

Test / Exam Name: Math's Chapter 12 Mcq Questions.

Standard: 10th

Subject: Mathematics

Student Name:

Section:

Roll No.:

Questions: 33 Time: 00:33 hh:mm Marks: 33

Instructions

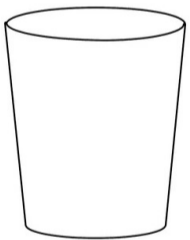
1. Attempt all questions.

- Q1.** A shoe box is a 15cm long, 10cm broad and 9cm high. The volume of the box is: **1 Mark**
1. 1500 cu. cm
 2. 1200 cu. cm
 3. 1000 cu. cm
 4. 1350 cu. cm

- Q2.** A cone is cut through a plane parallel to its base and then the cone that is formed on one side of that plane is removed. The new part that is left over on the other side of the plane is called: **1 Mark**
1. A frustum of a cone
 2. Cylinder
 3. Sphere
 4. Cone

- Q3.** A right triangle with sides 3cm, 4cm and 5cm is rotated about the side of 3cm to form a cone. The volume of the cone so formed is: **1 Mark**
1. $12\pi\text{cm}^3$
 2. $15\pi\text{cm}^3$
 3. $16\pi\text{cm}^3$
 4. $20\pi\text{cm}^3$

- Q4.** The shape of a glass tumbler is usually in the form of: **1 Mark**



1. Frustum of a cone
 2. A sphere
 3. A cone
 4. A cylinder
- Q5.** The radius of a sphere (in cm) whose volume is $12\pi\text{ cm}^3$, is: **1 Mark**
1. 3
 2. $3\sqrt{3}$
 3. $3^{\frac{2}{3}}$
 4. $3^{\frac{1}{3}}$
- Q6.** The diameter of a sphere is 6cm. It is melted and drawn in to a wire of diameter 2mm. The length of the wire is: **1 Mark**
1. 12m
 2. 18m
 3. 36m
 4. 66m
- Q7.** The inner dimensions of a closed box are 12cm, 10cm and 8cm. If the thickness of the wood is 1cm, then the capacity of the box is: **1 Mark**

1. 1200 cu. cm
2. 960 cu. cm
3. 480 cu. cm
4. 1920 cu. cm

Q8. Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: **1 Mark**

Assertion: No. of spherical balls that can be made out of a solid cube of lead whose edge is 44cm, each ball being 4cm. in diameter, is 2541

Reason: Number of balls = $\frac{\text{Volume of one ball}}{\text{Volume of lead}}$

1. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
2. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
3. Assertion (A) is true but reason (R) is false.
4. Assertion (A) is false but reason (R) is true.

Q9. A right circular cylinder of radius r and height h ($h > 2r$) just encloses a sphere of diameter: **1 Mark**

1. r
2. 2r
3. h
4. 2h

Q10. In a right circular cone, the cross-section made by a plane parallel to the base is a: **1 Mark**

1. Circle.
2. Frustum of a cone.
3. Sphere.
4. Hemisphere.

Q11. The radii of the ends of a bucket 16cm height are 20cm and 8cm. The curved surface area of the bucket is: **1 Mark**

1. 1760cm^2
2. 2240cm^2
3. 880cm^2
4. 3120cm^2

Q12. The surface area of a cube whose volume is 64 cm^3 is: **1 Mark**

1. 108 cm^2
2. 72 cm^2
3. 96 cm^2
4. 64 cm^2

Q13. A cylindrical cone sharpened on both the edges is the combination of: **1 Mark**

1. A frustum of a cone and a cylinder
2. Two cones and a cylinder
3. A cone and a hemisphere
4. A hemisphere and a cylinder

Q14. The plural form of 'frustum' is: **1 Mark**

1. Frusta
2. None of these
3. Frustum
4. Frustums

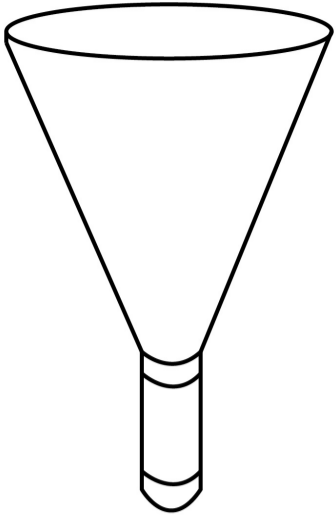
Q15. The number of solid spheres, each of diameter 6cm that can be made by melting a solid metal cylinder of height 45 cm and diameter 4cm, is: **1 Mark**

1. 3
2. 5
3. 4

- Q16.** A cubical block of side 7cm is surmounted by a hemisphere. The greatest diameter of the hemisphere is: **1 Mark**
1. 14cm
 2. 10.5cm
 3. 3.5cm
 4. 7cm
- Q17.** The edge of the cube whose volume is 1728 cu.cm is: **1 Mark**
1. 17cm
 2. 12cm
 3. 18cm
 4. 72cm
- Q18.** A cylindrical pencil sharpened at one edge is the combination of: **1 Mark**
1. A hemisphere and a cylinder
 2. A cone and a hemisphere
 3. A frustum of a cone and a cylinder
 4. A cone and a cylinder
- Q19.** Frustum is a _____ word. **1 Mark**
1. Latin
 2. Greek
 3. None of these
 4. English
- Q20.** A shuttlecock has the shape of: **1 Mark**
1. A cone and a hemisphere
 2. A hemisphere and a cylinder
 3. A frustum of a cone and a cylinder
 4. A frustum of a cone and a hemisphere
- Q21.** The perpendicular distance between the two parallel circular bases is called the _____ of the frustum of the cone. **1 Mark**
1. Height
 2. Volume
 3. Radius
 4. Slant height
- Q22.** During the conversion of a solid from one shape to another, the volume of the new shape will: **1 Mark**
1. Decrease
 2. Increase
 3. Be doubled
 4. Remain unaltered
- Q23.** The number of solid spheres, each of diameter 6cm that can be made by melting a solid metal cylinder of height 45 cm and diameter 4cm, is: **1 Mark**
1. 3
 2. 5
 3. 4
 4. 6
- Q24.** Volumes of two spheres are in the ratio 64 : 27. The ratio of their surface areas is: **1 Mark**
1. 3 : 4
 2. 4 : 3
 3. 9 : 16
 4. 16 : 9

Q25. A funnel is the combination of:

1 Mark



1. A cone and a hemisphere
2. A cone and a cylinder
3. A frustum of a cone and a cylinder
4. A hemisphere and a cylinder

Q26. A solid right circular cone is cut into two parts at the middle of its height by a plane parallel to its base.

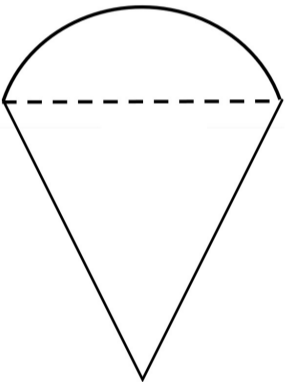
1 Mark

The ratio of the volume of the smaller cone to the whole cone is:

1. 1 : 2
2. 1 : 4
3. 1 : 6
4. 1 : 8

Q27. A plumbline (sahul) is the combination of:

1 Mark



1. A hemisphere and a cylinder
2. A hemisphere and a cone
3. A sphere and a cylinder
4. A cone and a cylinder

Q28. A right circular cylinder of radius r and height h ($h = 2r$) just encloses a sphere of diameter:

1 Mark

1. h
2. r
3. $2r$
4. $2h$

Q29. The cost of painting a cubical box of side 3m at the rate of Rs. 2 per sq. m is:

1 Mark

1. Rs. 120
2. Rs. 125
3. Rs. 112
4. Rs. 108

Q30. A right circular cylinder of radius r and height h ($h = 2r$) just encloses a sphere of diameter:

1 Mark

1. $3r$ units
2. r units
3. $2r$ units
4. $4r$ units

Q31. If two solid-hemispheres of same base radius r are joined together along their bases, then curved surface area of this new solid is:

1 Mark

1. $4\pi r^2$
2. $6\pi r^2$

3. $3\pi r^2$

4. $8\pi r^2$

Q32. If the volume of a cube is 343 cu.cm, then its edge is:

1 Mark

1. 7cm

2. 8cm

3. 9cm

4. 49cm

Q33. The number of solid spheres, each of diameter 6cm that can be made by melting a solid metal cylinder of height 45 cm and diameter 4cm, is:

1 Mark

1. 3

2. 5

3. 4

4. 6