

# LWS

## IX- Semi English IX ( English )

(Worksheet-1 Math-1 (Ch-1,2))

Mathematics Part - 1

DATE: --/--/--

TIME: 1 hrs

MARKS: 20

Roll NO:

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Q.1 A) Choose the correct alternative.

(4)

- $m \times (n \times o) = (m \times n) \times o$  is ..... property of rational numbers.  
a. Commulative      b. Inverse      c. Identity      d. Associative
- Write the rational number  $0.\overline{3}$  in  $\frac{p}{q}$  form. q  
a.  $\frac{33}{100}$       b.  $\frac{3}{10}$       c.  $\frac{1}{3}$       d.  $\frac{3}{100}$
- The decimal expansion of rational number is always either ..... or ..... type.  
a. Terminating  
b. Non terminating and recurring  
c. Non terminating and non recurring  
d. Both a and b
- All the elements of set P and set P' together form ..... set.  
a. Null set      b. Singleton set      c. Universal set      d. None of the above.

B) Solve the following questions. (Any one)      (2)

- Write the following sets using rule method.  
 $B = \{6, 12, 18, 24, 30, 36, 42, 48\}$
- a) Write the subset relation between the sets.  
P is the set of all residents in Pune.  
M is the set of all residents in Madhya Pradesh.  
I is the set of all residents in Indore.  
B is the set of all residents in India.      H  
is the set of all residents in Maharashtra.  
b) Which set can be the universal set for above sets?

Q.2 A) Complete the following Activities. (Any one)

(2)

- Write the following numbers in its decimal form..  
 $\frac{9}{11}$   
 $\frac{9}{11} = \underline{\hspace{2cm}}$
- Write the following sets using rule method.  
 $D = \{\text{Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday}\} = \{\underline{\hspace{2cm}}\}$

B) Solve the following questions. (Any one)      (2)

- Decide whether set A and B are equal sets. Give reason for your answer.  
 $A = \text{Even prime numbers}$        $B = \{x \mid 7x - 1 = 13\}$

2) Compare the surds :  $7\sqrt{2}$ ,  $5\sqrt{3}$

Q.3 Solve the following questions. (Any one) (3)

1) Multiply

$$(3\sqrt{2}-\sqrt{3})(4\sqrt{3}-\sqrt{2})$$

2) Write the simplest form of rationalizing factor for the given surds :  $\frac{3}{5}\sqrt{10}$

Q.4 Solve the following questions. (Any one) (4)

1) In a class of 70 students, 45 students like to play Cricket. 52 students like to play Kho- Kho. All the students like to play atleast one of the two games. How many students like to play Cricket or Kho - Kho?

2) Represent the numbers  $\sqrt{5}$  on a number line.

Q.5 Solve the following questions. (Any one) (3)

1) Write the simplest form of rationalizing factor for the given surds :  $\sqrt{27}$

2) Represent the union of two sets by Venn diagram for each of the following.

$$X = \{x|x \text{ is a prime number between } 80 \text{ and } 100\}$$

$$Y = \{y|y \text{ is an odd number between } 90 \text{ and } 100\}$$