ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution

Sub: Arithmetic | **Class: 7** | **Date: 10.05.21**

Duration: 40 Min | **Worksheet Solution 27** | **Full Marks: 15**

SETS

Choose the correct options:

1. List all the elements in A= {letters in the word "BOOK"}.

   a. A= {B,O,K}
   b. A= {B,O,O,K}
   c. A= {B,K}
   d. A=Φ

2. Which symbol completes the statement correctly? {6}____{1,3,6}

   a. ϵ
   b. $\subset$
   c. =
   d. $\not\subset$

3. Q.
   Complete the statement correctly: Cow____ the set of all farm animals.

   a. ϵ
   b. $\subset$
   c. =
   d. $\not\subset$

4. Which of the following is a well-defined set?

   a. {a happy child}
   b. {a popular TV series}
   c. {a favorite book by my classmates}
   d. {a Mathematics book in the school library}

5. Which of these sets is equal to {L,O,V,E}?

   a. {O,V,E}
   b. {S,E,V,O,L}
   c. {O,E,L,V}
   d. {L,E,V}

6. Which of these sets is equivalent but not equal to {Ram, Jay, Mick}

   a. {Mick, Jay, Olga}
   b. {Jay, Mick, Ram}
   c. {Mick, Jay, Ram}
   d. {Andy, Ram, Ed, Jay}

7. Describe this set in words: {2,3,5,7,11,13,17,19}

   a. Set of prime numbers from 2 to 19
   b. Set of prime numbers less than 19
   c. Set of odd numbers less than 20
   d. Set of whole numbers less than 20

8. Which of the following statements is TRUE?

a. $2 \in \{1,3,5,7\}$
b. $\{5\} \in \{5,10,15,20,\}$
c. $6 \in \{x/x \text{ is an odd number}\}$
d. $3 \in \{x/x \text{ is a prime number}\}$

9. Consider M={vowels in the word "MATHEMATICS"}. Find n(M).

a. 4
b. 3
c. 7
d. 10

10. Write {even whole numbers between 3 to 15} using the roster method.

a. {3,5,7,9,11,13,15}
b. {5,7,9,11,13}
c. {4,6,8,10,12,14}
d. {2,4,6,8,10,12,14,16}

11. It is a collection of well-defined group of objects.

a. Element
b. Set
c. Cardinality
d. Universal Set

12. Which best describe the set

{0, 2, 4, 6, …}?

a. Set of all counting numbers divisible by 2
b. Set of all composite numbers
c. Set of all whole numbers divisible by 2
d. Set of rational numbers

13. What type of set is denoted as either { } or ∅?

a. Superset
b. Disjointed Set
c. Empty (or Null) Set
d. Subset

14. Given that

R = { factors of 36 }.

n(R) =

a. 6
b. 9
c. 12
d. 15

15. Which of the following is not a well-defined set?

a. The set of boys in your class
b. The set of even numbers
c. The set of students wearing red dress
d. All of these