M - 41

DISTRICT COMMON EXAMINATION BOARD - MAHABUBNAGAR

SUMMATIVE ASSESSMENT - I - 2021 - 2022

MATHEMATICS

(English Medium)

PART - A & B

Class : VII] **(Max. Marks : 80)** **[Time : 2:45 Hrs.**

Instructions :

1) **In this time duration of 2 hours 45 minutes, 15 minutes of time is allotted to read and understand the question paper.**
2) **Answer the questions under Part - A on a separate answer booklet.**
3) **Write the answers to the questions under Part - B on the question paper itself and attach it to the answer booklet of Part - A.**

Marks : 70 **PART - A** **Time : 2 :00 Hrs.**

SECTION - I **7 x 2 = 14**

Note : 1) **Solve ALL the following problems.**

2) **Each problem carries 2 marks.**

1. Find the product $\frac{9}{5} \times \frac{10}{3} \times \frac{1}{4}$.
2. Solve the equation $5x - 8 = 3x - 2$ by using transposition method.
3. Find the value of $17 \times (-6) + (-6) \times (-34)$ by using suitable properties of integers.
4. Gauthami stated that "the complementary angles are always acute angles." Do you agree with her ? Why ?
5. Write the formula for simple interest and explain the terms in it.
6. Write 974.035 in expanded form.
7. Three times of a number reduces by 13 equals to 47. Find the number.

[Turn Over

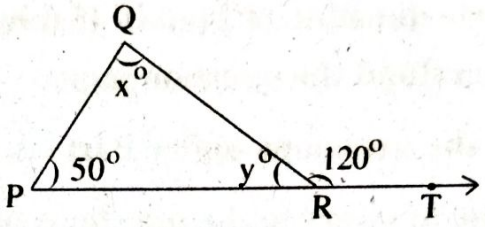
SECTION - II

6 x 4 = ?

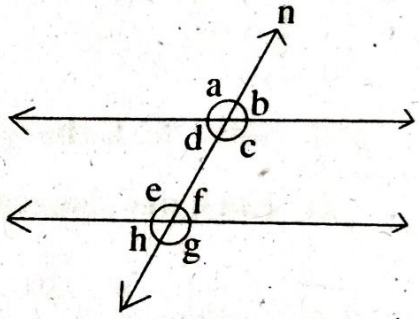
Note : 1) **Solve ALL the following problems.**

2) **Each problem carries 4 marks.**

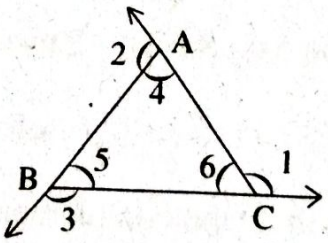
8. Find the simple interest on a certain sum Rs. 3000 for 2 years at 9% per annum.
9. Pavani said that "the length of the sides 6 cm, 5 cm, and 8 cm form a triangle". Do you agree with her ? Why ? Give reason.
10. Find the values of x and y from the given figure.



11. Abhinayasri stated that "the commutative property is true in set of integers under addition and multiplication". Do you agree with her ? Why ? Give reasons.
12. Write from the given figure.
    i) Interior angles
    ii) Exterior angles
    iii) Corresponding angles
    iv) Alternate interior angles



13. Show that the sum of exterior angles is 360° from the figure.



SECTION - III

4 x 8 = 32

Note : 1) **Solve ALL the following problems.**

2) **In this section every problem has internal choice to answer.**

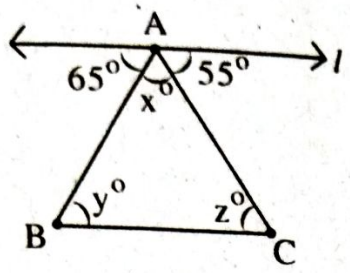
3) **Each problem carries 8 marks.**

14. A) Solve $7(x + 5) = 5(2x - 1)$.

(Or)

[Contd... 3rd

14) In the given figure $\overline{l} \parallel \overline{BC}$. Find the values of x, y and z.



15. A) If the monthly incomes of seven employees are Rs. 18,500; Rs. 16,000; Rs. 13,500; Rs. 11,000; Rs. 12,700; Rs. 15,000 and Rs. 19,700, then find the median of incomes.

(Or)

B) 20 kg. of rice is needed to a family of four members. If the number of family members is increased to 10, then find how many kg. of rice is needed.

16. A) The length of a rectangle is 5 lessthan the double of its breadth. If the perimeter of the rectangle is 32, then find the length and breadth of the rectangle.

(Or)

B) In a triangle, the exterior angle is 105° and the opposite interior angles are in the ratio 2 : 5. Find the angles of the triangle.

17. A) The marks of six students of 7^{th} class in Mathematics are given the following table.

Name of the student	Kavitha	Vinod	Radhika	Raghu	Tharun	Ravi
Marks	70	35	65	90	22	50

Draw the bar graph for the above information.

(Or)

B) Draw the following shapes.

i) Equilateral triangle

ii) Isosceles triangle

iii) Scalene triangle

iv) Right angle triangle

Regd. No. [ ] **M - 41 (A)** Marks : [ ]

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MATHEMATICS

(English Medium)

PART - B

Class : VII] **(Marks : 10)** **[Time : ½ Hr.**

Name of the Student : ..... Roll No. : .....

Instructions :

1) **Answer ALL the following questions.**

2) **Each question carries 1 mark.**

3) **Write the CAPITAL LETTERS (A, B, C, D) showing the correct answer for the questions in the brackets provided against them.** **10 x 1 = 10**

1. $(-13) \times 0 \times (-7) =$ _____ [ ]

   A) 20 B) 91

   C) 0 D) 21

2. $\frac{6}{7}$ of 42 is [ ]

   A) 36 B) 48

   C) 49 D) 55

3. If $\frac{p}{7} = -4$ then value of p is [ ]

   A) $\frac{-4}{7}$ B) – 28

   C) 28 D) $\frac{-7}{4}$

4. If the cost of one dozen banana is Rs. 20, then the cost of 9 bananas is [ ]

   A) ₹ 12 B) ₹ 14

   C) ₹ 29 D) ₹ 15

[Turn Over

5. If the angles $(2x + 15)^o$ and $(x - 45)^o$ are complementary, the value of x^o is [ ]

A) 60^o B) 40^o

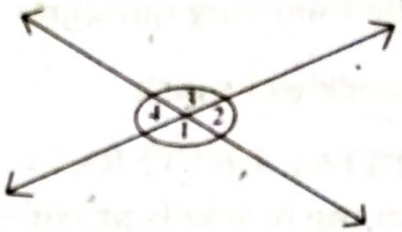
C) 75^o D) 90^o

6. If a human heart beats 72 times per minute, then how many times it beats in 15 seconds [ ]

A) 15 times B) 72 times

C) 18 times D) 57 times

7. In the given figure a pair of vertically opposite angles is [ ]



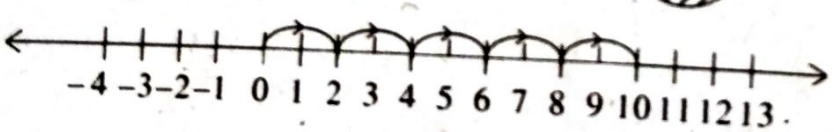
A) $(\angle 1, \angle 3)$ B) $(\angle 4, \angle 3)$

C) $(\angle 1, \angle 2)$ D) $(\angle 2, \angle 3)$

8. $\frac{3}{6}$ represents [ ]

A)  B) 

C)  D) 

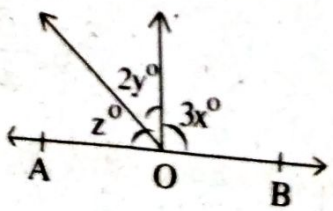
9. 

represents [ ]

A) 2 x 5 B) 2 x 3

C) 2 x 4 D) 2 x 6

10. Which of the following is true ? [ ]



A) $x + 2y = 180^o$ B) $3x + 2y + z = 180^o$

C) $z + 3x = 180^o$ D) $z + 2y = 180^o$