



1. Find the cardinality of  $A = \{8,1,4,-9,-6,9,7,-8\}$   
(i) 9 (ii) 7 (iii) 5 (iv) 11 (v) 8
2. If  $A = \{-9,6,-3,7,9,-4\}$ , then  $n(A) = ?$   
(i) 5 (ii) 9 (iii) 6 (iv) 7 (v) 3
3. Which of the following is a singleton set?  
(i)  $\{2,-6\}$  (ii)  $\{-7,1,7,-5,9\}$  (iii)  $\{-8\}$  (iv)  $\{-1,-6,-7,0\}$  (v)  $\{5,-3,1\}$
4. Which of the following is a null set?  
(i)  $\{4,-5,-3,9,0\}$  (ii)  $\{-7,-8,-6,8\}$  (iii)  $\{-3,6,7\}$  (iv)  $\{\}$  (v)  $\{-7,8\}$
5. Which of the following is an infinite set?  
(i)  $\{-5\}$  (ii)  $\{0,1,2,\dots\}$  (iii)  $\{3,-5\}$  (iv)  $\{\}$  (v)  $\{3,1,5\}$
6. Which of the following elements belong to the set  $\{5,8,6,1,4\}$ ?  
(i) 12 (ii) 4 (iii) 13 (iv)  $(-2)$  (v)  $(-1)$
7. Which of the following is 'union' symbol?  
(i)  $\subseteq$  (ii)  $\in$  (iii)  $\notin$  (iv)  $\cup$  (v)  $\supseteq$
8. Which of the following is 'intersection' symbol?  
(i)  $\cap$  (ii)  $\subseteq$  (iii)  $\supseteq$  (iv)  $\not\subset$  (v)  $\notin$
9. Which of the following is 'belongs to' symbol?  
(i)  $\subset$  (ii)  $\in$  (iii)  $\cap$  (iv)  $\leftrightarrow$  (v)  $\supset$
10. Which of the following is 'does not belongs to' symbol?  
(i)  $\notin$  (ii)  $\cap$  (iii)  $\not\subset$  (iv)  $\in$  (v)  $\not\in$
11. Which of the following is 'null set' symbol?  
(i)  $\not\subset$  (ii)  $\cup$  (iii)  $\subset$  (iv)  $\emptyset$  (v)  $\in$
12. Which of the following elements does not belong to the set  $\{1,3,6,5,2\}$ ?  
(i) 2 (ii) 6 (iii) 10 (iv) 5 (v) 1
13. Which of the following elements does not belong to the set  $\{p,i,s,j,b\}$ ?  
(i) j (ii) s (iii) e (iv) i (v) p
14. Which of the following is an empty set?  
(i)  $\{\emptyset\}$  (ii)  $\{\text{empty}\}$  (iii)  $\{0\}$  (iv)  $\{\}$  (v)  $\{0\}$

15. Which of the following is a null set?

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

16. Which of the following are null sets?

- a)  $\{\emptyset\}$   
b)  $\{\}$   
c)  $\emptyset$   
d)  $\{\text{empty}\}$   
e)  $\{4,1,6\}$

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

17. Which of the following sets have same cardinality?

- a)  $\{9,-1,1,6\}$   
b)  $\{-1,6,8\}$   
c)  $\{-8,0\}$   
d)  $\{-9,3,2,6,4\}$   
e)  $\{-5,1,-2\}$

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

18. What is the cardinality of an empty set?

- (i) 4 (ii) 8 (iii) 6 (iv) 3 (v) 0

19. Which of the following symbols represent the set of Whole numbers ?

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

20. Which of the following symbols represent the set of Integers ?

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

21. Which of the following are disjoint sets?

- (i)  $\{11,9,12,3,20,5\}, \{18,4,16,5,10\}$  (ii)  $\{11,9,12,3,20\}, \{18,4,16,5,10\}$   
(iii)  $\{11,9,12,3,20,5\}, \{11,9,12,3,20,5\}$  (iv)  $\{11,9,12,3,20,5\}, \{\}$  (v)  $\{\}, \{11,9,12,3,20,5\}$

22. Which of the following are overlapping sets?

- (i)  $\{20,6,7,3\}, \{16,14,19,8,13,4\}$  (ii)  $\{13,20,6,7,3,14,4\}, \{\}$  (iii)  $\{13,20,6,7,3,14,4\}, \{16,19,8\}$   
(iv)  $\{13,20,6,7,3,14,4\}, \{16,14,19,8,13,4\}$  (v)  $\{20,6,7,3\}, \{16,19,8\}$

## Assignment Key

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