       (D)  $310^\circ$
32. A plumb line is :  
(A) A vertical line      (B) A line parallel to vertical line  
(C) A line perpendicular to level line      (D) A line perpendicular to the horizontal line
33. Correction for refraction for a distance of 1 km =  
(A) 0.112 m      (B) 0.0673 m      (C) 0.0785 m      (D) 0.0673 km
34. Contour lines look to cross each other in case of :  
(A) A dam of vertical face      (B) A steep hill  
(C) A deep valley      (D) An overhanging cliff
35. The box of Prismatic compass is made of :  
(A) Steel      (B) Brass      (C) Iron      (D) Aluminium

36. If 'n' is the number of side, then the total sum of included angle of a closed traverse should be :
- (A)  $(n + 2) 90^\circ$       (B)  $(2n + 4) 90^\circ$       (C)  $(2n - 4) 90^\circ$       (D)  $(4n - 2) 90^\circ$
37. In an internal focusing telescope, focusing is achieved by the movement of a lens which is fitted inside the telescope and the lens is of the nature of :
- (A) Convex      (B) Concave  
(C) Plano-Convex      (D) Plano-Concave
38. In rise and fall method, a complete check is provided on the calculation of :
- (A) Back sight      (B) Fore sight  
(C) Intermediate sight      (D) All the sights
39. The working edge of an alidade, is known as :
- (A) Ebonite edge      (B) Fiducial edge      (C) Straight edge      (D) Graduated edge
40. The principle of 'working from whole to part' is used in surveying because :
- (A) Plotting becomes easy  
(B) Survey work can be completed quickly  
(C) Accumulation of errors is prevented  
(D) All of the above
41. The correction of sag is :
- (A) Always additive  
(B) Always subtractive  
(C) Always zero  
(D) Sometimes additive and sometimes subtractive
42. The maximum tolerance in a 20 m chain is :
- (A) 2 mm      (B) 3 mm      (C) 5 mm      (D) 8 mm

43. A series of closely spaced contour lines represents a :  
(A) Steep slope (B) Gentle slope (C) Uniform slope (D) Plane surface
44. In which survey pacing is used for measuring the distances ?  
(A) Preliminary surveys (B) Location survey  
(C) Reconnaissance surveys (D) All of the above
45. Two point problem and Three point problem are the methods of :  
(A) Radiation (B) Intersection (C) Traversing (D) Resection
46. When a brick is cut in two halves longitudinally, one part is called :  
(A) King closer (B) Cornice brick (C) Queen closer (D) Voussior
47. A vertical member supporting the hand rail is known as :  
(A) Newel (B) Strut (C) Stud (D) Baluster
48. Dog legged stair is a :  
(A) Half turn stair (B) Quarter turn stair  
(C) Three quarter turn stair (D) Continuous stair
49. Gypsum is added in cement :  
(A) After burning (B) Before burning  
(C) After grinding (D) At the time of mixing
50. Increase in volume of dry sand when water is added is called :  
(A) Honey combing (B) Segregation  
(C) Bulking (D) Bleeding
51. The indentation provided in a face of the brick is called :  
(A) Frog (B) Pallet  
(C) Strike (D) None of the above

52. The standard size of the brick as per Indian standards is :  
(A)  $20 \times 10 \times 10$  cm (B)  $18 \times 9 \times 9$  cm  
(C)  $23 \times 12 \times 8$  cm (D)  $19 \times 9 \times 9$  cm
53. The red colour obtained by the bricks is due to the presence of :  
(A) Lime (B) Silica (C) Iron oxide (D) Manganese
54. The aggregate is called course aggregate if it is completely retained on :  
(A) 10 mm sieve (B) 15 mm sieve (C) 29 mm sieve (D) 4.75 mm sieve
55. The volume of one bag of cement weighing 50 kg is :  
(A)  $0.05 \text{ m}^3$  (B)  $0.0345 \text{ m}^3$  (C)  $0.025 \text{ m}^3$  (D)  $0.04 \text{ m}^3$
56. The minimum water cement ratio to obtain workable concrete is :  
(A) 0.4 (B) 0.6 (C) 0.55 (D) 0.5
57. The solvent used in cement paint is :  
(A) Turpentine (B) Water (C) Spirit (D) Kerosene
58. A badly mixed cement concrete may lead to :  
(A) Cracks (B) Bleeding (C) Segregation (D) Honey-combing
59. The approximate cost of the complete labour as a % of total cost of the building is :  
(A) 10% (B) 40% (C) 25% (D) 5%
60. Working out the exact quantities of various items of work is known as :  
(A) Quantity surveying (B) Estimating  
(C) Mensuration (D) Valuation
61. The approximate weight of one cubic meter of mild steel is :  
(A) 1000 kg (B) 2400 kg (C) 14000 kg (D) 7850 kg

62. Which of the following is not a common size of reinforcement bars ?  
(A) 16 mm                      (B) 28 mm                      (C) 20 mm                      (D) 25 mm
63. The number of corrugations in a galvanized corrugated sheet is usually :  
(A) 6                              (B) 8                              (C) 10                              (D) 12
64. The volume of cement required to prepare 100 cu.m. of 1 : 2 : 4 concrete is :  
(A) 16 m<sup>3</sup>                      (B) 32 m<sup>3</sup>                      (C) 25 m<sup>3</sup>                      (D) 21 m<sup>3</sup>
65. The weight of 10 mm diameter mild steel rod per meter length is equal to :  
(A) 0.62 kg                      (B) 0.32 kg                      (C) 0.42 kg                      (D) 0.22 kg
66. How many kilo-liters are there in one cubic meter ?  
(A) 0.5                              (B) 1                              (C) 10                              (D) 100
67. The unit weight of R.C.C in kg/m<sup>3</sup> is :  
(A) 1200                              (B) 1800                              (C) 2400                              (D) 3000
68. An area of one hectare is equal to :  
(A) 10000 m<sup>2</sup>                      (B) 10 m<sup>2</sup>                              (C) 100 m<sup>2</sup>                              (D) 1000 m<sup>2</sup>
69. The amount required to be deposited by a contractor while submitting a tender is known as :  
(A) Fixed deposit                              (B) Caution deposit  
(C) Security deposit                              (D) Earnest money deposit
70. The minimum size of the pipe connected to septic tank is :  
(A) 50 mm                              (B) 100 mm                              (C) 150 mm                              (D) 200 mm
71. The technique of finding the fair price of an existing building or property is known as :  
(A) Estimation                              (B) Pricing                              (C) Valuation                              (D) Costing



72. In analysis of rates, the profit for the contractor is generally taken as :  
(A) 10% (B) 20% (C) 15% (D) 5%
73. The quantity of damp proof course (D.P.C.) is worked out in :  
(A)  $m^3$  (B)  $m^2$  (C) m (D) lump-sum
74. Thickness of plastering is usually :  
(A) 6 mm (B) 12 mm (C) 25 mm (D) 40 mm
75. The unit of measurement for concrete work in R.C.C. is in :  
(A) sq. m. (B) 10 sq. m. (C) cu. m. (D) 10 cu. m.
76. The nominal thickness of an expansion joint in brick wall must be more than :  
(A) 10 mm (B) 20 mm (C) 30 mm (D) 40 mm
77. The angular steps used for changing direction of stairs are called :  
(A) Angular steps (B) Radial steps (C) Winders (D) Round steps
78. The highest point of an arch is called as :  
(A) Key stone (B) Crown (C) Ridge (D) King closer
79. In residential building, the height of bath room should not be less than :  
(A) 2.4 m (B) 2 m (C) 3 m (D) 2.8 m
80. Lower edge of an inclined roof surface is called :  
(A) Pitch (B) Cleat (C) Eaves (D) Gable
81. In king post truss, the number of vertical post is :  
(A) Two (B) One (C) Three or more (D) An even number

82. True meridian passes through :
- (A) Actual line of control                      (B) A fixed point  
(C) True north and true south                (D) Equatorial line
83. When the declination is negative, the magnetic meridian will be on which side of true meridian ?
- (A) Western    (B) Eastern  
(C) Southern     (D) None of the above
84. Which of the following instrument is used for measurement of angles ?
- (A) Geodimeter      (B) Tellurometer      (C) Telescope      (D) Sextant
85. The length of ranging rod should be :
- (A) 1.5 to 2 m      (B) 2 to 3 m      (C) 3 to 4 m      (D) 2.5 to 4.5 m
86. The first temporary adjustment to be done after setting up the plane table at any station will be :
- (A) Orientation                                      (B) Levelling  
(C) Centering and Levelling                    (D) Sighting
87. If the end stations of a line are free from local attraction, then the difference in between fore and back bearing of that line should be :
- (A)  $180^\circ$                       (B)  $120^\circ$                       (C)  $90^\circ$                       (D)  $360^\circ$
88. A staff reading taken on a bench mark or change point is known as :
- (A) Fore sight    (B) Intermediate sight  
(C) Back sight     (D) None of the above
89. The bench mark established by the Survey of India Department with very high precision with reference to mean sea level is known as :
- (A) G.T.S. Bench Marks                              (B) Permanent Bench Mark  
(C) Arbitrary Bench Marks                        (D) Temporary Bench Marks