## MATHEMATICS

## STD VIII

06-11-13
Marks : 25
Time : 45min

## General Instructions:

Do the calculations in the working column
Give necessary formulae and steps wherever required
This question paper consists of $\mathbf{1 1}$ questions divided into four sections $\mathbf{A}, \mathbf{B}, \mathbf{C}$ and $\mathbf{D}$
Section A comprises of $\mathbf{3}$ questions of $\mathbf{1}$ mark each
Section B comprises of $\mathbf{4}$ questions of $\mathbf{2}$ mark each
Section C comprises of $\mathbf{2}$ questions of $\mathbf{3}$ mark each
Section D comprises of $\mathbf{2}$ questions of $\mathbf{4}$ mark each

## SECTION A

1. Which of the following ratios is equal to $68 \%$ ?
A. $25: 17$
B. $7: 25$
C. $17: 25$
D. $7: 5$
2. Which of the following polynomial is a trinomial ?
A. $(\mathrm{abc})^{3}$
B. $2 x^{2}+3 y^{2}$
C. $2 x^{2}+y^{2}-z^{3}$
D. $3 p^{3}$
3. If Marked Price $=$ Rs. 100 and Sale Price $=$ Rs. 80 , then the discount percent is $\qquad$
A. $6 \%$
B. $20 \%$
C. $80 \%$
D. $12 \%$

## SECTION B

4. A shop selling sewing machines offers $3 \%$ discount. What cash amount does a customer pay for a sewing machine marked at Rs 600 ?
5. A refrigerator is available for Rs 13750 including VAT. If rate of VAT is $10 \%$, find the original cost of furniture.
6. Add the following : $-8 x^{2}-4 x y+10 y^{2}, 3 x y-4 x^{2}+3 y^{2},-3 x^{2}+x y-7 y^{2}$
7. Subtract: $-3 x^{2}-4 x^{2} y+5 x^{2}-y^{2}$ from $-5 y^{2}+7 x^{2}-3 x^{2} y+6 x y^{2}$

## SECTION C

8. Find the amount and compound interest on Rs 30000 for $2 \frac{1}{2}$ years at $10 \%$ per annum compounded annually.
9. The population of a town is increasing at the rate of $5 \%$ per annum. What will be the population of the town on this basis after two years, if the present population is 16000 ?

## SECTION D

10. Find the amount paid when a sum of Rs 20,000 is invested for 12 months at $4 \%$ per annum compounded half yearly.
11. A man bought two articles for Rs 25000 each. He sold both the articles and on one he made a profit of $8 \%$ and on the other a loss of $4 \%$ Find the overall profit or loss in the whole transaction.
