

SLIP TEST-1

CLASS:X

SUB: MATHEMATICS

UNIT-1. RELATIONS AND FUNCTION

TOPIC: TYPES OF FUNCTIONS

Choose the correct answers:

1. Constant function is an example of-----

A) One-one function B) Many-one function C) Linear function D) Quadratic function

2. Reciprocal function is an example of-----

A) One-one function B) Many-one function C) Linear function D) Bijection

3.-----is used to check whether given graph is function or not.

A) Horizontal line test B) Vertical line test C) arrow diagram D) set of ordered pairs

4.-----is used to check whether given graph is one-one or Many-one function.

A) Horizontal line test B) Vertical line test C) arrow diagram D) set of ordered pairs

5. If $A = \{0, 1, 2, 3\}$, $B = \{0, 1, 4, 9\}$, $f(x) = x^2$ then, identify the type of function

A) One-one & onto B) Many-one & into C) One-one & into D) Many one & onto

6. If $A = \{-3, -2, -1, 0, 1, 2, 3\}$, $B = \{0, 1, 4, 9\}$, $f(x) = x^2$ then, identify the type of function

A) One-one & onto B) Many-one & into C) One-one & into D) Many one & onto

7. If every element in B has a pre-image in A, then Which of the following is true?

A) $\text{Range} = \text{Codomain}$ B) $\text{Range} \neq \text{codomain}$ C) $\text{Range} \subset \text{Codomain}$ D) $\text{Range} \subseteq \text{Codomain}$

8. If there exist at least one element in B which is not the image of any element of A, then Which of the following is true?

A) $\text{Range} = \text{Codomain}$ B) $\text{Range} \neq \text{domain}$ C) $\text{Range} \subset \text{Codomain}$ D) $\text{Range} \subseteq \text{Codomain}$

9. If $A = \{-2, -\frac{1}{2}, -1, 0, \frac{1}{2}, 1, \frac{3}{2}, 2\}$, $B = \{1, \frac{5}{4}, 2, \frac{13}{4}, 5\}$ and $\text{Range} = \{1, \frac{5}{4}, 2, \frac{13}{4}, 5\}$, then type of function is-----

A) Modulus function B) Many-one function C) Real valued function D) Real function

10. Identity function is an example of-----

A) One-one function B) Multiplicative identity function C) Linear function

D) All the above