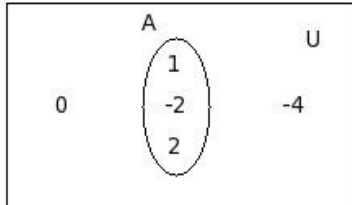




1. Which of the following symbols represent the set of Natural numbers ?

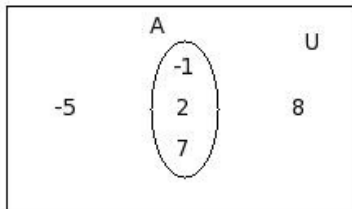
- (i) N (ii) Q (iii) Z (iv) R (v) W

2. Find  $\emptyset$



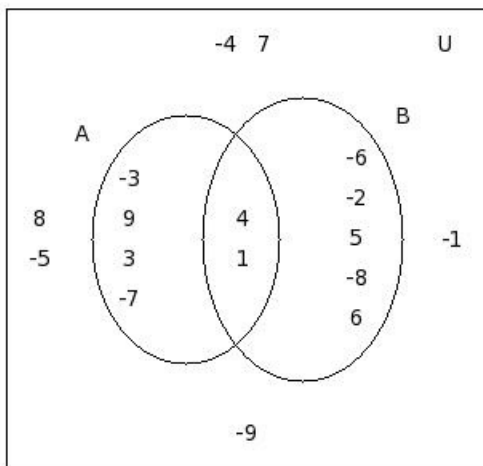
- (i)  $\{\}$  (ii)  $\{7\}$  (iii)  $\{2,7,1,4\}$  (iv)  $\{4\}$  (v)  $\{7,2\}$

3. Find  $n(A)$



- (i) 5 (ii) 2 (iii) 1 (iv) 3 (v) 4

4. Find  $A \cup B$



- (i)  $\{4,9,1,-7,-8,-3,3,5,-2,6,-6\}$  (ii)  $\{6,5,3,-8,9,-6,1,-3,-2,-7\}$  (iii)  $\{-8,9,1,-7,6,4,-2,3,-3,-6,5,7\}$   
 (iv)  $\{3,5,1,-6,6,4,-7,-8,-3,-2\}$  (v)  $\{3,1,9,4,6,5,-7,-6,8,-3,-8\}$

5. Which of the following is not equal to set  $A = \{5,9,3,8,4,0,6\}$ ?

- (i)  $\{0,4,3,9,5,8,6\}$  (ii)  $\{3,5,7,4,9,6,8\}$  (iii)  $\{0,5,6,4,8,9,3\}$  (iv)  $\{6,3,5,8,4,9,0\}$  (v)  $\{3,0,6,5,4,8,9\}$

6. If  $A = \{3,0,12,11,8,7\}$  and  $B = \{14,12,11,6,15,7\}$ , then  $A - B =$

- (i)  $\{0,17,3,8\}$  (ii)  $\{0,8\}$  (iii)  $\{12,3,0,8\}$  (iv)  $\{14,15,6\}$  (v)  $\{0,8,3\}$

7. Which of the following is 'equivalent set' symbol?

- (i)  $\leftrightarrow$  (ii)  $\subset$  (iii)  $\subseteq$  (iv)  $\cup$  (v)  $\notin$

8. If  $\mu = \{-8, -1, 4, -7, 6, 0, -2, 2, -5, 5, -4, 3, -6, 7\}$ ,  $A = \{-8, -1, 4, -7, 6, 0\}$  and  $B = \{-2, 6, 2, -5\}$ , find  $A - B$

- (i)  $\{-8, -7, 0, 5, 4\}$  (ii)  $\{-7, -8, -1, 4, 0, -4\}$  (iii)  $\{-8, -7, 0, -1\}$  (iv)  $\{\}$  (v)  $\{-7, 4, 0, -8, -1\}$

9. Which of the following is a null set?

- (i)  $\{-5, -4, 2, -2, 7\}$  (ii)  $\{3, -5\}$  (iii)  $\{\}$  (iv)  $\{3, -4, 7\}$  (v)  $\{9, -7, 1, -1\}$

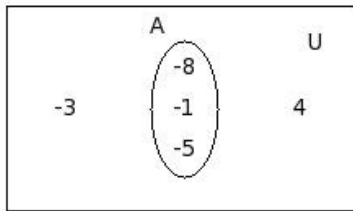
10. If  $A = \{1, 2, 5\}$  and  $B = \{4, 0, 3\}$ , then  $A \cup B =$

- (i)  $\{5, 2, 4, 0, 1\}$  (ii)  $\{3, 6, 0, 4, 5, 2\}$  (iii)  $\{3, 2, 6, 0, 4, 1, 5\}$  (iv)  $\{2, 4, 1, 3, 0, 5\}$  (v)  $\{3, 1, 0, 2, 4\}$

11. Which of the following elements does not belong to the set  $\{x, r, h, u, f\}$

- (i) h (ii) u (iii) y (iv) x (v) f

12. Find  $n(A \cap A)$



- (i) 3 (ii) 1 (iii) 2 (iv) 5 (v) 4

13. Given sets A, B and C, where  $A \subset B \subset C$ , which of the following are true?

- a)  $B \subset A$   
 b)  $\emptyset \subset B$   
 c)  $C \subset A$   
 d)  $C \supset B$   
 e)  $B \supset A$
- (i)  $\{b, d, e\}$  (ii)  $\{c, d\}$  (iii)  $\{a, c, e\}$  (iv)  $\{a, b, d\}$  (v)  $\{a, b\}$

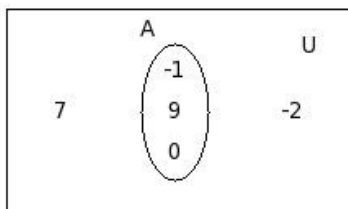
14. Which of the following is a singleton set?

- (i)  $\{3, -6, -8, -7, 9\}$  (ii)  $\{-7\}$  (iii)  $\{-1, -9, -3, -8\}$  (iv)  $\{3, 1, -2\}$  (v)  $\{2, 0\}$

15. Which of the following is a subset of  $A = \{0\}$ ?

- (i)  $\{\}$  (ii)  $\{2, 4, 1\}$  (iii)  $\{2, 4\}$  (iv)  $\{2\}$

16. Find  $A \cap \emptyset$



- (i)  $\{9\}$  (ii)  $\{5\}$  (iii)  $\{\}$  (iv)  $\{9, 0\}$  (v)  $\{3, 0, 9, 4\}$

17. Which of the following is 'universal set' symbol?

- (i)  $\notin$  (ii)  $\mu$  (iii)  $\cup$  (iv)  $\in$  (v)  $\neq$

18. Which of the following is 'belongs to' symbol?

- (i)  $\notin$  (ii)  $\in$  (iii)  $\cap$  (iv)  $\subset$  (v)  $\neq$

19. Which of the following is a null set?

- (i)  $\{\emptyset\}$  (ii)  $\{\text{empty}\}$  (iii)  $\{o\}$  (iv)  $\{0\}$  (v)  $\emptyset$

20. Which of the following is equivalent set of  $A = \{-2, 7, 2, -7, 9, 5\}$ ?

- (i)  $\{-7, -6, 7, 9\}$  (ii)  $\{-2, 7, 2, 9, 5\}$  (iii)  $\{6, -6, 5, 0, -8, 8, -9, 4\}$  (iv)  $\{-1, -3, 1, -6, 0, -4, -7\}$  (v)  $\{-1, -3, 1, -6, 0, -4\}$

21. Which of the following is an infinite set?

- (i)  $\{0, 1, 2, 3, 4, 5, 6, 7, 8, \dots\}$  (ii)  $\{9, -8, -3\}$  (iii)  $\{1\}$  (iv)  $\{-6, -8\}$  (v)  $\{\}$

22. If  $A \subset B$ , then which of the following are true?

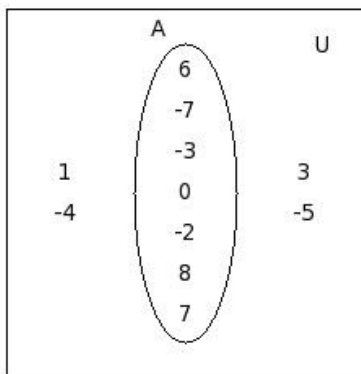
- a)  $A' = B$   
b)  $A' \subset B$   
c)  $B \supset A$   
d)  $B \subset A$   
e)  $A = B$

- (i)  $\{d, e, c\}$  (ii)  $\{a, c\}$  (iii)  $\{c\}$  (iv)  $\{b, c\}$

23. Which of the following elements belong to the set  $\{8, 7, 10, 4, 2\}$ ?

- (i)  $(-3)$  (ii)  $15$  (iii)  $14$  (iv)  $(-4)$  (v)  $2$

24. Find  $A \cap A$



- (i)  $\{-3, 6, -2, 8, 7, -7, 0\}$  (ii)  $\{-4, -1, 12, 8, -8, 6\}$  (iii)  $\{-1, 12, 8, -8, 6, 2, -4, 5\}$  (iv)  $\{-2, -3, 6, 8, 0, 7\}$   
(v)  $\{12, 8, 6, 0, -2, -3\}$

25. Which of the following is 'does not belongs to' symbol?

- (i)  $\subset$  (ii)  $\supseteq$  (iii)  $\neq$  (iv)  $\leftrightarrow$  (v)  $\notin$

## Assignment Key

1) (i)	2) (i)	3) (iv)	4) (i)	5) (ii)	6) (v)
7) (i)	8) (v)	9) (iii)	10) (iv)	11) (iii)	12) (i)
13) (i)	14) (ii)	15) (i)	16) (iii)	17) (ii)	18) (ii)
19) (v)	20) (v)	21) (i)	22) (iii)	23) (v)	24) (i)
25) (v)					