D.A.V. PUBLIC SCHOOL, CRRC, Medical Road, Gaya

Sunday Test (Date – 03.12.2023)

Class –IX **Time : 40 Min**

Sub. – Mathematics **F.M. - 20**

SECTION A:- ($2 \times 5 = 10$)

1. How many square meters of canvas is required for a conical tent whose height is 3.5 m. and the radius of base is 12m.
2. What length of tarpaulin 2 m. wide will be required to make a conical tent of height 8 m and base radius 6 m? Assuming that the extra length of material that will be required for stitching margins and wastage in cutting is approximately 30 cm.(use $\pi = 3.14$)
3. A hemispherical bowl is made of steel, 0.25cm thick. The inner radius of the bowl is 5 cm. Find the outer curved surface area.
4. A solid sphere and a solid hemisphere have same surface areas. Find the ratio of their radii.
5. Diameter of moon is approximately one – fourth of the diameter of earth. What fraction of volume of earth is the volume of moon.

SECTION B:- ($5 \times 2 = 10$)

6. 27 solid iron sphere each of radius r and surface area S are melted to form a sphere of surface area S'. Find the i) radius r' of the new sphere and ii) ratio of S and S'.
7. A heap of rice is in the form of a cone whose diameter is 10.5 m and height is 3 m. Find the volume. The heap is to be covered by canvas to protect it from rain. Find the area of t6he canvas required.

***

***