## 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 $84 \mathrm{~cm}^{2}$ 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) $-2 \frac{1}{3}+4 \frac{3}{5}(\mathrm{ii}) \frac{-6}{13}-\frac{-7}{15}$
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 $\triangle \mathrm{DEF}$ such that $\mathrm{DE}=5 \mathrm{~cm}, \mathrm{DF}=3 \mathrm{~cm}$ and $\angle \mathrm{EDF}=90^{\circ}$.
Q9. 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 ` 45 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 \(\pi=\frac{22}{7}\) ) Q 12 . Draw \(\triangle \mathrm{PQR}\) with \(\mathrm{PQ}=4 \mathrm{~cm}, \mathrm{QR}=3.5 \mathrm{~cm}\) and \(\mathrm{PR}=4 \mathrm{~cm}\). 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 ${ }^{`} 110$ per $\mathrm{m}^{2}$

## "OR"

A rectangular shaped swimming pool with dimensions $30 \mathrm{~m} \times 20 \mathrm{~m}$ has 5 m wide 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 $\mathrm{m}^{2}$.
Q15. Write the following rational numbers in ascending order: $\frac{-3}{7}, \frac{-3}{2}, \frac{-3}{4}$
Q16. Construct $\triangle \mathrm{PQR}$ if $\mathrm{PQ}=5 \mathrm{~cm}, \angle \mathrm{PQR}=105^{\circ}$ and $\angle \mathrm{QRP}=40^{\circ}$.

