

S-775

Total Pages : 3

Roll No. -----

MCS-506

Introduction of Computer Networks

(MCA/MSIT)

2nd /4th Semester, Examination 2022(Dec.)

Time: 2 Hours

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2 x 19 = 38]

P.T.O.

- Q.1. Describe OSI model in detail. Compare OSI model with TCP-IP model.
- Q.2. Briefly explain the concept of DNS, IPV6 and FTP.
- Q.3. What is firewall? Explain the types of firewalls in detail.
- Q.4. What is Virtual Private Network (VPN)? Explain the difference between Intranet and Extranet.
- Q.5. What is IP address class? Describe various classes of IP address.

Section – B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4 x 8 = 32]

- Q.1. Explain DTE-DCE interface.
- Q.2. Explain symmetric and asymmetric key cryptography with example.
- Q.3. What is Internet? What are the applications of Internet? Explain.
- Q.4. Differentiate between Baseband and Broadband Signals.
- Q.5. Explain the following terms:
- i. Frequency-Division Multiplexing (FDM)
 - ii. Wavelength-Division Multiplexing
 - iii. Time-Division Multiplexing (TDM)
- Q.6. Explain the difference between Bit rate and Baud rate.
- Q.7. What are the Possible Modes of communication? Explain.
- Q.8. Write short notes on the following;
- i. HDLC
 - ii. Cyclic Redundancy Checks
