| Success Key <br> Test Series | SUCCESS KEY TEST SERIES <br> VIII. (English) <br> (Unit Test- 4 (7,8,9/16,17)) <br> Mathematics- | DATE: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TIME: 1:30 hrs |  |  |  |
|  |  | MARKS: 40 |  |  |  |
|  |  |  |  |  |  |

## Q. 1 A) Choose the correct alternative.

1) Curved surface area of cylinder $=$ $\qquad$
2) Total surface area of cylinder $=$ $\qquad$
3) Volume of cube = $\qquad$
4) Volume of a cuboid = $\qquad$
5) Area of the circle $=$ $\qquad$
B) Answer the following questions
6) Find the volume of a box if its length, breadth and height are $20 \mathrm{~cm}, 10.5 \mathrm{~cm}$ and 8 cm respectively.
7) which of the following statements are of inverse variation. Number of workers on a job and time taken by them to complete the job.
8) Write the following statements using symbol of variation.

Circumference (c) of a circle is directly proportional to its radius (r)
4) A cuboid shape soap bar has volume 150 cc . Find its thickness if its length is 10 cm and breadth is 5 cm .
5) Write the following statements using symbol of variation.

The intensity (I) of light varies inversely with the square of distance (d) of a screen from lamp.
Q. $2 \quad$ Attempt the following questions. (Any five)

1) A farmer sold foodgrains for 9200 rupees through an agent. The rate of commission was $2 \%$. How much amount did the agent get.
2) Find the volume of box whose length is 12 m , breadth is 6 m and height is 5.5 m .
3) John sold books worth rupees 4500 for a publisher. For this he received $15 \%$ commission. Complete the following activity to find the total commission John obtained.
4) In a circle with centre $P$, chord $A B$ is drawn of length 13 cm , seg $P Q \perp$ chord $A B$, then find $I(Q B)$.

5) Find the volume of cylinder whose height is 7 m and radius is 10 m .
6) Find the length of diagonal of a square with side 8 cm

## Q. 3 Solve the following questions. (Any four)

1) The radius of a circle is 13 cm and length of one of its chord is 10 cm . Find the distance of chord from the centre.
2) x varies inversely as y when $\mathrm{x}=15$ then $\mathrm{y}=10$ if $\mathrm{x}=20$ then $\mathrm{y}=$ ?
3) How many bricks of length 25 cm , breadth 15 cm and height 10 cm are required to build a wall of length 6 m , height 2.5 m and breadth 0.5 m ?
4) A chord of length 16 cm is drawn in a circle of diameter 20 cm . Calculate its distance from the centre of the circle.
5) If marked price $=$ Rs. 990 and percentage of discount find selling price.

## Q. 4 Answer the following (Any two)

1) Complete the following table considering that cost of apples and their number are in direct variation.

| Number of apples (x) | 1 | 4 | $\ldots .$. | 12 | 20 |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Cost of apples $(\mathrm{y})$ | 8 | 32 | 56 | $\ldots .$. | 160 |

2) If selling price $=$ Rs. 900 , Discount is $20 \%$ then find the marked price.
3) Lengths of diagonals of a rhombus $A B C D$ are 16 cm and 12 cm . Find the side and perimeter of the rhombus.
