



III Semester B.C.A. Degree Examination, February/March 2024

(NEP Scheme) (Freshers and Repeaters)

COMPUTER APPLICATIONS

Computer Communication and Networks



Time : 2½ Hours

Max. Marks : 60

Instruction : Answer *all* the Sections.

SECTION – A

I. Answer **any six** questions. **Each** question carries **2** marks. **(6×2=12)**

- 1) Mention any two applications of computer networks.
- 2) What is network topology ?
- 3) What is a twisted pair cable ?
- 4) Define attenuation and distortion.
- 5) What is framing ? What is the need for framing ?
- 6) Define switching and mention its types.
- 7) Compute odd parity and even parity for the data 10001001.
- 8) What is routing ?
- 9) Define DNS.

SECTION – B

II. Answer **any four** questions. **Each** question carries **6** marks. **(4×6=24)**

- 10) Explain multiplexing and demultiplexing.
- 11) What is Optical Fiber ? Explain with neat diagram.

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- 12) Explain sliding window protocol.
- 13) Generate CRC code for data word 100111 using the divisor 101.
- 14) Explain Go-back-N ARQ protocol.
- 15) Explain Leakey bucket algorithm.

SECTION – C

III. Answer **any three** questions. **Each** question carries **8** marks. **(3×8=24)**

- 16) Compare OSI and TCP/IP network models. **8**
 - 17) Differentiate LAN, WAN and MAN. **8**
 - 18) What is switching ? Explain its types with neat diagram. **8**
 - 19) Explain distance vector routing with an example. **8**
 - 20) a) Explain working of SMTP. **4**
b) Explain elements of transport service. **4**
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