Note : All questions carry 1 mark each.

1. Which of the following is not a solid shape?

   (a) Cuboid (b) Sphere (c) Cone (d) Rhombus

2. A cube and cuboid both have

   (a) 4 edges (b) 6 edges (c) 10 edges (d) 12 edges

3. Which of the following solid does not have any vertex?

   (a) cube (b) cone (c) cylinder (d) pyramid

4. Which of the following solids has the most number of vertices?

   (a) Cuboid (b) Cone (c) Cylinder (d) Sphere

5. A triangular prism has

   (a) 6 faces, 8 vertices and 12 edges (b) 8 faces, 6 vertices and 12 edges

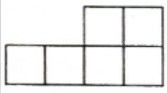
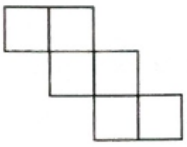
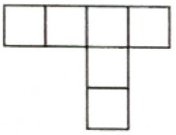
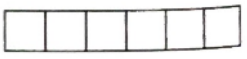
   (c) 5 faces, 6 vertices and 9 edges (d) 9 faces, 6 vertices and 5 edges

6. A square pyramid has

   (a) 5 vertices and 5 edges (b) 5 vertices and 8 edges

   (c) 8 vertices and 5 edges (d) 8 vertices and 8 edges

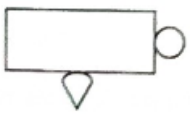
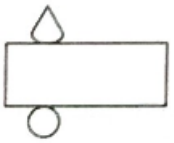
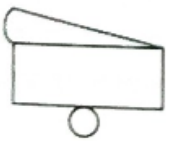
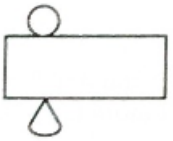
7. Which of the following can be the net of a cube?

   (a)  (b)  (c)  (d) 

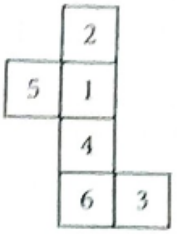
8. Identify the solid whose net is given

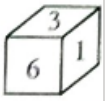
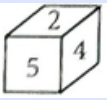
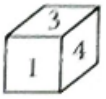
   (a) Cylinder (b) Sphere (c) Cone (d) Prism

9. The given solid consists of a cylinder and a cone. Which of the following is a possible net for the given solid?

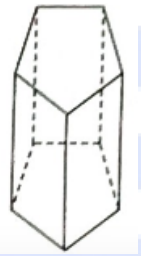
(a)  (b)  (c)  (d) 

10. Select the cube that can be formed by folding the net.



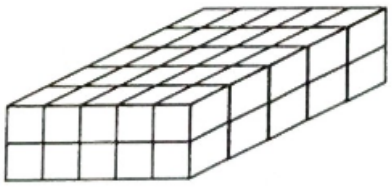
(a)  (b)  (c)  (d) 

11. The number of hidden faces, vertices and edges of the given figure are respectively.



(a) 4,2,5 (b) 5,2,5 (c) 4,3,5 (d) 4,2,6

12. The total number of cubes in the given arrangement is



(a) 40 (b) 45 (c) 50 (d) 60

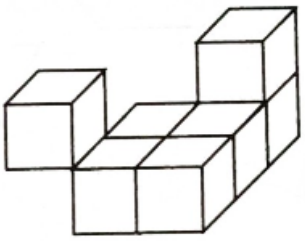
13. What cross sections would you get when you give a vertical and horizontal cut respectively to the standing pen?

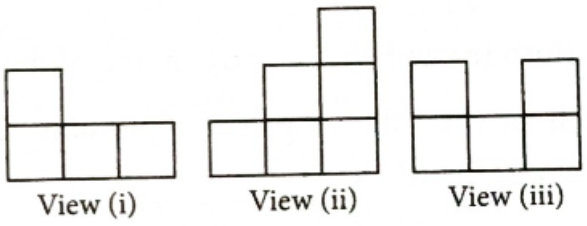
(a) Rectangle, Circle (b) Triangle, Circle (c) Circle, Rectangle (d) Circle, Triangle

14. Which of the following figures would appear the same in the top and front views?

(a) Cylinder (b) Square pyramid (c) Cone (d) Sphere

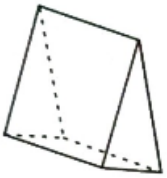
15. Three views for a solid are given. Identify the side view.





(a) View (i) (b) View (ii) (c) View (iii) (d) None of these

16. The name of the solid in figure is



(a) triangular pyramid (b) rectangular prism

(c) triangular prism (d) rectangular pyramid

17. Out of the following which is a 3–D figure?

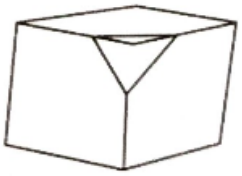
(a) Square (b) Sphere (c) Triangle (d) Circle

18. If three cubes each of edge $4\,\text{cm}$ are placed end to end, then the dimensions of resulting solid are

(a) $12\,\text{cm} \times 4\,\text{cm} \times 4\,\text{cm}$ (b) $4\,\text{cm} \times 8\,\text{cm} \times 4\,\text{cm}$

(c) $4\,\text{cm} \times 8\,\text{cm} \times 12\,\text{cm}$ (d) $4\,\text{cm} \times 6\,\text{cm} \times 8\,\text{cm}$

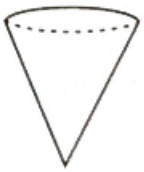
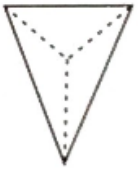
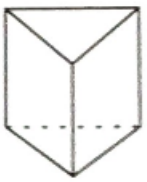
19. When we cut a corner of a cube as shown in the figure, we get the cutout piece as



(a) square pyramid (b) trapezium prism

(c) triangular pyramid (d) a triangle

20. Which of the following 3–dimensional figures has the top, side and front as triangles?

(a)  (b)  (c)  (d) 

21. Assertion : A solid cylinder has no vertex.

Reason :A 2–D shape that form one of the flat surfaces of the solid is called face.

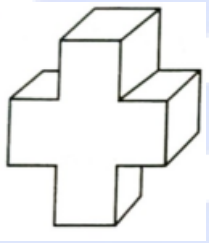
(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.

22. Assertion ; The given figure has 36 edges.



Reason: The line segment/curve where two faces meet is called edge of the solid.

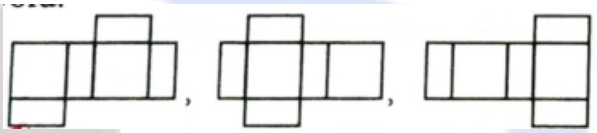
(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.

23. Assertion : Following are few possible nets of cuboid.



Reason : Every 3–D solid has unique net.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.

24. Assertion :4 cubes of side $2\,\text{cm}$ can form a cube of side $4\,\text{cm}$.

Reason : When we look at combined shape, some parts of it are hidden.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.