[Total No. of Questions - 11] [Total No. of Printed Pages - 2] (2124)

1894

MBA 4th Semester Examination Data Communication & Networks (NS)

IT-04

Time: 3 Hours

Max. Marks: 60

True candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

SECTION - A

Attempt all questions. Each question carries 2 marks.

- 1. (a) What is synchronous and asynchronous mode of data transfer?
 - (b) What is FDMA and how it is different from CDMA?
 - (c) Which principle of optics is followed in data transmission through optical fiber?
 - (d) What NIC stands for and its function in computer network?
 - (e) Name the different layers of OSI model.
 - (f) Difference between broadcasting and multi casting.
 - (g) What is Concept of tunneling?
 - (h) Write the different modes of communication.
 - (i) Define WAP, WML.
 - (j) What is VPN?

 $(10 \times 2 = 20)$

[P.T.O.]

SECTION - B

Attempt any four questions. Each question carries 5 marks.

- 2. What is hamming code and how it is used to detect and correct error in transmitted data?
- 3. Distinguish between star, bus and ring LAN topologies with suitable examples?
- 4. Explain networking in LINUX.
- 5. What are socket and port? How they differ from each other?
- 6. Explain the function of HUB, switch and router in networking.
- 7. What are different transmission impairments? How they affect the data transmission? (4×5=20)

SECTION - C

Attempt any two questions, Each question carries 10 marks.

- 8. What is IP addressing. Explain the different class of IP address? How the class of IP 192.170.30.112 can be detected using sub net mask?
- 9. Explain the various ways of transmission of data. List the ired and wireless ways of data transmission.
- 10. Explain the function of various layers of OSI model. Name the layer responsible for encryption of data.
- 11. Explain the terms 'Terrestrial Microwave', 'Broadcast radio', 'Infrared and Light waves'. (10×2=20)