

## SECOND TERMINAL EXAMINATION – 2013

### MATHEMATICS

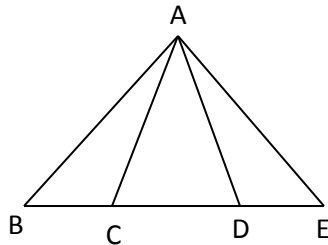
Standard : VIII

Score :50

Time : 2 hours

1. Joseph took out a loan of 50000 rupees at 12% from a bank. The bank later allowed a reduction of 3%. How much is the actual interest for the amount Joseph had borrowed for 1 year? (2)
2. Find the sum of  $x$  and  $x+1$  and also the sum of  $x$  and  $x+2$ . What is the product of these sums? (2)
3. The perimeter of a rhombus is 68 centimetres and the length of one of its diagonals is 30 centimetres. Find the length of the other diagonals. (2)
4. Write down the product of  $x-1$  and  $x-2$ . Use it to calculate  $99 \times 198$ . (2)
5. Draw a parallelogram with one side 7 centimetres; diagonals 10 centimetres and 8 centimetres. (3)
6. At Leena's home, there are hens and goats, 15 in all. The total number of legs is 50. How many hens does she have? (3)

7. .



In the figure,  $AC = AD$ . If  $BC = ED$ , prove that  $AB = AE$ . (3)

8. In quadrilateral ABCD,  $AB = 6\text{cm}$ ,  $BC = 3\text{cm}$ ,  $CD = 2\text{cm}$ ,  $AD = 4\text{cm}$ ,  $AC = 5\text{cm}$ . Construct quadrilateral. (3)
9. If  $x = -3$ ,  $y = -4$ , find the value of  $3x - 5y$ . (3)
10. Taking 6 times a number and subtracting 5 gives the same result as taking 4 times the number and adding 1. What is the number? (3)
11. If  $x - \frac{1}{x} = 3$ , then what is  $x^2 + \frac{1}{x^2}$ ? (3)
12. The ratio of the number of Poems to the short stories in a bookstall is 3:5. There are 60 more short stories than Poems. How many poems and short stories are there in this book stall? (4)
13. The product of two numbers is  $\frac{1}{4}$ . What is the difference of the squares of their sum and difference? (4)

14. The rates of interest for gold mortgage advertised by three banks are follows:

Bank A 12% interest

Bank B 1.50 rupees per month for each 100 rupees

Bank C 20 rupees per month for each 1000 rupees

Which bank charges the least interest?

(4)

15. In trapezium PQRS,  $PQ = 7\text{cm}$ ,  $QR = 3\text{cm}$ ,  $RS = 5\text{cm}$ ,  $PS = 4\text{cm}$ . Draw trapezium. (4)

16. A man deposits 25000 rupees every June, starting at 2005 June. The bank gives simple interest at 8%. How much would he have in his account on 2010 may? How much would he get as interest alone? (5)