



# सन्धि एकेडेमी

## SANDHI

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इन्जिनियरिङ सेवा, सिभिल समुह, जनरल/स्यानिटरी/इरिगेसन उपसमुह, पाँचौ तह, सब इन्जिनियर पदको खुला तथा समावेशी  
प्रतियोगितात्मक लिखित परीक्षाको नमुना परिक्षा  
मिति: २०८२।०४।१७

Key-C

समय: ४५ मिनेट

विषय: सेवा सम्बन्धि ज्ञान।

पूर्णांक: १००

वस्तुगत बहुउत्तर (५०x२ अंक)

उत्तरपुस्तिकामा प्रश्नपत्रको Key अनिवार्य रूपले उल्लेख गर्नु पर्ने छ। उल्लेख नगरेमा उत्तरपुस्तिका रद्द हुनेछ। परीक्षामा Calculator, Mobile प्रयोग गर्न पाइने छैन। सहि उत्तरको लागि प्रति प्रश्न २ अंक प्रदान गरिनेछ भने गलत उत्तर दिएमा प्रतिप्रश्न ०.४ अङ्क कट्टा गरिनेछ।

- The sensitiveness of a level tube decreases is**
  - radius of curvature of its inner surface is increased
  - diameter of the tube is increased
  - length of the vapour bubble is increased
  - both viscosity and surface tension are increased
- A series of closely spaced contour lines represents a**
  - Steep slope
  - Gentle slope
  - Uniform slope
  - Plane surface
- An internal focussing type surveying telescope, may be focussed by the movement of**
  - objective glass of the telescope
  - convex-lens in the telescope
  - concave lens in the telescope
  - plano-convex lens in the telescope
- Contours of different elevations may cross each other in the case of**
  - An overhanging cliff
  - A vertical cliff
  - A saddle
  - An inclined plane
- Determining the difference in elevation between two points on the surface of the earth, is known as**
  - Levelling
  - Differential levelling
  - Simple levelling
  - Longitudinal levelling
- Excess of silica in brick earth results in**
  - Cracking and warping of bricks
  - Loss of cohesion
  - Enhancing the impermeability of bricks
  - None of the above
- Excess of silica in brick earth causes**
  - Loss of cohesion
  - Impermeability
  - Cracking and warping on drying
  - Brittleness
- Bulking of sand is maximum if moisture content is about.**
  - 2 %
  - 4%
  - 6%
  - 10%

9. Based on its dry weight, a freshly felled tree may contain water  
A.25%                      B.50%                      C.75%                      D. 100%
10. For a structure subjected to the action of sea water, the cement used is  
A. rapid hardening cement                      B. low heat cement  
C. high alumina cement                      D. sulphate resisting cement
11. Which of the following cements is expected to have the highest compressive strength after 3 days.  
A. ordinary Portland cement                      B. rapid hardening cement  
C. high alumina cement                      D. sulphate resisting cement
12. Scale used for the building drawing for municipal approval is  
A. 1:100                      B. 1:20                      C. 1:50                      D. None of the above
13. The Isometric view of a sphere is:  
A. A sphere                      B. An ellipse                      C. A circle                      D. A cone
14. Drawings used in construction site are known as:  
A. Measure drawings                      B. Working drawings  
C. Site drawings                      D. Construction drawings
15. The drawing constructed after completion of the construction work is:  
A. Working drawing                      B. Concept drawing  
C. As built drawing                      D. None of the above
16. Section lining is drawn with line at:  
A. 60 degree                      B. 45 degrees                      C. 30 degrees                      D. 15 degrees
17. Particle size range is measured by  
A. effective size                      B. uniformity coefficient  
C. coefficient of curvature                      D. none of the above
18. In which type of soil the cohesive force is assumed to be zero:  
A. clayey                      B. sandy                      C. silty                      D. silty clay
19. Minimum area of openings in a habitable room as fraction of the floor area of room should  
A. 1/2                      B. 1/4                      C. 1/6                      D. 1/8
20. When two footing are connected by a beam, it is called  
A. Beam footing                      B. Combined footing  
C. Strap footing                      D. Strip footing
21. The damp proof course  
A. May be horizontal or vertical                      B. Should be continuous  
C. Should be good impervious materials                      D. All of the above
22. A temporary rigid structures having platform raised up as the building increase in height, is called  
A. Scaffolding                      B. Shoring                      C. Underpinning                      D. Jacking
23. The best methods of curing is  
A. Water curing                      B. steam curing                      C. Chemical curing                      D. Shading of concrete works

24. Surface water is obtained from  
A. Well B. Spring C. Artesian well D. Rain
25. Mostly used coagulant is,  
A. Alum B. Chlorine C. Lime D. Bleaching powder
26. Water supply includes  
A. Collection, transportation and treatment of water  
B. Distribution of water to consumers  
C. Provision of hydrants for fire fighting  
D. All of the above
27. The asbestos cement pipes are generally laid  
A. horizontally B. vertically  
C. at an angle of 30° D. at an angle of 60°
28. Total losses in canal is  
A. 40 % of total discharge B. 10 % of total discharge  
C. 60 % of total discharge D. equal to the seepage losses
29. The shape of the lined canal recommended by kneddy's  
A. Triangular B. Rectangular C. Parabolic D. Trapezoidal
30. The device provided near weirs or dams to facilities the irrigation of fish up stream or downstream is called  
A. Fish net B. Fish ladder C. Fish channel D. Fish pond
31. In concrete canal the approximate permissible velocity of water should not exceed  
A. 0.5 m/sec B. 1 m/sec C. 1.5 m/sec D. 2 m/sec
32. The width of the right of way, is influenced by  
A. formation width B. shoulders or berms  
C. classification of road D. all the above
33. The equilibrium super elevation required to counteract the centrifugal force full is given by:  
A.  $\frac{V^2}{27.5R}$  B.  $\frac{V^2}{225R}$  C.  $\frac{V^2}{127R}$  D.  $\frac{0.75V^2}{127R}$
34. Parking lanes are provided on:  
A. urban roads B. national highways  
C. major district road D. state highway
35. The right of way of national highways on either side from the centre in Nepal is:  
A. 15m B. 20m C. 25m D. 50m
36. The formation width of a road means the width of:  
A. pavement and shoulder B. carriage way  
C. embankment at ground level D. embankment at top level
37. Binder used in bituminous road is  
A. bitumen B. kerosene oil C. fevicol D. stone dust

38. Formation width of road includes  
A. carriage way  
B. carriage way + shoulder  
C. carriage way + shoulder + berm  
D. carriage way + shoulder + berm + drain
39. The pavement width of a road depends upon  
A. terrain  
B. type of traffic  
C. Both A & B  
D. number of lanes
40. The weight of an item measured correct to nearest  
A. 0.25 kg  
B. 0.50 kg  
C. 0.75 kg  
D. 1.0 kg
41. End lap provided in asbestos cements is equal to  
A. 5 cm  
B. 10 cm  
C. 15 cm  
D. 25 cm
42. While estimating the quantities for the construction of a building, the correct metric unit is  
A. Metre for length  
B. Cubic metre for area  
C. Square metres for volume  
D. Litre for capacity
43. The measurement is made in square metre in case of  
A. Cement concrete in foundation  
B. R.C.C. structure  
C. Hollow concrete block wall  
D. None of these
44. The standard width of AC sheet is  
A. 32"  
B. 35"  
C. 41"  
D. 46"
45. Quantity of 4m long, 3m height and 50cm thick stone masonry wall is:  
A. 6m<sup>3</sup>  
B. 60m<sup>3</sup>  
C. 8m<sup>3</sup>  
D. 12m<sup>3</sup>
46. The area of an arch segment with span 'l' and rise 'r' is for estimate purpose given by:  
A.  $1/3 \times l \times r$   
B.  $2/3 \times l \times r$   
C.  $1/4 \times l \times r$   
D.  $1/6 \times l \times r$
47. The necessary elements of the estimate are :  
A. Drawing  
B. Specification  
C. Rates  
D. All of the above
48. The contractor is selected by:  
A. low bid selection  
B. best value selection  
C. qualification based selection  
D. all of the above
49. Bar chart is suitable for  
A. Minor works  
B. Medium works  
C. Large project works  
D. All of the above
50. A legal agreement between contractor and owner is called  
A. Pieces of agreement  
B. contract  
C. work order  
D. all of the above

उत्तर पुस्तिकामा प्रश्नपत्रको Key अनिवार्य रूपले उल्लेख गर्नुपर्नेछ । उल्लेख नगरेमा उत्तर पुस्तिका रद्द हुनेछ ।