M.Sc.

2011

4th Semester Examination

ELECTRONICS

PAPER—EL-2202

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer *Q. No. 1* and any *three* from the rest.

1. Answer any *five* questions :   2×5

   (a) Discuss briefly characteristics of coaxial cable as physical media for communication.

   (b) What is as ADSL modem ?

   (c) What is the role of a Network interface card ?

   (d) What do you mean by time division switching ?

   (e) Discuss briefly the function of the Hub as a network device.

   (f) Explain the structure of an IP (IPV4) address.

(Turn Over)

2. (a) Discuss the framing method briefly.

   (b) What is CSMA/CD ?

   (c) What do you mean by TCP/IP protocol ? 6+2+2

3. (a) How many layers are in the ISO/OSI model ? Write down the layers accordingly.

   (b) Write down the activities of physical layer.

   (c) Discuss Error-correcting codes. (1+2)+3+4

4. (a) What is RS–232–C ? Write down the activity and characteristics of 9 pins of it.

   (b) Discuss X·25 network system. 6+4

5. (a) What do you mean by Point-to-point network ?

   (b) What do you mean by Service Primitives in networking system ?

   (c) Write down the advantages of the network system.

   3+4+3

6. (a) Write down the difference between connection-oriented and connection less management system.

   (b) How many types of network are in use ? Discuss briefly. 5+5