



# U. S. OSTWAL INTERNATIONAL SCHOOL

OSTWAL WONDER CITY, BOISAR (E)

TERM -I

Name : \_\_\_\_\_

Grade : VII

Subject : Maths

Time: 2.5 hrs

Date: \_\_\_\_\_

Marks: 80

Roll No: \_\_\_\_\_

## General Instructions:

- All questions are compulsory
- Do not write the questions. Directly write the answers.
- Write the paper neatly. Reading time: 15 minutes

### SECTION A (40 Marks)

Attempt any -4 questions from this section

#### Question 1.

A.Solve :- (4)

1. Find x such that :-  $x:7::12:84$
2. Find mean proportion between 3 and 12

B.Convert the ratio into percentage 4:25. (3)

C.If A and B are two sets such that  $n(A \cup B) = 18$ ,  $n(A) = 8$  and  $n(B) = 15$ , find  $n(A \cap B)$ . (3)

#### Question 2.

A.Find the difference between.  $ab + 3bc + 2a^2 - 5b^2$  and  $5a^2 - 6b^2 + 10ab$  (3)

B.Divide:-  $40p^2q^3$  by  $8pq^2$ . (3)

C Find the third proportion of the following Rs.5, Rs25 (4)

#### Question 3

A.If  $X = -1$ , find the value of the following expression (4)

1.  $3x - 1$
2.  $-x^3 - x^2 + x - 1$

B.Find the number whose 64% is 512. (3)

C.Find the two numbers whose sum is 55 and difference is 7 (3)

#### Question 4

A. If  $K = \{5, 10, 15, 20, 25\}$ ,  $L = \{10, 20, 30, 40, 50\}$ ,  $M = \{4, 8, 12, 16, 20, 24\}$ . and  $P = \{8, 10, 12, 14, 16, 30, 24\}$  then find : (4)

1.  $K - L$
2.  $M - P$
3.  $P - K$
4.  $L - M$

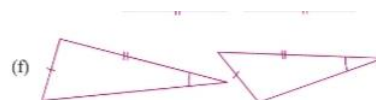
B.If  $[P/q] = [-2/3]9 \div [-2/3]8$ , find the value of  $[p/q]2$

C .Solve the following equations. (3)

1.  $3x + 14 = 14$
2.  $5p - 16 = 69$

#### Question 5

A.State following pair of triangle are congruent state the criteria Of congruence (3)



B.Express the ratio in simplest form :- 200% (3)

C. The sides of triangle are  $(X + Y)$  cm,  $(3x + 5)$  cm and  $(10x - 3y)$  cm. (4)  
Find the perimeter of triangle.

**SECTION B (40 marks)**

**Attempt any 4 questions from this section**

**Question 6**

A Write equations for the following statement (3)

1. The sum of 9 times a and 6 is 24
2. A number b is divide by 5 gives 7

B Identify the monomials binomials in the following:- (3)

- $7xy-a$ ,  $14/17q$ ,  $-13$   
 $9-xyz+Y^2$ ,  $ab-a^2$ ,  $13/5 \times 2y^2$

B. 1. What percentage of 450 kg is 44 kg (4)  
2. Find 85% of 7500 kg?

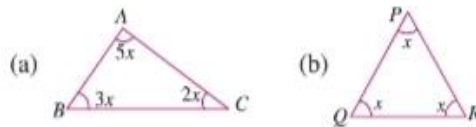
**Question 7**

**A.Solve** (3)

1.  $3/11 \times (-7/19)$
2.  $7/13 \div (-4/65)$

B. Express which of the following using exponential notation. (3)

1. 27,000.
2. -343



C. Find the unknown angle in the following figure. (4)

**Question 8.**

A. If a number increase from 650 to 715 find the increase (3)  
In percentage?

B. Two complementary angles are in the ratio 4 :5 find the (4)  
Angle

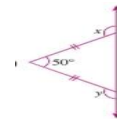
C. Write the complement of angle  $20^\circ - x$  (3)

**Question 9**

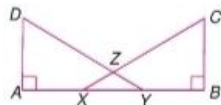
A. Check weather  $\Delta ABC$  is equilateral or isosceles :- (3)

1.  $\angle A = x + 30^\circ$ ;  $\angle B = 2x + 5^\circ$ ;  $\angle C = 3x - 5^\circ$
2. One angle of a triangle is  $70^\circ$  and the other two angle (3)  
Are in the ratio 5:6 find these angles.

B. Use the property of triangle to find the unknown angle. (3)



C. In the adjoining figure  $DA = CB$  and  $AX = BY$ . Prove that. (4)  
 $\Delta DAY \sim \Delta CBX$ .



**Question.10**

A. Shahid can complete a work in 12 hour and Rahul can do same (3)  
Work in 15 hours how long will it take to complete it if they  
Work together?

B. Evaluate :-  $(a+b)(a-b)$ . (3)

D. Some of the three consecutive odd natural number is 105. (4)  
Find the largest of three number.

**\*ALL THE BEST\***

