**VISION INSTITUTE OF MANAGEMENT**

**COMPUTER GRAPHICS & MULTIMEDIA APPLICATION**

**BCA 2nd YEAR/4th SEM**

**ASSIGNMENTS OF UNIT 3**

1. **Prove that 2D Scaling transformations are commutative i.e., S1 S2=S2 S1.**
2. **Prove that 2D rotations about the origin are commutative i.e. R1 R2=R2 R1.**
3. **Rotate a line CD whose endpoints are (3, 4) and (12, 15) about origin through a 45° anticlockwise direction.**
4. **Rotate line AB whose endpoints are A (2, 5) and B (6, 12) about origin through a 30° clockwise direction.**
5. **A triangle ABC is given. The coordinates of A, B, C are given as**

**A (3 4)  
                    B (6 4)  
                    C (4 8)**

**Find reflected position of triangle i.e., to the x-axis.**