

Note: 1. Draw labelled diagram wherever necessary.

2. Attempt all questions.

**Q.1 Write short notes on (Any 3) (15)**

- a. TCP/IP Stack
- b. Internet banking in India.
- c. Advantages of E-commerce.
- d. Data Manipulation Queries.
- f. Firewalls.

**Q.2 Explain the concepts (Any 3) (15)**

- a. Viruses and worms.
- b. Digital signature.
- c. Supply Chain Management Software.
- d. Wireless media.
- e. SSL.

**Q.3 A. Explain function of Layers in OSI Model. (8)**

**B. Advantages of Mobile banking. (7)**

**OR**

**Q.3 A. Explain various services provided by internet. (7)**

**B. Explain client/server and server based networks. (8)**

**Q.4 A. Explain datatypes in Access. (7)**

**B. Explain following functions: (8)**

- a. FV    b. IPMT    c. PPMT    d. NPER.

**OR**

**Q.4 A. Explain characteristics and value of information. (7)**

**B. Explain in detail application of VSAT. (8)**

