

## END SEMESTER EXAMINATION (ESE), 2020

Semester: 6Th Sem

Subject: Data Communication and Networking (Theory)

Subject Code: Et-602

New Syllabus

Total Marks: 56 Marks

Time: 2hrs. 30 minutes

**All questions are compulsory**

- I. Choose the Correct Answer :- 1x10=10
1. .... Signals can have only a limited number of values.  
 (A) Digital (B) Analog  
 (C) A & B (D)None of the above.
  2. How many layers are there in TCP/IP model?  
 (A) 4 layers (B) 5 layers  
 (B) 6 layers (D) 7 layers
  3. Which of the following layer of OSI model also called end-to-end layer?  
 (A) Presentation layer (B) Networking layer  
 (B) Session layer (D) Transport layer
  4. Terminator are used in ..... Topology?  
 (A) Bus (B) Star (C) Ring (D) Tree
  5. In the Star Topology the central point of failure is the  
 (A) Client (B) Switch (C) Terminator (D) Access
  6. .... Is a collection point to point link that may form a circle.  
 (A) LAN (B) MAN (C) WAN (D)Ring Topology
  7. Multiplexing is used in –  
 (A) Pocket Switching (B) Circuit Switching  
 (C) Data Switching (D) All of the Above.
  8. ATM Networks are-  
 (A) Connectionless (B) Interconnected  
 (C) Connection Oriented (D) None of These
  9. If Single computer network is divided into segments and routers are added between them its forms as on  
 (A) Internet (B) Internetwork  
 (C) Network (D) All of These
  10. Repeater operates in which Layer of OSI Model?  
 (A) Physical Layer (B) Network Layer  
 (C) Data Link Layer (D) Transport Layer

II. Answer any five questions : 5X3=15

1. What is guided Transmission Media and Un-guided Transmission Media?
2. Define Broadband Transmission Media.
3. What are the differences between peer to peer and client-server model?
4. What is the serial Transmission?
5. What is circuit switching? Give example.
6. What is a router? Explain briefly.
7. Define Ethernet Network.

III. Answer any four questions : 4X4=16

1. What are the various modes of data transmission?
2. Explain the difference between OSI and TCP/IP model.
3. Difference between LAN, MAN and WAN.
4. Discuss Bus Topology in detail; write its advantages and disadvantages.
5. Explain token ring network briefly.
6. What is Modem? Why modem is used?

IV. Answer any three questions : 3X5=15

1. Define OSI reference model. What is its significance in data communication?
2. Differentiate between synchronous and asynchronous transmission.
3. What is a bridge? Explain its function.
4. Describe the Rs 232 standard.
5. Explain the services provided by ISDN.

\*\*\*\*\*