Note : Attempt any *FIVE* questions.

1. (*a*) Draw a block diagram of digital computer and explain functioning of its various blocks. **(6)**

   (*b*) Explain hierarchy of memories used in computer system. **(7)**

   (*c*) Differentiate between the following :

   (*i*) Static RAM & dynamic RAM

   (*ii*) Computer hardware & software **(7)**

2. (*a*) Differentiate between the following :

   (*i*) multiprogramming & multitasking

   (*ii*) GUI & CUI **(6)**

   (*b*) (*i*) Define the following terms with respect to DBMS :

   field, record, file, database, primary key

   (*ii*) Write down five advantages of using MS-Excel for accounting purpose. **(7)**

   (*c*) (*i*) Define Operating System. Explain the different functions performed by OS.

   (*ii*) Define SQL. What are the advantages of using it ? **(7)**

3. (a) Perform the following conversions :

(i) $(5214)_{10} = ($ $)_{16}$

(ii) $(5A8.F)_{16} = ($ $)_8$

(iii) $(1310)_{10} = ($ $)_{BCD}$

(iv) $(235.46)_8 = ($ $)_2$ **(6)**

(b) Explain UTP and STP. **(7)**

(c) How is fourth generation language different from third generation language ? **(7)**

4. (a) Differentiate between LAN, WAN & MAN. **(7)**

(b) Write short notes on :

(i) MPEG

(ii) MP3

(iii) MHEG **(6)**

(c) Explain the salient feature of NICNET. List other specialized and dedicated networks. **(7)**

5. (a) What is database management system ? Explain with example. **(7)**

(b) Explain MS-office, its components and application. **(7)**

(c) What do you mean by FTP & Telnet ? **(6)**

6. (a) Differentiate between a half duplex and a full duplex transmission with example. **(7)**

(b) Explain Client Server Architecture. **(7)**

(c) Differentiate between Assembly language and High Level Language. **(6)**

7. (a) Draw a flow chart of an algorithm to find the largest number out of N positive integers. **(7)**

(b) What is an electronic payment? Explain with suitable example, how a customer pays electronically to the merchant for the product he/she buys through internet. **(7)**

(c) Differentiate between complier and interpreter. **(6)**