# Avinashilingam Institute for Home Science and Higher Education for Women

**(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)**
**Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B**
**Coimbatore - 641 043, Tamil Nadu, India**

## Bachelor's Degree Examination – July 2020
## IV Semester

**Class: II UG** **Time : 3Hours**
**Major: Computer Applications** **Max. Marks : 100**

### 18BCAC15 Computer Networks
### Part A
**Choose the Correct Answer** **10 X 1=10**

1. The physical layer is concerned with _____
   a. bit-by-bit delivery b. process to process delivery
   c. application to application delivery d. port to port deliver

2. National Internet Service Provider (ISP) networks are connected to one another by private switching stations called
   a. Network Access Points b. Peering c. Points National IS d. Regional ISP

3. The data link layer takes the packets from _____ and encapsulates them into frames for transmission.
   a. network layer b. physical layer c. transport layer d. application layer

4. Which of the following tasks is not done by data link layer?
   a. framing b. error control c. flow control d. channel coding

5. Value of the frame body field of Media Access Control frame is in between
   a. 0 and 512 bytes b. 0 and 1214 bytes
   c. 0 to 2312 bytes d. 0 to 3450 bytes

6. Media access control is the sub layer of
   a. LLC b. IEEE c. ANSI d. both a and c

7. Which one of the following is not a function of network layer.
   a. routing b. inter-networking c. congestion control d. error control

8. The network layer is concerned with _____ of data.
   a. bits b. frames c. packets d. bytes

9. Which of the following are transport layer protocols used in networking
   a. TCP and FTP b. UDP and HTTP c. TCP and UDP d. HTTP and FTP

10. Transport layer aggregates data from different applications into a single stream before passing it to _____
   a. network layer b. data link layer c. application layer d. physical layer

**Part B** **5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

11. a. Describe the process of data communication.

(or)

11. b. Simulate on twisted pairs. Give an example.

12. a. Differentiate between error correction codes and error detection codes.

(or)

12. b. Compare and contrast the Stop & Wait protocol and Sliding Window Protocol.

13. a. Describe the process of dynamic channel allocation.

(or)

13. b. Define Bluetooth. Give a real time example.

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14. a. Illustrate the functions of Transport layer.

(or)

14. b. Differentiate between IPv4 and IPv6.

15. a. Demonstrate Internet Transport protocol.

(or)

15. b. Discuss the Real time application layers.

**Part C** **5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

16.a. Illustrate the functions of OSI Layer.

(or)

16. b. Categorize the Types of transmission medium.

17.a. Illustrate the Elementary data link protocol.

(or)

17. b. Describe the working principle of Simplex Stop and Wait protocol.

18. a. Paraphrase the Classic Ethernet.

(or)

18. b. Explicate the features of Bluetooth and RFID.

19. a. Explicate on Forward packet switching.

(or)

19. b. Sketch the Shortest Job First Algorithm. Give an Example.

20. a. Illustrate the working procedure of User Datagram Protocol through its data format.

(or)

20. b. Illustrate the working procedure of Transmission Control Protocol through its data format

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