

Mathematics ECAT Pre Engineering Chapter 2 Set, Functions and Groups Online Test

| Sr | Questions | Answers Choice |
|----|---|---|
| 1 | The set of natural is a semi group w.r.t | A. Addition B. Division C. Subtraction D. None of these |
| 2 | A - B = | |
| 3 | Question Image | D. None of these |
| 4 | If f:A→B is an injective function and second elements of no two of its ordered pairs are equal, then f is called | A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these |
| 5 | Question Image | A. 1/x Bx C. 2x D. 0.5 x |
| 6 | The set {{a,b}} is | A. Infinite set B. Singleton set C. Two points set D. None |
| 7 | In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics | A. 40 B. 30 C. 50 D. 20 |
| 8 | If $P = \{x/x = p/q \text{ where } p,q \in Z \text{ and } q \neq 0\}$, then P is the set of | A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers |
| 9 | Question Image | |
| 10 | Question Image | |
| 11 | Every subset of a finite set is | A. Disjoint B. Null C. Finite D. Infinite |
| 12 | Question Image | A. Singleton set B. A set with two points C. Empty set D. None of these |
| 13 | The number of proper subset of A ={a.b.c.d} is | A. 3 B. 6 C. 8 D. 15 |
| 14 | The set {Z\{0}} is group w.r.t | A. Addition B. Multiplication C. Division D. Subtraction |
| 15 | Question Image | |
| 16 | Every set is an improper subset of | A. Empty set B. Equivalent set C. Itself D. Singleton set |
| 17 | The function $f\{(x, y) \mid y = ax^2 + bx + c\}$ is | A. One-one function B. Constant function C. Onto function D. Quadratic function |
| 18 | Question Image | |
| | | A Forms a group wirt addition |

| 19 | The set (Z,+) forms a group | B. Non commutative group w.r.t multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group |
|----|-----------------------------|---|
| 20 | Question Image | A. A B. B C. A' D. None of these |