Reg. No. : | | | | | | | | | | |

Question Paper Code: 54204

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Computer Science and Engineering

15UCS404- COMPUTER COMMUNICATION AND NETWORKS

(Regulation 2015)

Duration: 1.15 hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. For real time multimedia, file transfer, DNS and email, the transport layer protocols used are respectively CO1-R

   (a) TCP, UDP, TCP and UDP (b) UDP, UDP, TCP and TCP

   (c) UDP, TCP, UDP and TCP (d) TCP, TCP, UDP and UDP

2. Which one of the following task is not done by data link layer? CO1- R

   (a) Framing b) Error control c) Flow control (d) Channel coding

\3. Ethernet = 10Mbps, Jamming signal = 48bit, Round trip propagation delay = 46.4μs, minimum frame size =? CO2-U

   (a) 512 (b) 440 (c) 100 (d) 1024

4. Cyclic codes are fast when these are implemented in CO2- R

   (a) Software (b) Hardware (c) Local Area Network (d) Both a and b

5. In an IP datagram one of the header fields is time to live (TTL) field because CO3-U

   (a) It can be used to prevent packet looping

   (b) It can be used to optimize throughput

   (c) It can be used to reduce delays

   (d) It can be used to prioritize packets

6. Which of the following technique starts transmission only after all the CO3- R

bits of the packets arrive?

(a) Circuit switching b) Message switching

c) Store and forward switching d) Packet switching

7. The network layer concerns with CO4-R

(a) Bits (b) Frames (c) Packets (d) Datagrams

8. _____ is a packet routing method in which incoming packet is sent to every neighbor except where it came from. CO4- R

(a) Flooding (b) Routing (c) Forwarding (d) Switching

9. For the application layer in the Internet stack, the protocol data unit (PDU) is CO5-R

(a) Datagram (b) Message (c) Frame (d) Segment

10. User datagram protocol is called connectionless because CO5- R

(a) All UDP packets are treated independently by transport layer

(b) It sends data as a stream of related packets

(c) It is received in the same order as sent order

(d) All UDP packets are treated independently by application layer

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11.	List the layers of OSI model and elaborate the functionalities of each layer	CO1-R	(8)
12.	What is the need for error detection? Explain the methods used for error detection with typical example.	CO2-U	(8)
13.	Explain any four connecting devices in detail.	CO3-R	(8)
14.	Explain in detail (i) ICMP (ii) IGMP	CO4-U	(8)
15.	Define Congestion control. Describe in detail about the congestion control techniques of TCP in detail.	CO5-U	(8)