

BCA  
Third Semester  
Computer Networks  
(BCA- 303)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20  
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer any *four* from *Question no. 2 to 8*  
*Question no. 1 is compulsory.*

1. Describe different types of server. Write the differences between broadband and baseband transmission. 7+3=10
2. What is wireless transmission? Define different types of wireless transmission. Write about electromagnetic spectrum. 2+3+5=10
3. Describe TCP/IP reference model. Compare it with OSI reference model. 7+3=10
4. Write about the 5 different devices used in networking 10
5. What is IP addressing? How can we classify the different categories of IP addressing? 5+5=10
6. What is computer network? Define the different topologies used in network. Write about the advantages of guided media over the unguided media. 10
7. Describe the firewall security. Define circuit switching with advantages and disadvantages. 5+5
8. Write short notes on any 2 of the following 5+5=10  
b) Token ring      b)IEEE      c)ALOHA      d)UDP      e)LAN

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**BCA**  
**Third Semester**  
**Computer Networks**  
**(BCA- 303)**

**Duration: 20 minutes**

**Marks – 20**

**(PART A - Objective Type)**

**I. Choose the correct answer:**

**1×10=10**

1. Two devices are in network if

- a) a process in one device is able to exchange information with a process in another device
- b) a process is running on both devices
- c) PIDs of the processes running on different devices are same
- d) none of the mentioned

2. For error detection \_\_\_\_\_ is used by higher layer protocols(TCP/IP)

- a) Bit-sum
- b) Checksum
- c) Data-sum
- d) Error-bit

3. A set of rules that govern all aspects of information communication is called \_\_\_\_\_

- a) Server
- b) Internet
- c) Protocol
- d) OSI model

4. The management of data flow between computers or devices or between nodes in a network is called

- a) Flow control
- b) Data control
- c) Data management
- d) Flow management

5. The process on each machine that communicate at a given layer is called \_\_\_\_\_

- a) UDP process
- b) Internet process
- c) Server technology
- d) Peer-to-peer process

6. The amount of data that can be carried from one point to another in a given time period is called

- a) Scope                      b) Capacity                      c) Bandwidth                      d) Limitation

7. The controlling access to a network by analyzing the incoming and outgoing packets is called

- a) IP Filtering                      b) Data Filtering  
c) Packet Filtering                      d) Firewall Filtering

8. Communication channel is shared by all the machines on the network in

- a) broadcast network                      b) unicast network  
c) multicast network                      d) none of the mentioned

9. In computer network nodes are

- a) the computer that originates the data                      b) the computer that routes the data  
c) the computer that terminates the data                      d) all of the mentioned

10. Bluetooth is an example of

- a) personal area network                      b) local area network  
c) virtual private network                      d) none of the mentioned

11. Network congestion occurs

- a) in case of traffic overloading                      b) when a system terminates  
c) when connection between two nodes terminates  
d) none of the mentioned

12. Communication between a computer and a keyboard involves \_\_\_\_\_  
transmission

- a) Automatic                      b) Half-duplex  
c) Full-duplex                      d) Simplex

13. The \_\_\_\_\_ is the physical path over which a message travels

- a) Path                      b) Medium                      c) Protocol                      d) Route

14. Which address identifies a process on a host?
- a) physical address
  - b) logical address
  - c) port address
  - d) specific address
15. OSI stands for
- a) open system interconnection
  - b) operating system interface
  - c) optical service implementation
  - d) none of the mentioned
16. The OSI model has \_\_\_ layers.
- a) 4
  - b) 5
  - c) 6
  - d) 7
17. TCP/IP model does not have \_\_\_\_\_ layer but OSI model have this layer.
- a) session layer
  - b) presentation layer
  - c) application layer
  - d) both (a) and (b)
18. Which layer links the network support layers and user support layers
- a) session layer
  - b) data link layer
  - c) transport layer
  - d) network layer
19. TCP/IP model was developed \_\_\_\_\_ the OSI model.
- a) prior to
  - b) after
  - c) simultaneous to
  - d) none of the mentioned
20. Which layer is responsible for process to process delivery?
- a) network layer
  - b) transport layer
  - c) session layer
  - d) data link layer

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