

Time : 2½ 🙌 urs

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

(NEP Scheme) (F + R)
COMPUTER SCIENCE
Computer Networks

Max. Marks: 60

Instruction : Answer all Parts.

PART - A

I. Answer any 4 of the following.

 $(4 \times 2 = 8)$

- 1) What are the categories of networks?
- 2) Differentiate between TCP and IP.
- 3) What is polling?
- 4) What is the significance of Mobile IP?
- 5) What is the purpose of unicast routing?
- 6) Mention any two E-mail protocols.

PART - B

II. Answer any 4 of the following.

 $(4 \times 5 = 20)$

- 7) Explain about error detection and correction.
- 8) Discuss in detail about data link layer protocols.
- 9) Explain FDMA and TDMA.
- 10) Differentiate between IPv4 and IPv6 addressing.
- 11) Discuss the design issues of data link layer.
- 12) Write a note on Domain name system and Quality of service.



PART - C

| III. | Answer any 4 of the following. | (4×8 | =32) |
|------|--|------|------|
| | 13) With a neat diagram explain OSI reference model. | | 8 |
| | 14) Discuss Block coding, cycle codes and checksum. | | 8 |
| | 15) What is pure and slotted ALOHA? Discuss in detail. | | 8 |
| | 16) Explain the different dynamic routing algorithms. | | 8 |
| | 17) Explain the different transport layer protocols. | | 8 |
| | 18) Write a short note on the following. | | |
| | a) Wireless LAN. | | 5 |
| | h) Token passing | | 3 |