

TDC Even Semester Exam., 2019

COMPUTER SCIENCE

(Honours)

(6th Semester)

Course No. : BCSH-602

(Computer Network and Data Communication)

Full Marks : 35

Pass Marks : 12

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. Compare and contrast the TCP/IP and OSI models. 7
2. Explain the following : 2+2+3=7
 - (a) Synchronization
 - (b) Full-duplex
 - (c) Access control

UNIT—II

3. (a) Distinguish between forward error correction versus error correction by re-transmission. 4
- (b) How is the simple parity check related to the two-dimensional parity check? 3
4. (a) What is CRC technique of error detection? 3
- (b) What is backbone network? Explain with an example. 4

UNIT—III

5. Explain the following terms : 2+2+3=7
 - (a) Subnet
 - (b) Supernet
 - (c) Subnet mask
6. (a) What are IPv4 and IPv6? What are the advantages of IPv6 over IPv4? 2+3=5
- (b) Differentiate between hub and switch. 2

UNIT—IV

7. What is the difference between open-loop congestion control and closed-loop congestion control? 7
8. Explain AIMD congestion control algorithm in detail for TCP. 7

(3)

UNIT—V

9. (a) What is a proxy server and how is it related to HTTP? 3
- (b) What is the difference between local and remote log-in in TELNET? 4
10. Write short notes on the following : 2+2+3=7
- (a) Electronic mail
- (b) Network security
- (c) DNS

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