ASPIRANTS'

IIT-JEE/NEET FOUNDATION

CLASS: VI	IIT-JEE/NEET MODEL TEST PAPER	DATE:
MAX. MARKS: 50		TIME: 60 MINUTES

SECTION-I : (S.C.A.T) - (7 × 3 = 21 M)

1. If two sets have no element in common, then they are considered as _____ sets.

A) Disjoint B) Overlapping
C) Joint D) Ordered

2. If A and B are two sets, every element of A is in B then B is a _____ of A.

A) Sub set B) Power set
C) Super set D) Proper set

3. If n(A) = 5 then the number of sub sets of A is _____

A) 16 B) 0 C) 25 D) 32

4. Let A = {0}, then, which of the following is correct?

A) P(A) = $\{\phi, \{0\}\}$ B) n(P(A)) = 2 = 2^1
C) Both (1) & (2) D) None of these

5. If A= {1, 3, 5, 6} then n(p(A))=

A) 5 B) 31 C) 16 D) 32

6. μ = {2, 3, 4, 5, 6, 7, 8, 9, 10} and A = {2, 3, 5} then A^c is

A) {4, 6, 7, 8, 9, 10} B) {4, 6, 9, 10}
C) { } D) {3, 5, 9, 10}

7. Which of the following is an infinite set?

A) The set of all factors of 248

B) The set of all natural numbers from 5 to 555

C) The set of all multiples of 7

D) The set of all whole numbers less than 1000

SECTION-II : (M.C.A.T) - (3 × 4 = 12 M)

8. Which of the following is/are infinite set(s) ?

A) $A = \{x : x \in z \text{ and } x^2 - 5x + 6 = 0\}$

B) $B = \{x : x \in z \text{ and } x^2 \text{ is even}\}$

C) $C = \{x : x \in z \text{ and } x^2 = 36\}$

D) $D = \{x : x \in z \text{ and } x > -10\}$

9. Which of the following sets are singleton sets ?

A) The set of months whose names begin with the letter F

B) The set of numbers divisible by 11 and lying between 100 and 110

C) The set of even prime numbers

D) The set of factors of a numeral 1

10. Which of the following objects form a set?

A) All problems in the exercise

B) All the members of your class

C) All good students of your school

D) First six days in a weak

SECTION-III : (C.T) - (3 × 3 = 9 M)

The number of elements in a set is called cardinal number of the set.

11. Let A = { 1, 2, 3, 4, 5, 6, 7}, then the number of elements in set A is ____

A) 4 B) 5 C) 6 D) 7

12. The cardinal number of set A = { a, b, c, d} is

A) 3 B) 4 C) 5 D) 6

13. The number of set of letters in the word "BAMBOO" is

A) 3 B) 4 C) 5 D) 6

SECTION-IV : (M.M.T) - (4 × 2 = 8 M)

The roster forms of the following set-builder form

Column - I

14. $\{x / x \in Z, -3 < x < 3\}$

15. $\{x / x = 3n, n \in W, 0 \le n \le 4\}$

16. $\{x / x = n^2, n \in N, 1 \le n \le 5\}$

17. $\left\{x / x = \frac{n}{n+1}, n \in N\right\}$

Column - II

A) $\left\{\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, ...\right\}$

B) $\{-2, -1, 0, 1, 2\}$

C) $\{1, 4, 9, 16, 25\}$

D) $\{0, 3, 6, 9, 12\}$