

B.Sc. Semester-III Examination, 2022-23**COMPUTER SCIENCE [Honours]**

Course ID : 31513

Course Code : SH/CSC/303/C-7

Course Title : Computer Networks – Theory

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer **all** the questions.**UNIT-I**1. Answer any **five** of the following questions:

1×5=5

- a) Define bandwidth.
- b) Define switch.
- c) What is Round Trip Time?
- d) What is burst error?
- e) What is FDM?
- f) What is WWW?
- g) What is router?
- h) Define Computer Networks.

UNIT-II2. Answer any **two** of the following questions :

5×2=10

- a) Compare between TCP and UDP.
- b) Explain in brief: sliding-window technique.
- c) Compare and contrast Star and Ring topology.
- d) Explain the functions of Router and Switch.

UNIT-III3. Answer any **one** of the following questions :

10×1=10

- a) Describe different types of network topologies
Explain the followings:
 - i) LAN
 - ii) MAN
 - iii) WAN
 - iv) ARPANET
- b) What is TCP/IP reference model? Explain the functions and protocols and services of each layer of this model.

6+4

2+8