

### **Quiz-8**

Q.1 What is the largest subspace of the vector space  $\mathbb{R}^3$ ?

- (A)  $\mathbb{R}^3$  (B) any plane passing through origin of  $\mathbb{R}^3$   
(C) any line passing through origin  $\mathbb{R}^3$  (D) origin of  $\mathbb{R}^3$

Q.2 What is the smallest subspace of the vector space  $\mathbb{R}^3$ ?

- (A)  $\mathbb{R}^3$  (B) any plane passing through origin of  $\mathbb{R}^3$   
(C) any line passing through origin  $\mathbb{R}^3$  (D) origin of  $\mathbb{R}^3$

Q.3 Which of the following is not a vector space?

- (A)  $z=0$  (B)  $x+y=0$  (C)  $x+y+z=0$  (D)  $x+y+z+1=0$

Q.4 Which of the following is not a subspace of  $\mathbb{R}^2$ ?

- (A)  $x=0$  (B)  $y=0$  (C)  $x+y=1$  (D)  $\{(0,0)\}$

Q.5 Which of the following is not a subspace of  $\mathbb{R}^3$ ?

- (A)  $x=0$  (B)  $y=0$  (C)  $z=0$  (D)  $x=1$