

T.Y. B. SC. (Computer Science) SEM –V (CBCS - 2016 COURSE) :

WINTER - 2018

SUBJECT: 1) DATA COMMUNICATION AND NETWORKING-I

Day: Tuesday
Date: 23/10/2018

W-2018-0934

Time: 03.00 PM TO 06.00 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Answer **ANY TWO** of the following: **(12)**

- a) Differentiate between connection oriented and connectionless services.
- b) Draw and explain types of network topologies in detail.
- c) Explain the concept of Token ring and its advantages.

Q.2 Answer **ANY TWO** of the following: **(12)**

- a) Describe co-axial cables and twisted wire pairs with the help of neat diagram.
- b) Differentiate between virtual circuits and datagram.
- c) Explain the working of stop and wait protocol.

Q.3 Answer **ANY TWO** of the following: **(12)**

- a) Differentiate between TCP/IP reference model and ISO-OSI model.
- b) Explain the characteristics of fiber optic and also state its advantages.
- c) What is SMTP and TELNET?

Q.4 Answer **ANY THREE** of the following: **(12)**

- a) Write a note on wireless Ethernet.
- b) Compare and Contrast – LAN ,MAN,WAN
- c) Explain the frame format of Internet protocol.
- d) Describe FDM and TDM.

Q.5 Answer **ANY FOUR** of the following: **(12)**

- a) Explain checksum mechanism in UDP.
- b) Define term: i) Bandwidth ii) Shanon's law.
- c) Differentiate between analog and digital transmission.
- d) What is modulation? Explain amplitude modulation.
- e) Explain unrestricted simplex protocol.
- f) Differentiate between router and bridge.

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