

SETS**EMPTY SETS****EXERCISE**

- Q.1** Identify the one that is different
(a) Null set (b) Void set (c) Infinite set (d) Empty set
- Q.2** Which symbol represents the empty set in the following options?
(a) $()$ (b) $[]$ (c) $\{\}$ (d) $< >$
- Q.3** Which one of the following represents an empty set?
(a) Prime numbers up to 10
(b) Even numbers up to 10
(c) Prime numbers divisible by 2
(d) Prime numbers divisible by 3
- Q.4** Determine the count of points shared by parallel lines.
(a) Three points (b) One point (c) Two point (d) No point
- Q.5** Is the set $\{x : x \text{ is a natural number } x < 5 \text{ and } x > 7\}$ an empty set?
(a) True (b) False
- Q.6** Which one of the following is a null set?
(a) $\{x : x \text{ is a natural number and } x^2 = 4\}$
(b) $\{x : x \text{ is a rational number and } x^2 = 2\}$
(c) $\{x : x \text{ is an even prime number}\}$
(d) $\{x : x \text{ is name of the day of week}\}$
- Q.7** The cardinality of an empty set is _____.
(a) zero (b) one (c) two (d) any

- Q.8** Determine the solution to set $\{x : x \text{ is a natural number and } 2x+1=2\}$.
(a) $\{1\}$ (b) $\{2\}$ (c) $\{1/2\}$ (d) $\{\}$
- Q.9** What is the term for a set that contains no elements?
(a) Equivalent Set (b) Empty Set
(c) Equal Set (d) Infinite Set
- Q.10** Which one of the following is a set with no elements?
(a) The set of dogs with six legs
(b) The set of books in the library
(c) The set of boys in a school
(d) The set of a square with 4 sides
- Q.11** The null set is its own subset.
(a) True (b) False

ANSWER KEY

1. (c)
2. (c)
3. (d)
4. (d)
5. (a)
6. (b)
7. (a)
8. (d)
9. (b)
10. (a)
11. (a)