**ASSIGNMENT V**

**PART A**

1. **What is multiplexing gain?**
2. **Draw the MIMO model.**
3. **Mention the applications of MIMO systems**.
4. **What is array gain?**
5. **What is meant by co-phasing?**
6. **What is Alamouti’s scheme?**
7. **What is channel state information?**
8. **Write short notes on capacity in fading and non-fading channels.**

**PART B**

**1. Briefly explain Multiple-input multiple output systems.**

**2. Explain in detail about the Pre-coding and Beam forming techniques.**

**3. Explain the architectures of spatial multiplexing with neat diagram.**

**4. Discuss the transmitter and receiver diversity in detail.**