



VI Semester B.Sc. Examination, May/June 2014
(Scheme : Semester)
Computer Science (Paper – 8)
Basics of Communication, Networks and Internet

Time : 3 Hours

Max. Marks : 80

Instruction: Answer *all* the questions.

1. a1) identify and explain the five components of the data communication systems. 6
a2) Explain any three topologies with a neat diagram. 6
OR
b1) How microwave communication works ? Explain. 6
b2) Explain the principles of cellular telephony. 6
2. a1) Explain simplex, full duplex and half duplex modes. 6
a2) Write a note on checksum error detection method. 6
OR
b1) What is multiplexing ? Explain any one multiplexing technique. 6
b2) Discuss Block Code Method. 6
3. a1) Explain the characteristics of analog and digital signals. 6
a2) Distinguish between base band transmission and broad band transmission. 6
OR
b1) Bring out the significance of layered architecture considering the OSI model. 12
4. a1) Discuss pulse amplitude modulation for conversion from analog to digital encoding. 6
a2) Explain phase shift keying with neat diagram. 6

OR



b1) List out and explain various services provided by application layer. 6

b2) Explain pulse code, modulation and sampling rate. 6

5. a1) Explain the role of transport layer in TCP/IP model. 6

a2) Write a note on encapsulation. 6

OR

b1) Explain different types of Bridges. 6

b2) Briefly explain RARP, DNS and UDP. 6

6. a1) What is E-mail ? Write a note on HTTP and SMTP. 6

a2) Write a note on URL and WWW. 6

OR

b1) Briefly explain the browser architecture. 6

b2) Explain any two search engines. 6

7. Answer **any four** of the following questions : (4×2=8)

a) What is redundancy ?

b) List different types of error.

c) Define amplitude.

d) Define protocol.

e) Write any two application of optical fibre.

f) What is bit rate and bit length ?