

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

**Q.1** Find the odd one out.

- |                  |               |
|------------------|---------------|
| (a) Null set     | (b) Void set  |
| (c) Infinite set | (d) Empty set |

**Q.2** Which of the following is representation of empty set?

- |         |         |
|---------|---------|
| (a) ( ) | (b) [ ] |
| (c) { } | (d) < > |

**Q.3** Which of the following is 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** Find the number of points common to parallel lines.

- |                  |               |
|------------------|---------------|
| (a) Three points | (b) One point |
| (c) Two point    | (d) No point  |

**Q.5** Is set  $\{x : x \text{ is a natural number } x < 5 \text{ and } x > 7\}$  a null set?

- (a) True
- (b) False

**Q.6** Which 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 number of elements in a null set is \_\_\_\_\_  
(a) zero (b) one  
(c) two (d) any
- Q.8** Find 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** A set with no elements in it is called?  
(a) Equivalent Set (b) Empty Set  
(c) Equal Set (d) Infinite Set
- Q.10** Which of the following is an empty set?  
(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** If B is a null set and A is some set then which one of the following is false?  
(a)  $B \subseteq A$  (b)  $B \cup A = A$   
(c)  $B \cap A = A$  (d)  $B \cap A = B$
- Q.12** The subset of a null set is the null set itself.  
(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. (c)
- 12. (a)