CAREER BLITZ **SA-2-PT-1**

A Responsible Education Management Company **Max Marks- 50**

Name: **Class: IX** **Time: 1 Hour** **Date: 15-11-2015** **Course: BLITZ**

MATHS

1.	In a cylinder, if radius is halved and height is doubled, the volume will be (A) same (B) doubled (C) halved (D) four times	**3**
2.	The radius of a sphere is 2*r*, then its volume will be (a) $\frac{4}{3}\pi r^3$ (b) $4\pi r^3$ (c) $\frac{8}{3}\pi r^3$ (d) $\frac{32}{3}\pi r^3$	**3**
3.	The total surface area of a cube is 96 cm^2. The volume of the cube is: (A) 8 cm^3 (B) 512 cm^3 (C) 64 cm^3 (D) 27 cm^3	**3**
4.	A cone is 8.4 cm high and the radius of its base is 2.1 cm. It is melted and recast into a sphere. The radius of the sphere is : (A) 4.2 cm (B) 2.1 cm (C) 2.4 cm (D) 1.6 cm	**3**
5.	In a cylinder, radius is doubled and height is halved, curved surface area will be (A) halved (B) doubled (C) same (D) four times	**3**
6.	The radii of two cylinders are in the ratio of 2:3 and their heights are in the ratio of 5:3. The ratio of their volumes is: (A) 10 : 17 (B) 20 : 27 (C) 17 : 27 (D) 20 : 37	**3**
7.	The lateral surface area of a cube is 256 m^2. The volume of the cube is (A) 512 m^3 (B) 64 m^3 (C) 216 m^3 (D) 256 m^3	**3**
8.	The number of planks of dimensions (4 m × 50 cm × 20 cm) that can be stored in a pit which is 16 m long, 12m wide and 4 m deep is (A) 1900 (B) 1920 (C) 1800 (D) 1840	**3**
9.	The length of the longest pole that can be put in a room of dimensions (10 m × 10 m × 5m) is (A) 15 m (B) 16 m (C) 10 m (D) 12 m	**3**
10.	The radius of a hemispherical balloon increases from 6 cm to 12 cm as air is being pumped into it. The ratios of the surface areas of the balloon in the two cases is (A) 1 : 4 (B) 1 : 3 (C) 2 : 3 (D) 2 : 1	**3**
11.	Metal spheres, each of radius 2 cm, are packed into a rectangular box of internal dimensions 16 cm × 8 cm × 8 cm. When 16 spheres are packed the box is filled with preservative liquid. Find the volume of this liquid. Give your answer to the nearest integer. [Useπ=3.14]	**4**
12.	Find the amount of water displaced by a solid spherical ball of diameter 4.2 cm, when it is completely immersed in water.	**4**

13.	A school provides milk to the students daily in a cylindrical glasses of diameter 7 cm. If the glass is filled with milk upto an height of 12 cm, find how many litres of milk is needed to serve 1600 students.	**4**
14.	A small village, having a population of 5000, requires 75 litres of water per head per day. The village has got an overhead tank of measurement 40 m × 25 m × 15 m. For how many days will the water of this tank last?	**4**
15.	A right triangle with sides 6 cm, 8 cm and 10 cm is revolved about the side 8 cm. Find the volume and the curved surface of the solid so formed.	**4**