

30/2014

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. In the prismatic compass :
 - (A) The magnetic needle move with the box
 - (B) The line of sight does not move with the box
 - (C) The magnetic needle and graduated circle do not move with the box
 - (D) The graduated circle is fixed to the box and the magnetic needle always remains in the N-S direction

2. What general name is given to the physical parts of computer?
 - (A) Software
 - (B) Firmware
 - (C) Hardware
 - (D) Device drivers

3. Which of the following is hardest rock?
 - (A) Marble
 - (B) Tale
 - (C) Diamond
 - (D) Quarts

4. The shear force in the centre of a simply supported beam carrying a uniformly distributed load of " w " per unit length is :
 - (A) Zero
 - (B) $wl^2/2$
 - (C) $wl^2/8$
 - (D) $wl^2/4$

5. The Correction for sag is :
 - (A) Always additive
 - (B) Always zero
 - (C) Always subtractive
 - (D) Sometimes additive and Sometimes subtractive

6. In single Flemish bond :
 - (A) Front elevation is Flemish bond and back elevation is English bond
 - (B) Front elevation is English bond and back elevation is Flemish bond
 - (C) Front and back elevations are Flemish bond
 - (D) None of the above

7. Most modern surveying instrument used for civil engineering works is :
- (A) Automatic leveling instruments (B) Electronic theodolite
(C) Total station (D) All of the above
8. The curvature of earth is taken into consideration if the limit of survey is :
- (A) 50 to 100 km² (B) 100 to 200 km²
(C) 200 to 250 km² (D) More than 250 km²
9. An imaginary line lying throughout the surface of the ground and preserving an constant inclination to the horizontal is known as :
- (A) Contour line (B) Contour interval
(C) Horizontal equivalent (D) Contour gradient
10. The rule of water cement ratio was established by :
- (A) Duff Abram (B) Dr.Kar Terjaghi
(C) Plowman (D) W.Simms
11. The shortcut key to extend a selection to the end of a word is :
- (A) Shift + right arrow (B) Ctrl + Shift + right arrow
(C) Ctrl + Shift + left arrow (D) Ctrl + Shift + up arrow
12. The horizon glass in an optical square is :
- (A) Wholly silvered
(B) Wholly unsilvered
(C) One fourth silvered and three fourth unsilvered
(D) Half silvered and half unsilvered
13. IMB 1401 is :
- (A) First generation computer (B) Third generation computer
(C) Second generation computer (D) Fourth generation computer
14. From which direction does AutoCAD start measuring angles?
- (A) 12° clock (B) 9° clock
(C) 6° clock (D) 3° clock
15. A point A is situated in the third quadrant; it is 3cm below horizontal plane and 2.5cm behind the vertical plane its projection on plane is :
- (A) 3 cm above the reference line and 2.5cm below the reference line
(B) 2.5 cm above the reference line and 3cm below the reference line
(C) 3 cm below the reference line
(D) 2.5 cm above the reference line

16. The moisture content of timber used in building frames can be :
- (A) 2% to 5% (B) 12% to 8%
(C) 8% to 12% (D) > 20%
17. 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
(D) None of the above
18. The whole circle bearing of the line AB and is $269^{\circ}, 30'$ then the azimuth of the line AB is :
- (A) $0^{\circ}, 30'$ (B) $269^{\circ}, 30'$
(C) $89^{\circ}, 30'$ (D) $90^{\circ}, 30'$
19. The error due to eccentricity of inner and outer axes can be eliminated by?
- (A) Reading both verniers and taking the mean of the two
(B) Reading both face observation and taking the mean of the two
(C) Double sighting
(D) Taking means of several readings distributed over different portion of the graduated circle
20. A level line is a :
- (A) Horizontal line
(B) Line parallel to the mean spheroidal surface of the earth
(C) Line passing through the objective lens and the eye piece of a dumpy or tilting level
(D) Line passing through the centre of cross hair and the centre of the eye piece
21. The process of determining the locations of the instrument station by drawing resectors from the location of the known station is called :
- (A) Radiation (B) Intersection
(C) Resection (D) Traversing
22. The correction applied to each 30 m chain for a line measured along a Slope θ is :
- (A) $30(1 - \sin \theta)$ (B) $30(1 - \cos \theta)$
(C) $30(1 - \tan \theta)$ (D) $30(1 - \cot \theta)$

23. The obstacle, which obstructs vision but not chaining is a :
- (A) River (B) Building
(C) Rising ground (D) None of them
24. The preferable slope of the drawing board support is :
- (A) 1 : 2 (B) 1 : 4
(C) 1 : 6 (D) 1 : 8
25. When the angular measurement is more precise than the linear measurement in a traverse the balancing of traverse is done by :
- (A) Any rule (B) Transit rule
(C) Bowditch's rule (D) Empirical rule
26. The window usually provided near the main roof of a room and open above the adjoining verandah is called?
- (A) Clerestorey window (B) Dormer window
(C) Bay window (D) Skylight window
27. 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
28. The purpose of cross regulator in irrigating canals is :
- (A) To control the discharge into the off take canal
(B) To maintain proper levels in the main canal
(C) To control slit entry off take canal
(D) None of the above
29. The toughness of road aggregate is measured by :
- (A) Attrition test (B) Abrasion test
(C) Impact test (D) Crushing strength test
30. Steel is preferred as reinforced material in concrete because :
- (A) It is easily available
(B) It is the cheapest and good in strength
(C) It forms a good bond
(D) The coefficient of thermal expansion of steel and concrete is almost same

31. The path of a projectile is :
- (A) Hyperbola (B) Parabola
(C) Ellipse (D) Circle
32. Age of tree can be ascertained by :
- (A) Number of annual rings (B) Number of branches
(C) Radius of its stem (D) Circumference of its stem
33. You cannot close MS Word application by :
- (A) Choosing file menu then exit submenu (B) Press Alt + F4
(C) Click X button on the title bar (D) From file menu choose close submenu
34. The Indian Road Congress (IRC) was set up in :
- (A) 1934 (B) 1930
(C) 1948 (D) 1956
35. Conical edge pencil is used for :
- (A) Drawing the line (B) Lettering
(C) Drawing thick line (D) Drawing medium thick line
36. The first watering before sowing the crop :
- (A) Paleo (B) Kar watering
(C) Delta (D) None of these
37. The cement used for canal linings :
- (A) Low heat Portland cement (B) Sulphate resisting cement
(C) Rapid hardening Portland cement (D) Quick setting cement
38. The scale having same RF but graduated to read different units :
- (A) Comparative scale (B) Diagonal scale
(C) Vernier scale (D) None of the above
39. The permissible error in chaining for measurement with chain on rough or hilly ground is :
- (A) 1:100 (B) 1:500
(C) 1:1000 (D) 1:250

40. The difference in levels of the outer and inner edges of a road curve is :
- (A) Gradient (B) Camber
(C) Cross slope (D) Super elevation
41. Hoffman's kiln is used for burning of :
- (A) Tiles (B) Lime
(C) Cement (D) Bricks
42. A good brick earth contains 20 to 30% of :
- (A) Lime (B) Alumina
(C) Silica (D) Magnesia
43. Burning of tiles is done in :
- (A) Rotary kiln (B) Sialkot kiln
(C) Hoffman's kiln (D) Bull's trench kiln
44. An example of raking bond is :
- (A) Diagonal bond (B) English bond
(C) Flemish bond (D) Dutch bond
45. A foundation which covers entire area beneath a structure :
- (A) Well foundation (B) Raft foundation
(C) Pile foundation (D) Pier foundation
46. It is not a method for damp proofing:
- (A) Pressure grouting (B) Guniting
(C) Integral damp proofing (D) Seasoning
47. The portion of support on which first voussoir of arch placed :
- (A) Soffit (B) Abutment
(C) Skew back (D) Haunch
48. Outer curve of an arch is called :
- (A) Extrados (B) Crown
(C) Springer (D) Outer bark

49. Minimum headroom provided for a stair is :
- (A) 2.01 m (B) 2.70 m
(C) 2.10 m (D) 1.80 m
50. In spiral stair all steps are:
- (A) Fliers (B) Winders
(C) Risers (D) Treads
51. Maximum span of couple close roof is :
- (A) 3.6 m (B) 4.6 m
(C) 2.5 m (D) 4.2 m
52. In queen post truss, the top of vertical posts are connected by a horizontal member called :
- (A) Straining beam (B) T-Beam
(C) Tie beam (D) Collar beam
53. An example of lengthening joint is :
- (A) Cogged joint (B) Housed joint
(C) Bridle joint (D) Scarfed joint
54. A member which subdivide a window opening horizontally is :
- (A) Reveal (B) Jamb
(C) Transom (D) Mullion
55. A vertical window provided on a sloping roof is :
- (A) Bay window (B) Sky light
(C) Lantern window (D) Dormer window
56. The process of roughening the back ground to provide suitable bond for plastering is called :
- (A) Peeling (B) Hacking
(C) Gauging (D) Crazing
57. Painting constant for venetian door for both sides :
- (A) 2.25 (B) 2
(C) 3 (D) 2.125

58. C.C. 1:3:6 represents the grade of cement concrete :
- (A) M_{10} (B) $M_{7.5}$
 (C) M_{15} (D) M_5
59. One Hectare equals :
- (A) 10 Acre (B) 2.83 Acre
 (C) 100 Acre (D) 2.47 Acre
60. Length of revenue chain is :
- (A) 33 feet (B) 66 feet
 (C) 100 feet (D) 10 feet
61. Longitudinal slope of a road is :
- (A) Camber (B) Cant
 (C) Shoulder (D) Gradient
62. FRL stands for :
- (A) First Reduced Level (B) Formation of Road Line
 (C) Full Reservoir Level (D) Filling of Railway Line
63. Difference in levels of the water surfaces between upstream and downstream of the bridge is :
- (A) Rise (B) Water way
 (C) Afflux (D) Vent way
64. Correction for slope in chain survey is :
- (A) $h^2/2l$ (B) h/l^2
 (C) $l/2h$ (D) $2l^2h$
65. If canal water flows under drain water that type structure is called :
- (A) Super passage (B) Aqueduct
 (C) Level crossing (D) Canal Regulator
66. Gauge distance of Broad Gauge is :
- (A) 1.767 m (B) 0.610 m
 (C) 0.762 m (D) 1.676 m