

**Avinashilingam Institute for Home Science and Higher Education for Women
[Deemed to be University] Coimbatore-641 043**

**Bachelor's Degree Examination – November 2018
III Semester**

**Class : II UG
Major : Information Technology**

**Time: 3 hours
Max. Marks: 100**

15BITC10 Data Communications and Networks

Part-A

10 x 1=10

Choose the correct answer

1. The fundamental basis of data communication is _____.
a) Light b)electricity c)voltage d)signal propagation
2. _____ is an analog multiplexing technique.
a) FDM b)TDM c)STDM d)none of the above
3. Optical fibers use _____ for data transmission.
a) Voltage b)current c)light d)sound
4. In star topology, the central hub is called _____.
a) active hub b) passive hub c)inactive hub d)live hub
- 5.To protect against fiber cut, FDDI has _____ fibers.
a) 4 b)1 c)2 d)3
6. Frame relay maintains _____ for routing frames.
a) arrays b) databases c) messages d) tables
7. A bridge is a _____ device
a) networking b) connecting c)internetworking d)routing
8. The _____ maintains details of user ids and passwords at the ISP.
a) router b)file c)FTP Server d)RAS server.
9. TCP uses the mechanism of _____.
a) physical connections b) virtual connections
c) circuit switching d) virtual circuits
10. The client does _____.
a) active open b) passive open
c) both a and b d) none of the above

Part B

5* 6 = 30

Answer the following

Answer should not exceed 400 words or two pages

- 11) a) Explain the fundamental concepts of data communication.
(or)
11) b) Explain the concepts of Multiplexing and De multiplexing.
- 12) a) Write short note on Mesh and Bus topology.
(or)
12) b) Explain about OSI model.
- 13) a) Explain about Token ring.
(or)
13) b) Explain the WAN and its architecture.
- 14) a) Explain about ICMP.
(or)
14) b) Explain about ARP.
- 15) a) Discuss the concepts of Ports and Sockets.
(or)
15) b) Write short note Web Browser architecture.

Part C

Answer the following

Answer should not exceed 800 words or four pages

- 16) a) Explain the types of multiplexing?
(or)
16) b) Write in detail about error detection?
- 17) a) Explain the concept of Unguided media and Guided media.
(or)
17) b) Discuss the concept of routing algorithms.
- 18) a) Discuss in detail about ISDN.
(or)
18) b) Write about frame relay and explain how it works.
- 19) a) Explain about the bridges and routers.
(or)
19) b) Discuss the basics of Internet.
- 20) a) Explain about TCP features and its relationship between TCP/IP.
(or)
20) b) Explain in detail about E-Mail.