## Atomic Energy Central School - Narora

Periodic Test III – 2018-19 (Mathematics)

Time-1 hour

## Class-VII

Max. Marks -40

General Instructions: Q.N. 1 - 4 is of one mark each. Q.N. 5 - 8 is of two marks each. Q.N. 9-12 is of three marks each. Q.N. 13-16 is of four marks each.

Q1. Convert the given numbers to per cents: (i)  $\frac{5}{4}$ (ii) 0.65

Q2. Convert each part of the ratio to percentage;3: 7

Q3. Area of a tringle is 84  $cm^2$  and its base is 14 cm. Find the height on the base.

"OR"

The perimeter of a rectangle is 130 cm. If the breadth of the rectangle is 30 cm, find its length.

Q4. Rewrite the rational numbers  $\frac{-44}{72}$  in the simplest form. Q5.Find the value of:(i) $-2\frac{1}{3} + 4\frac{3}{5}$ (ii) $\frac{-6}{13} - \frac{-7}{15}$ 

Q6. What will be the area of the largest square that can be cut out of a circle of radius 10 cm?

Q7. Meeta saves ` 4000, which is 10% of her salary. Find her salary.

Q8. Draw a line, say AB, take a point C outside it. Through C, draw a line parallel to AB using ruler and compasses only.

"OR"

Construct  $\triangle DEF$  such that DE = 5 cm, DF = 3 cm and  $\angle EDF = 90^{\circ}$ .

Construct  $\triangle DEF$  such that DE = 0 cm, -1Q9. Find the value of: (i) $\frac{-7}{12} \div \frac{-2}{13}$ (ii) $\frac{3}{7} \times \frac{-2}{5}$ "OR"

List four rational numbers between  $\frac{5}{7}$  and  $\frac{7}{8}$ .

Q10. If Meena gives an interest of 25 for one year at 9% rate per annum. What is the sum she has borrowed?

Q11. If the circumference of a circular sheet is 154 m, find its radius. Also find the area of the sheet. (Take  $\pi = \frac{22}{7}$ )

Q12. Draw  $\triangle$  PQR with PQ = 4 cm, QR = 3.5 cm and PR = 4 cm. What type of triangle is this?

Q13. Juhi sells a washing machine for 13,500. She loses 20% in the bargain. What was the price at which she bought it?

Q14. Through a rectangular field of length 90 m and breadth 60 m, two roads are constructed which are parallel to the sides and cut each other at right angles through the centre of the fields. If the width of each road is 3 m, find

(i) the area covered by the roads. (ii) the cost of constructing the roads at the rate of  $110 \text{ per } \text{m}^2$ 

## "OR"

A rectangular shaped swimming pool with dimensions  $30 \text{ m} \times 20 \text{ m}$  has 5 mwide cemented path along its length and 8 m wide path along its width. Find the cost of cementing the path at the rate of Rs 200 per  $m^2$ .

Q15. Write the following rational numbers in ascending order:  $\frac{-3}{7}$ ,  $\frac{-3}{2}$ ,  $\frac{-3}{4}$ 

Q16. Construct  $\triangle PQR$  if PQ = 5 cm,  $\angle PQR$  = 105° and  $\angle QRP$  = 40°.