

ECAT (Pre-Eng) Mathematics Chapter 4 Functions and Groups

| Sr | Questions | Answers Choice |
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| 1 | Function is a special type of | A. relation B. ordered pairs C. cartesian product D. sets |
| 2 | A relation A into B in which Domain is not equal to A, is called | A. into function B. onto function C. None of these D. surjective |
| 3 | If A is non-empty set, any subset of $A \times A$ is called a relation in a | A. A B. B C. D D. r |
| 4 | Let A and B be two non-empty sets, then any subset of the cartesian product $A \times B$ called a | A. Function B. Domain C. Range D. Binary relation |
| 5 | $ax+by+c = 0$, represents a | A. Circle B. Parabola C. Straight line D. Quadratic circle |
| 6 | The net of cartesian product $A \times B$ consists of | A. domain B. range C. binary relation D. ordered pair |
| 7 | Which of the following diagrams represent into function? | |
| 8 | If no two elements of ordered pairs of a function from A onto B are the same, then it is called | A. surjective B. injective C. bijective D. on to |
| 9 | $ax+by+c = 0$, represent a | A. circle B. parabola C. straight line D. quadratic circle |
| 10 | Function is a special type of | A. relation B. ordered pairs C. Cartesian product D. Set |
| 11 | The graph of a constant line is | A. vertical line B. parabola C. circle D. horizontal line |
| 12 | Addition is not operation on | A. Natural numbers B. Even numbers C. odd numbers D. set of integers |
| 13 | A semi-group having an identity is called a | A. groupoid B. non-commutative C. abelian D. monoid |
| 14 | Such a function which is $(1 - 1)$ is called | A. surjective B. injective C. bijective D. into |
| 15 | A function f will have an inverse function if and only if it is a | A. onto function B. into function C. Constant D. one-one function |
| 16 | $(a,b) (c,d)$ if and only if | A. $a = b$ and $c = d$ B. $a = d$ and $b = c$ C. $a = c$ and $b = d$ |

$$D. a - b = c - d$$

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| 17 | If A is non-empty set, any subset of $A \times A$ is called a relation in | A. A B. B C. \emptyset D. r |
| 18 | Which of the following represent injective function | |
| 19 | Let A and B be two non-empty sets, then any subset of the cartesian product $A \times B$ is called a | A. function B. domain C. range D. binary relation |
| 20 | Question Image | |