Question Bank SA -1

Class –7   **CH -1,2,3,4,5 and 6**   **Sub: MATHS**

Multiple Choice Questions:

1. The value of (-2) X (-1) X (1) is
   (a) 1   (b) 3   (c) -4   **(d) 2**

2. (-43) X (-99) + (43) is equal to
   (a) 4300   (b) -4300   (c) -4214   (d) 4257

3. Reciprocal of 3 is
   (a) -3   **(b) 1/3**   (c) 4   (d) none

4. The mode of the given data 22,29,27,23,43,41,27 is
   (a) 23   **(b) 27**   (c) 22   (d) none

5. The absolute value of | - 23 | is
   (A) - 23   **(B) 23**   (C) 0   (D) None

6. The smallest prime number is
   (A) 0   **(B) 2**   (C) 1   (D) None

. **7.** The smallest whole number is
   (A) 0   (B) 2   (C) 1   (D) None

8. Value of [(-6) + 2] ÷ (2) is
   (A) -2   (B) 2   (C) 1/2   (D) None

9. Value of (-10) X (-5) + (-7) is
   (A) 40   **(B) 43**   (C) -43   (D) 23

10. The reciprocal of 2/7 is
    (A) 7/2   (B) 1/7   **(C) 7/2**   (D) -2/7

11. How many pieces of 13.2 cm can be cut from a 330 cm long rod?
    (A) 25   (B) 28   (C) 21   (D) 35

12. The median of the data 2, 16, 29, 88, 49, 99, 16, 4, 37 is
    (A) 16   **(B) 29**   (C) 99   (D) 88

13. If mean of 6 observations is 4, then their sum is

(A) 20   (B) 22   **(C) 24**   (D) 26

14. If a and b are positive integers, then the solution of the equation ax = b will always be a
     (A) Positive number   (B) Negative number
     (C) 1   (D) 0

15. If $7x + 4 = 39$, then x is equal to
     (A) 6   **(B) 5**   (C) 8   (D) -4

16. If $k + 2 = 6$, then the value of $4k + 12$ is equal to
     (A) 16   (B) -12   **(C) 28**   (D) -30

17. The angle which makes a linear pair with an angle of 58^0 is of
     (A) 122^0   (B) 123^0 (C) 119^0 (D) 69^0

18. If two supplementary angle are in the ratio of 1:2, then the bigger angle is

     (A) 120^0   (B) 125^0 (C) 110^0 (D) 90^0

19. The sides of a triangle have length (in cm) 10, 6.5 and a, where a is a whole number.

     The minimum value that a can take is
     (A) 6   (B) 5   **(C) 3**   (D) 4

20. If the exterior angle of a triangle is 130^0 and its interior angle is equal, then measure of each interior angle is

     (A) 55^0 **(B) 65^0**   (C) 60^0 (D) 50^0

Fill the blank:

1. The range of the data 21, 23,45,15,17 is _____

2. The mean of the data 3,6,9,10,12 is _____

3. ¾ of 27 is _____

4. $4 \times 6\frac{1}{3}$ is equal to _____

5. The lowest term of the product $2\frac{3}{7} \times \frac{7}{9}$ is _____

6. $\frac{4}{5} \div 4$ is equal to _____

7. $25.4 \times 1000 =$ _____

8. $25.4 \div 20 =$ _____

9. If we multiply _____ number of negative integers, then the resulting integer is positive.

10. If we multiply six negative integers and six positive integers, then the resulting integer is _____

11. $(-9) \times 20 =$ _____

12. (- 43) + _____ = (-43)

13. If 3 – x = - 4, then x = _____

14. If x – 1/2 = 3/2 then x = _____

15. If sum of measure of two angles is 90^0, then the angles are _____

16. If sum of measure of two angles is 180^0, then the angles are _____

17. Sum of interior angles on the same side of a transversal is _____

18. The supplement of a right angle is always _____

19. Measures of each of the angles of an equilateral triangle is _____

20. Median is also called _____ in an equilateral triangle

Answer :

1. **30**   2. **8**   3. **20.25**   4. **25.33**   5. **1.89**

6.   **1/5**   7. **25,400**   8. **1.27**   9. Even   10. Positive

11. **-180**   12. **1**   13. **-7**   14. **2**   15. **complementary**

16. **Supplementary**   17. **180^0**   18. **Right**   19. **60^0**   20.   **altitude**

Tell whether the statement is true or false: **[1 MARK QUESTION]**

1. The mode is always one of the numbers in a data.   (TRUE)

2. The mean is one of the numbers in a data   (FALSE)

3. The median is always one of the numbers in a data (TRUE)

4. The data 6, 4, 3, 8, 9, 12, 13, 9 has mean 9.   (FALSE)

5. Product of two negative integers is a negative integer.   (FALSE)

6. Product of three negative integers is a negative integer.   (TRUE)

7. 4 – (-7) is same as 4 + 7   (TRUE)

8. The reciprocal of 4/7 is 4/7.   (FALSE)

9. 1 is only number which has its own reciprocal.   (FALSE)

10. The reciprocal of a proper fraction is a proper fraction.   (FALSE)

11. 6 is solution of the equation 4 x + 3 = 15.   (FALSE)

12. If x – 7/8 = 7/8, then x = 7/4   (TRUE)

13. If 4x – 7 = 11, then x = 4.   (FALSE)

14. Two right angles are complementary to each other.   (TRUE)

15. One obtuse and one acute angle can make a pair of complementary angles   (FALSE)

16. An angle is more then 45^0, its complementary angle must be less than 45^0. (TRUE)

17. Vertically opposite angles are either both acute angle or both obtuse angles.   (TRUE)

18. Sum of any two angles of triangle is always greater than the third angle. (FALSE)

19. Sum of the measure of three angles of a triangle is 180^0 (TRUE)

20. It is possible to have a triangle in which each angle is less than 60^0 (FALSE)

Solve: Each carry one mark: **[1 MARK QUESTION]**

1. The small counting number.
   Ans. 1

2. The opposite of – 5/2.
   Ans. 5/2

3. The greater negative number.
   Ans. -1

4. The smallest positive integer.
   Ans. 1

5.   3 X (-1) = _____

   Ans. (- 3)

6. (-21) X (30)_____

   Ans. (- 630)

7. For any integer, what is (-1) X a equal to?

   Ans. (- X)

8 (-3) X _____   = 27

   Ans. (-9)

9. 5 X _____ = -35

Ans. (- 7)

10.   _____ X (-8) = -56

Ans. 7

11. _____ X (_-12) = 132

Ans. (- 11)

12. Write equation for: The sum of number x and 5 is 9

Ans. $x + 5 = 9$

13. Write equation for: 2 subtracted from y is 6

Ans. $y - 2 = 6$

14. Ten times a is 90.

Ans. $10a = 90$

15. Three – fourth of m is 14.

Ans. $3m / 4 = 14$

16. Find complementary angle. (i) 30^0 (ii) 50^0 (iii) 55^0

Ans. (i) 60^0 (ii) 40^0 (iii) 35^0

17. Find the supplementary angle. (i) 130^0 (ii) 150^0 (iii) 55^0

Ans. (i) 50^0 (ii) 30^0 (iii) 125^0

18. Find the product $\frac{3}{7}$ X 4

Ans. $\frac{12}{7}$ or $1\frac{5}{7}$

19. Find : $2 \div \frac{8}{9}$

Ans. $2 \times \frac{9}{8} = \frac{18}{8} = \frac{9 \times 2}{4 \times 2} = 9/4 = 2\frac{1}{4}$

20. find the mode of 4, 5, 4, 7, 12, 4, 8 and 5.

Ans. 4

Solve: Each carry two marks

1. Solve: (i) 2 – 3/5   (ii) 3/5 + 2/7

2. Find: (i) ½ 0f 46   (ii) 2/3 of 18
3. Multiply: (i) 3 X $5\frac{1}{5}$ (ii) 7 X $2\frac{1}{4}$

4. Find the mean of first five whole numbers

5. Amit scores the following runs in eight innings: 58, 76, 40, 35, 46, 45, 0, and 100. Find mean score.

6. Write down a pair of integers whose: (i) sum is -7   (ii) difference is -10 (iii) sum is 0

7. Verify the following (i) 18 X [7 + (-3)] = [18 X 7] + [18 X (-3)]

(ii) (-21) X [(-4) + (-6)] = [(-21) X (-4)] + [(-21) X (-6)]

8. Express 5 cm in metre and kilometre

9. Write statement for the following equation:

(i) $P + 4 = 15$ (ii) $m - 7 = 3$ (iii) $2m = 7$ (iv) $m/5 = 3$ (v) $p/2 + 2 = 8$

10. Solve: (i) $x - 10 = 0$ (ii) $b/2 = 6$ (iii) $5m + 7 = 17$

11. Find the angle which is equal to its complement.

12. Find the angle which is equal to its supplementary.

13. Find the complement of each of the following angles:

(i) 20^0 (ii) 63^0 (iii) 57^0 (iv) 44^0

14. Find supplement of each of the following angles:

(i) 120^0 (ii) 105^0 (iii) 87^0 (iv) 154^0

Solve: Each carry three marks

1. A plane is flying at the height of 5000m above the sea level. At a particular point, it is exactly above a submarine floating 1200 m below the sea level. What is the vertical distance between them?
2. In a quiz, team, A scored -40, 10, 0 and team B scored 10,0,-40 in three successive round. Which team scored more? can we say that we can add integers in any order?
3.

4.

Shade: (i) $\frac{1}{2}$ of the circles in box (a)   (ii) $\frac{2}{3}$ of the triangles in box (b)

(iii) $\frac{3}{5}$ of the squares in box (c).
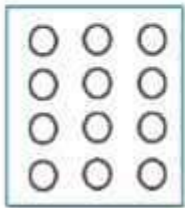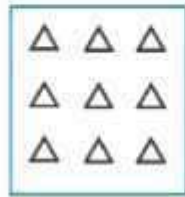
(a)   (b)   (c)

5.

: The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

Days	Rain fall (in mm)
Monday	0.0
Tuesday	12.2
Wednesday	2.1
Thursday	0.0
Friday	20.5
Saturday	5.5
Sunday	1.0

(i) Find the range of the rainfall in the above data.

(ii) Find the mean rainfall for the week.

(iii) On how many days was the rainfall less than the mean rainfall.

6.

The weights (in kg.) of 15 students of a class are:

38, 42, 35, 37, 45, 50, 32, 43, 43, 40, 36, 38, 43, 38, 47

(i) Find the mode and median of this data.

(ii) Is there more than one mode?

7. Irfan says that he has 7 marbles more than five times the marbles permit has. Irfan has 37 marbles. How many marbles does permit have?

8. Laxmi'father is 49 years old. He is 4 years older than three times Laxmi's age . What is Laxmi's age?

9. State the property that is used in each of the following statements?
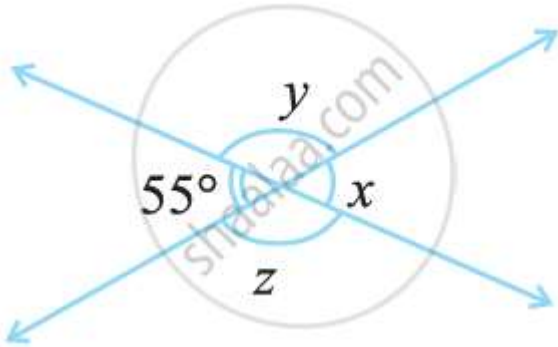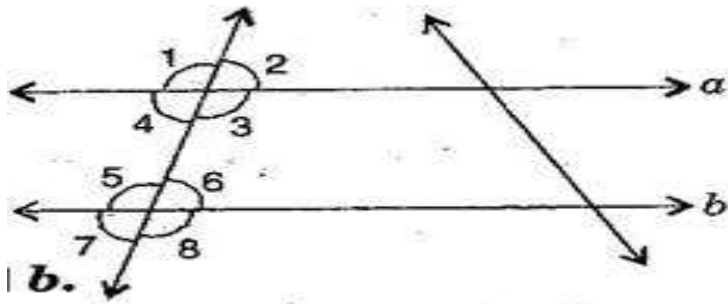
11. Find the values of the angles x, y and z in each of the following:

(ii)
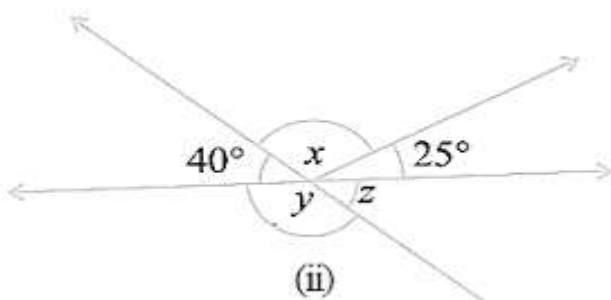
12. PQR is a triangle, right angled at P. If PQ = 10cm and PR = 24cm, find QR

QUESTION 4

Solve: Each carry four marks

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

6, 15, 120, 50, 100, 80, 10, 15, 8, 10, 15. Find mean, mode and median of this data

2.

Following number line shows the temperature in degree celsius (°C) at different places on a particular day.
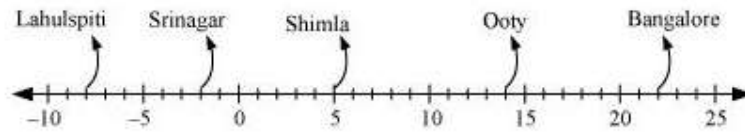
(a) Observe this number line and write the temperature of the places marked on it.

(b) What is the temperature difference between the hottest and the coldest places among the above?

(c) What is the temperature difference between Lahulspiti and Srinagar?

(d) Can we say temperature of Srinagar and Shimla taken together is less than the temperature at Shimla? Is it also less than the temperature at Srinagar?

3. A car covers a distance of 89.1 km in 2.2 hours. What is the average distance covered by it in 1 hour?

4. Saili plants 4 saplings, in a row, in her garden. The distance between two adjacent saplings is ¾ m. Find the distance between the first and the last sapling.

5. Solve the following equations:

   (i) $2(x + 4) = 12$ (ii) $3(n - 5) = -21$

6. A tree is broken at a height of 5m from the ground and its touches the ground at a distance of 12m from the base of the tree. Find the original height of the tree.
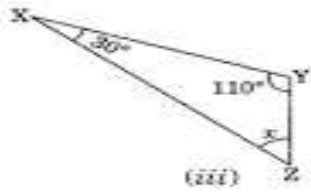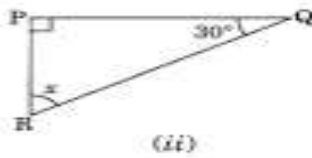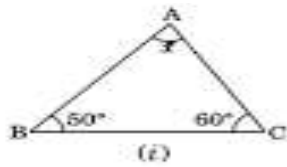
7.

In △PQR, D is the mid-point of $\overline{QR}$.
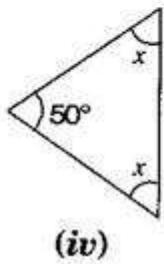
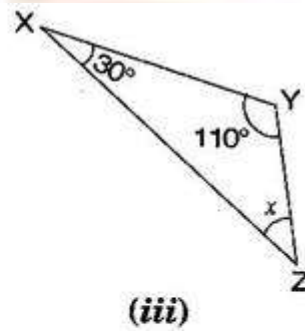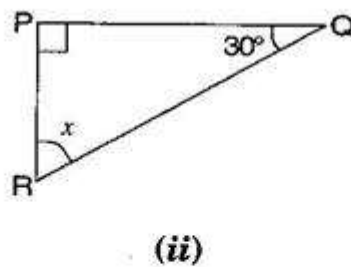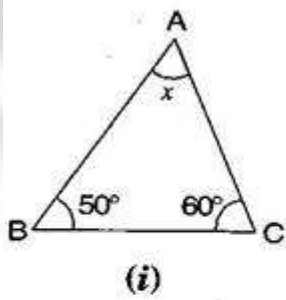$\overline{PM}$ is _____

PD is _____

Is QM = MR ?
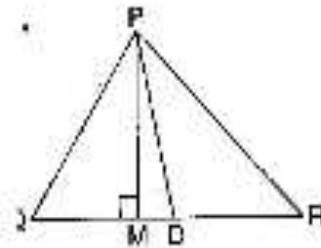
8. . Find the value of the unknown angle x in the following diagrams:
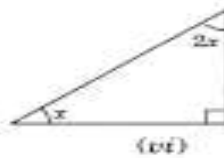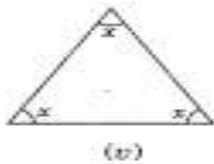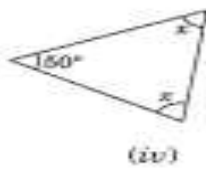
9. Find the value of the unknown angle x in the following diagrams

(i)   (ii)   (iii)

(iv)   (v)   (vi)
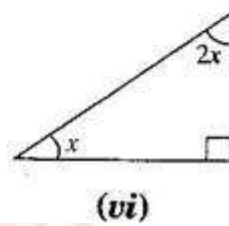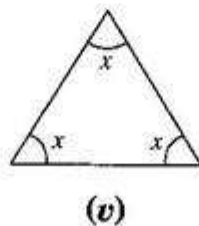
THE – END

PAPER FORMATE

PART – A

MULTIPLE CHOICE QUESTIONS	**[1 X 6 = 6]**
FILL IN THE BLANK	**[1 x 4 = 4]**
STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE	**[6 X $\frac{1}{2}$ = 3]**
WRITE ANSWER IN ONE WORD	**[1 X 6 = 6]**

PART – B

SOLVE: EACH CARRY TWO MARKS	**[2 X 5 = 10]**
SOLVE: EACH CARRY THREE MARKS	**[3 X 5 = 15]**
SOLVE: EACH CARRY FOUR MARKS	**[4 X 4 = 16]**