



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**SUBJECT – Arithmetic**

**Marks: 15**

**CLASS 8**

**Work sheet 2**

**SETS(continued)**

**Date:8.4.2020**

**Answer all the following questions(1×15=15)**

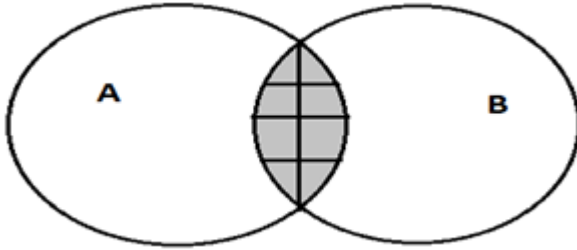
- Which of the following is subset of set  $\{1, 2, 3, 4\}$ .
  - $\{1, 2\}$
  - $\{1, 2, 3\}$
  - $\{1\}$
  - All of the mentioned
- $A = \{\emptyset, \{\emptyset\}, 2, \{2, \emptyset\}, 3\}$ , which of the following is true.
  - $\{\{\emptyset, \{\emptyset\}\} \in A$
  - $\{2\} \in A$
  - $\emptyset \subset A$
  - $3 \subset A$
- Subset of the set  $A = \{ \}$  is:
  - A
  - $\{ \}$
  - $\emptyset$
  - All of the mentioned
- What is the cardinality of the set of odd positive integers less than 10?
  - 10
  - 5
  - 3
  - 20
- The union of the sets  $\{1, 2, 5\}$  and  $\{1, 2, 6\}$  is the set \_\_\_\_\_
  - $\{1, 2, 6, 1\}$
  - $\{1, 2, 5, 6\}$
  - $\{1, 2, 1, 2\}$
  - $\{1, 5, 6, 3\}$
- The intersection of the sets  $\{1, 2, 5\}$  and  $\{1, 2, 6\}$  is the set \_\_\_\_\_
  - $\{1, 2\}$
  - $\{5, 6\}$
  - $\{2, 5\}$

d) {1, 6}

7. Two sets are called disjoint if there \_\_\_\_\_ is the empty set.
- Union
  - Difference
  - Intersection
  - Complement
8. Which of the following two sets are disjoint?
- {1, 3, 5} and {1, 3, 6}
  - {1, 2, 3} and {1, 2, 3}
  - {1, 3, 5} and {2, 3, 4}
  - {1, 3, 5} and {2, 4, 6}
9. The difference of {1, 2, 3} and {1, 2, 5} is the set \_\_\_\_\_
- {1}
  - {5}
  - {3}
  - {2}
10. The complement of the set A is \_\_\_\_\_
- $A - B$
  - $U - A$
  - $A - U$
  - $B - A$
11. The set difference of the set A with null set is \_\_\_\_\_
- A
  - null
  - U
  - B
12. Let the set A is {1, 2, 3} and B is {2, 3, 4}. Then number of elements in  $A \cup B$  is
- 4
  - 5
  - 6
  - 7
13. Let the set A is {1, 2, 3} and B is {2, 3, 4}. Then number of elements in  $A \cap B$  is
- 1
  - 2
  - 3
  - 4

14. Let A be set of all prime numbers, B be the set of all even prime numbers, C be the set of all odd prime numbers, then which of the following is true?
- a)  $A \equiv B \cup C$
  - b) B is a singleton set.
  - c)  $A \equiv C \cup \{2\}$
  - d) All of the mentioned

15. The shaded area of figure is best described by



- a)  $A \cap B$
- b)  $A \cup B$
- c) A
- d) B

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