Class XI
Chapter 1 - SETS
MODULE 1/2
Worksheet

One mark questions

1 Let A = {1,3,{1,2},5 ,7, 8}.Then which of the following statements is true

a) $\{1,2\} \in A$ b) $\{1,2\} \subset A$

2 Collection of five most renowned mathematicians of the world is a set. (True/False)

3 The collection of real numbers less than 100 is a set.(True/False)

4 Write the following set in roster form: $A = \{x : x \text{ is an integer and } -8 \leq x < 8\}$

5 Write the set of all vowels in the English alphabet which precede k.

6 Write the following sets in the set-builder form : P= {4,8,12,16}

Two marks questions

7 Is the following pair of sets equal? Give reasons.

A = {2, 3}, B ={ x : x is solution of x + 5x + 6 = 0}

8 In the following, state whether A = B or not: A = { a, b, c, d } B = { 1, 2, 3, 4 }.Give reason

9 State whether each of the following set is finite or infinite:

The set of lines which are perpendicular to the y-axis.

The set of circles passing through the (2,4)

The set of numbers which are divisible by 10.

10 Let A = {1, 2, 3 }, B = {1, 3, 5, 9}, C = {1, 3, 5, 7, 9}. Insert the symbol $\subset$ or $\not\subset$ between each of the following pair of sets: (i) ϕ . . . B (ii) A . . . B (iii) A . . . C (iv) B . . . C

11 Are the following pair of sets equal?. Give reasons.

A = {-4, 3}, B = {x : x is solution of $x^2 + x - 12 = 0$}

12 Let A = {1}, B = {{1}, 2} and C = {{1}, 2, 3}. Is it true that $A \subset C$? Give reason.

13 From the sets given below, select equal sets :

A = { 1, 4, 8, 12}, B = { 1, 2, 3, 4}, C = {1, 4, 8, 12, 14}, D = { 3, 1, 4, 2} E = {–1, 1},

F = { 0, a}, G = {1, –1}, H = { -1, 0, 1}

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