Examination Class VIII (Mathematics)

Time:1 Hours Max. Marks: 30

I. Answer all the Questions:

- 1. A flooring tile has the shape of a parallelogram whose base is 24 cm and the corresponding height is 10 cm. How many such tiles are required to cover a floor of area $1080 \ m^2$? (If required, you can split the tiles in whatever way you want to fill up the corners).
- 2. Find the area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm.
- 3. The floor of a building consists of 3000 tiles which are rhombus shaped, and each of its diagonals are 45 cm and 30 cm in length. Find the total cost of polishing the floor, if the cost per m^2 is Rs 4.
- 4. The diagonal of a quadrilateral shaped field is 24 m and the perpendiculars dropped on it from the remaining opposite vertices are 8 m and 13 m. Find the area of the field.
- 5. The internal measures of a cuboidal room are 12 m \times 8 m \times 4 m. Find the total cost of whitewashing all four walls of a room, if the cost of white washing is Rs 5 per m^2 . What will be the cost of white washing if the ceiling of the room is also whitewashed.
- 6. Find the side of a cube whose surface area is $600 cm^2$.
- 7. The lateral surface area of a hollow cylinder is $4224 \ cm^2$. It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimeter of rectangular sheet?
- 8. A road roller takes 750 complete revolutions to move once over to level a road. Find the area of the road if the diameter of a road roller is 84 cm and length is 1 m.
- 9. A godown is in the form of a cuboid of measures 60 m \times 40 m \times 30 m. How many cuboidal boxes can be stored in it if the volume of one box is 0.8 m^3 ?
- 10. If each edge of a cube is doubled, (i) how many times will its surface area increase? (ii) how many times will its volume increase?