Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore-641 043
Master's Degree Examination-November2018
III Semester

Class: II PG
Major: MCA

Time: 3HOUR
Max.Marks: 60

17MCAC13 Data Communication and Networks

PART-A

Circle the correct answer **10x1/2=5**

1. The set of layers and protocols is called a _____.
   a) Protocol stack b) Interface c) Physical medium d) Network architecture.

2. LANs can be connected by devices called_____.
   a) Bridges b) Links c) Subnets d) Routing

3. _____ is the set of techniques that allow the Simultaneous transmission of multiple signals across a single data link.
   a) Analog b) Digital c) Multiplexing d) Frequency

4. _____ is a cable that accepts and transport signals in the form of light.
   a) Fiber optic cable b) Optical Fiber c) coaxial cable d) Twisted pair

5. The resulting n bit blocks are called_____.
   a) Data words b) Code words c) Block words d)error words

6. _____ is initially in the ready state, but it can move between the ready and blocking state
   a) Sender State b) Ready State c) Blocking State d) Receiving State

7._____ is also unreliable like IP and UDP .
   a) Addressing b) Multicast c) Unicast d) Ethernet

8. A router changes the link layer address in a_____.
   a) pockets b) Links c) Subnets d) Routing

9. _____ balances the rate a producer creates data with the rate a consumer can use the data.
   a) Data flow b) Flow control c)Error control d) Resource record

10. TCP stand for_____.
   a) Travel control protocol b)Typical control protocol
   c) Transmission control protocol d) Transmission communication protocol

PART-B

Answer the following **5x4=20**

(Answer should not exceed 200 words or one pages)

11. a) Discuss the uses of Computer Networks.

(or)

11. b) Compare the OSI and TCP/IP Reference model.

12. a) Discuss about Data and Signals.

(or)

12. b) Write short note on Transmission modes.

13. a) Write a short note on Block Coding.

(or)

13. b) Explain briefly about Data Link Control(DLC).

14. a) Write short notes on Gigabit Ethernet.

(or)

14. b) Discuss about Connecting Devices and its uses.

15. a) Write short note on Error Reporting Messages formats.

(or)

15. b) Discuss TCP Congestion Control.

PART-C

Answer the following **5x7=35**

Answer should not exceed 600 words or Three pages

16. a) Explain briefly about Network Types with it example.

(or)

16. b) Explain in detail about the layer in OSI Model.

17. a) Briefly discuss about multiplexing and its category.

(or)

17. b) Describe briefly about switching with neat Diagram .

18. a) Explain about Data Link Layer and its communication

(or)

18. b) Describe about Checksum with example.

19. a) Explain briefly about Standard Ethernet and its functions .

(or)

19. b) Briefly explain Virtual LAN's and its features.

20. a) Explain briefly about Internet Protocol (IP) address.

(or)

20. b) Describe about Transport Layer and its various functions.