

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-641 043**

Bachelor's Degree Examination – November 2017

III Semester

Class : II UG

Time :3 hours

Major : Information Technology

Max. Marks: 100

15BITC10 Data Communication and Networks

Part-A

10 x 1=10

Choose the correct answer

1. The information to be communicated in a data communications system is the _____
a. protocol b. message c. medium d. transmission
2. A network is made of a set of switches connected by physical links, in which each link is divided into n channels
a. line switched b. frame switched c. circuits switched d. none of these
3. Packed-switched networks can also be divided into _____ subcategories: virtual-circuit networks and datagram networks
a. four b. three c. two d. five
4. The simplest type of switching fabric is the _____ switch.
a. cross point b. crossbar c. TSI d. STS
5. In the OSI model, what is the main function of the transport layer?
a. node-to-node delivery b. Updating and maintenance of routing tables
c. process to process message delivery d. synchronization
6. A switch in a datagram network uses a routing table that is based on the _____ address
a. source b. destination c. local d. none of the these
7. UDP is called a _____ transport protocol
a. connectionless, reliable b. connection oriented unreliable
c. connectionless, unreliable d. connection oriented reliable
8. In _____, there is no resource allocation for a packet.
a. datagram switching b. circuit switching c. frame switching d. none of these
9. _____ provides full transport layer service to applications.
a. TCP b. UDP c. IP d. ARP
10. In _____ switching, the paths in the circuit are separated from one another spatially.
a. time division b. space division c. two dimensional d. three dimensional

Part B

5 X 6=30

Answer the following

Answer should not exceed 400 words or two pages

- 11.a. What do you mean by data communication? Explain any two components of a data communication system.
(or)
b. Write a short note on information encoding.
- 12.a. Write a short note on Bus and Star topology with a neat diagram.
(or)
b. Explain about circuit switching.
- 13.a. Explain about advantages of frame relay over X.25.
(or)
b. Write a short note on LAN.

