



41324/C 240

Reg. No.

--	--	--	--	--	--	--	--

III Semester B.C.A.4 Degree Examination, November/December 2018
DATA COMMUNICATION AND COMPUTER NETWORKS (Regular)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) *All Sections are compulsory.*
2) *Draw neat diagrams wherever necessary.*

SECTION – A

1. Answer the following. (2×10=20)
- Define communication network. Give example.
 - What is the function of a switch ?
 - Define Nyquist signalling rate.
 - What is a modem ?
 - Mention the drawbacks of single parity check.
 - What is the difference between guided and unguided media ?
 - What is a protocol ? Give example.
 - Define the term flow control.
 - What is a wireless LAN ?
 - What is the purpose of a MAC protocol ?

SECTION – B

- Answer **any four** of the following. (5×4=20)
- Discuss packet switching and internet.
 - What is line encoding ? Explain NRZ-L and RZ encoding schemes.
 - Describe the co-axial cable transmission medium.
 - Explain the HDLC frame format.
 - Write a note on LAN.

SECTION – C

- Answer **any four** of the following. (10×4=40)
- Explain in detail the OSI reference model.
 - Define modulation. Explain the various digital modulation techniques.
 - What are polynomial codes ? Describe the Cyclic Redundancy Check method (CRC) for error detection.
 - What are ARQ protocols ? Explain the stop-and-wait ARQ.
 - Explain the IEEE 802.3 (Ethernet) standard for LAN.