

2014

M.Sc.

4th Semester Examination

ELECTRONICS

PAPER—ELC-402

Full Marks : 50

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.

(Computer Networking)

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

1. (a) What is the difference between bit rate & band rate ?
- (b) What is point to point protocol ?
- (c) What do you mean by bit stuffing ?

(Turn Over)

- (d) What is the function of an ADSL modem ?
- (e) State the difference between HTTP and FTP.
2. What are the different physical topologies used in data communication ? Briefly discuss them. Write down the function of different layers in TCP/IP model.
- 2+3+5
3. (a) Discuss various types of transmission media.
- (b) What is the function of router and hub ?
- (c) Discuss the difference between circuit switching & packet switching.
- 4+3+3
4. (a) What is stop & wait protocol ?
- (b) What are the different types of frame format used in HDLC ?
- (c) Define piggy backing.
- 3+5+2
5. (a) What do you mean by sampling in PCM technology ?
- (b) What is the data rate of standard ethernet ?
- (c) Write down advantages of optical fiber communications.

(d) Define the type of following destination addresses :

(i) 4A : 30 : 10 : 21 : 10 : 1A

(ii) 47 : 20 : 1B : 2E : 08 : EE

(iii) FF : FF : FF : FF : FF : FF 2+1+4+3

6. (a) Discuss cell concept in mobile communication. What is frequency reuse ?

(b) Explain terms :

(i) HLR, (ii) VLR, (iii) AVC. 4+(2+2+2)

Internal Assessment — 10
