

# CLASS VII

## GUESS PAPER-02

### MATHEMATICS

#### General Instructions :-

1. All questions are Compulsory.
2. The question paper consists of 27 questions and it is divided into three Sections A,B and C.
3. **Section A** comprises of 10 questions carrying 1 mark each.
4. **Section B** comprises of 11 questions carrying 2 mark each.
5. **Section C** comprises of 6 questions carrying 3 mark each.
6. Question numbers 1 to 10 in section A are multiple choice questions where you are to select one correct option out of the given four.

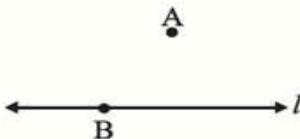
#### Section A

(Questions 1 to 10 carry 1 mark each )

1. If a, b and c are integers then, according to distribute law :

- A.  $a(b+c)=a \times b + c \times a$
- B.  $a(b+c) = (a + b) c$
- C.  $a(b+c)=a + b \times a + c$
- D.  $a(b+c)=a \times c - a \times b$

2. look at the figure below :



To draw a line parallel to l though A, the first step will be :

- A. Join A to l
- B. Join A to B
- C. Draw perpendicular from A on l
- D. Draw a line through A

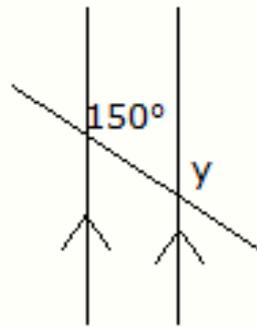
3. A number is chosen at random from 1 to 5. What is the probability that the number chosen is odd ?

- A.  $\frac{2}{5}$     B.  $\frac{3}{5}$     C.  $\frac{1}{4}$     D.  $\frac{1}{6}$

4. The solution of the equation  $3x + 4 = 25$  is

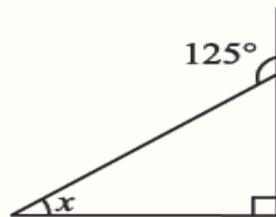
- A. 7    B. 8    C. 9    D. 6

5. In the figure given below , the measure of y is :



- A. 30 degree  
B. 50 degree  
C. 100 degree  
D. 90 degree

6. The measure of angle x, in the given figure is :



- A.  $45^\circ$     B.  $53^\circ$     C.  $80^\circ$     D.  $35^\circ$

7. Write full form of ASA in congruence :

- A. Angle – side –Angle    B. Angle Side Side    C. Angle–Angle – side    D. Side-  
Side -Side

8. What is answer of  $455 \div 100$  :

- A. 4450      B. 4.55      C. 45.500      D. 4.5

9. What is relation in this formula – 3 Median – 2 Mean = ? :

- A. Mode      B. Mean      C. 2 Mode      D. 3 Mean

10. What is solution of  $1\frac{5}{6} - \frac{2}{6}$  :

- A.  $\frac{5}{6}$       B.  $\frac{5}{8}$       C.  $\frac{3}{6}$       D.  $\frac{3}{2}$

### Section B

(Questions 11 to 21 carry 2 mark each )

11. What is the measure of complement of each of the following angle ??

- (a)  $45^\circ$       (b)  $54^\circ$       (c)  $70^\circ$

12. Write the following equations in statement form :

- (a)  $6n + 4 = 10$       (b)  $\frac{y}{2} - 3 = 9$

13. Ram has solved  $\frac{4}{8}$  part of an exercise while hema solved  $\frac{1}{2}$  part of it. Who has solved more.

14. How many angles are formed when 2 lines intersect?

15. How many 0.5 cm long strips of ribbon can be cut from a ribbon that is 150 cm long ?

16. Verify  $a - (-b)$  for the following values of a and b.

- (i)  $a=21, b=15$       (ii)  $a=120, b=-230$       (iii)  $a=-112, b=150$

17. Use the signs of  $>$ ,  $<$  or  $=$  in the given box to make the statements true :

(i)  $(-45) + (-9) \quad \square \quad (-61) + (-54)$

(ii)  $(-8) + (12) + (5) + (-52)$

18. Find the product, using suitable properties :

(i)  $26 \times (-45) + (-21) \times 48$

(ii)  $15 \times (-56) - (-84) \times 89$

(iii)  $81 \times (78-52)$

19. Solve the following equations :

(i)  $Y + 14 = 45.$

(ii)  $\frac{4}{5}x - 14 = 54.$

(iii)  $\frac{d}{4} + 4 = 8.$

(iv)  $2t/12 - 12 = 26$

20. (a) Construct 3 equations starting with  $x=2.$

(b) construct 3 equations starting with  $y = -5$

21. Is it possible to have a triangle with the following sides ?

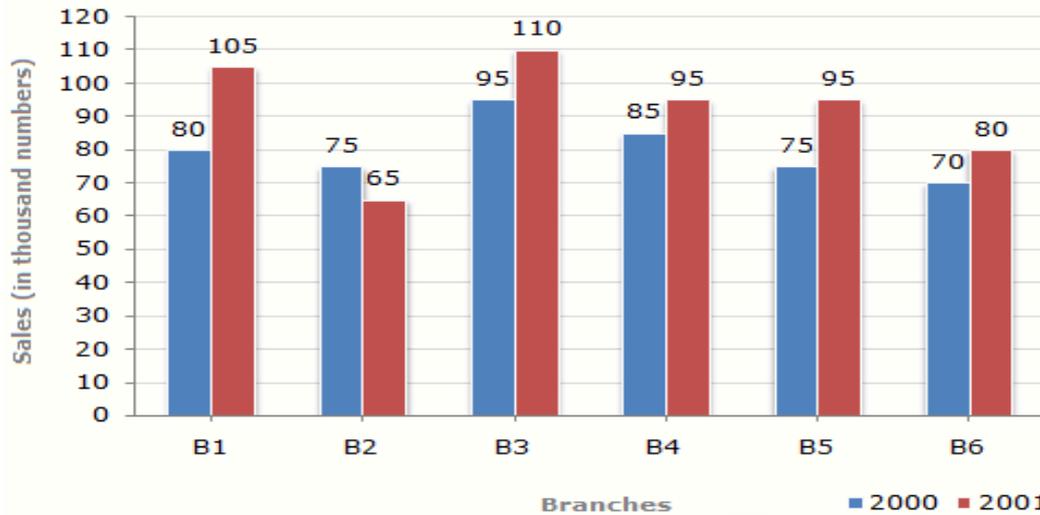
(i) 2cm, 4 cm, 5cm

(ii) 6 cm, 3 cm, 2 cm

### Section C

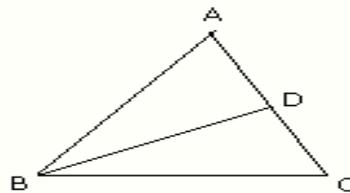
**(Questions 22 to 27 carry 3 mark each )**

22. The bar graph given below shows the sales of books (in thousands) from six branches of a publishing company during two consecutive years 2000 and 2001

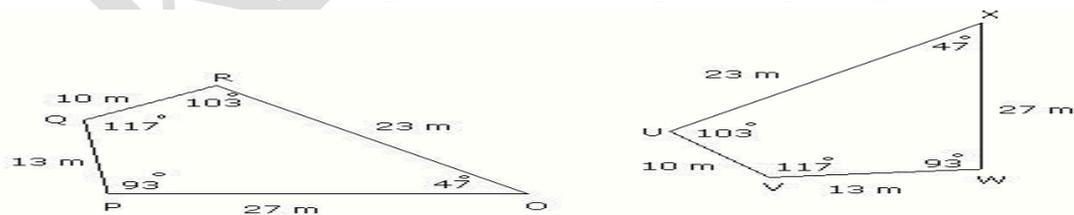


- (1) What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years ?
- (2) What is the average sale of all the branches ( in thousand numbers ) for the year 2000 ?
- (3) Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years ?

23. Let ABC be an isosceles triangle in which  $AB = AC$  and  $BD$  is perpendicular to  $AC$ . Then- Prove that  $BD^2 - CD^2 = 2AD \cdot CD$



24. Name all the corresponding parts of the congruent figures given below :



25. Write name of properties of Addition and subtraction of integers. Write their formulae with examples.

26. The runs scored in a cricket match by 11 players is as follows :

6,120,50,100,15,15,8,10,15,80,10 . Find the mean, mode and median of this data. Are the three same ?

27. AM is a median of a triangle ABC. Is  $AB + BC + CA > 2AM$ .

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