Unit 5 Sets and Functions

1	A collection of well-defined objects is called	Subset	Power set	✓Set	None of these
2	A set $Q = \left\{\frac{a}{b} \mid a, b \in Z \wedge b \neq 0\right\}$ is called a set of	Whole number	Natural number	Irrational number	✓Rational number
3	The different number of ways to describe a set	1	2	✓3	4
4	A set which has no elements is called	Subset	✓Empty set	Singleton set	Super set
5	The set $\{x \mid x \in W \wedge x \leq 101\}$ is	Infinite set	Subset	Null set	✓Finite set
6	The set having only one element is called	Null set	Power set	✓Singleton set	Subset
7	Power set of an empty set is	φ	$\{a\}$	$\{\phi, \{a\}\}$	✓$\{\phi\}$
8	The number of elements in power set $\{1,2,3\}$ is	4	6	✓8	9
9	If $A \subseteq B$, then $A \cup B$ us equal to	A	✓B	ϕ	None of these
10	If $A \subseteq B$, then $A \cap B$ us equal to	✓A	B	ϕ	None of these
11	If $A \subseteq B$, then $A - B$ us equal to	A	B	✓ϕ	$B - A$
12	$(A \cup B) \cup C$ is equal to	$A \cap (B \cup C)$	$(A \cup B) \cap C$	✓$A \cup (B \cup C)$	$A \cap (B \cup C)$
13	$A \cup (B \cap C)$ is equal to	✓$(A \cup B) \cap (A \cup C)$	$(A \cap B) \cup (A \cap C)$	$A \cap (B \cup C)$	$A \cup (B \cup C)$
14	If A and B are disjoint sets, then $A \cup B$ is equal to	A	B	ϕ	✓$B \cup A$
15	If the number of elements in set A is 3 and the number of elements in set B is 4, then the number of elements in $A \times B$ is equal to	3	4	7	✓12
16	If the number of elements in set A is 2 and the number of elements in set B is 3, then the number of binary relation in $A \times B$ is equal to	2^3	✓2^6	2^8	2^2
17	The domain of $R = \{(0,2), (2,3), (3,3), (3,4)\}$ is	$\{0,3,4\}$	✓$\{0,2,3\}$	$\{0,2,4\}$	$\{2,3,4\}$
18	The range of $R = \{(1,3), (2,2), (3,1), (4,4)\}$ is	$\{1,2,4\}$	$\{3,2,4\}$	✓$\{1,2,3,4\}$	$\{1.3.4\}$
19	Point $(-1,4)$ lies in quadrant	I	✓II	III	IV
20	The relation $\{(1,2), (2,3), (3,3), (3,4)\}$ is	Onto function	Into function	✓Not a function	One-one function