

2016

Time : 3 hours

Full Marks : 100

Pass Marks : 40

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions.

1. What is Computer Network ? Explain various types of network applications.
2. Explain the role of a Server and a Node in Computer Network.
3. Distinguished between connection oriented and connection less network services.
4. What is OSI layers ? Explain any one OSI layers with diagram.



SA - 4/1

(Turn over)

- 5.) Describe guided and unguided network media with their uses.
6. Explain Frequency Distribution Modulation and Time Distribution Modulation.
7. Differentiate between Client server and peer to peer network architecture.
8. Specify and recommend minimum requirements of devices and software to establish a LAN in a office with 12 nodes and 1 server.
9. What is Protocol ? Explain its use in computer networks with example.
10. Define any **two** of the following terms ;
 - (a) TCP/IP
 - (b) Ethernet
 - (c) Host IP
 - (d) CSMA/CD



SA - 4/1 (600)

(2)

VKV(3) — BCA (4)

2017

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The questions are of equal value.

*Answer any **five** questions.*

1. Explain the functioning of seven layers of OSI model. Write any three strengths of OSI model.
2. What do you mean by network topology ? Explain the advantages and disadvantages of star topology.
3. Explain different categories of network.

VE – 9/2

(Turn over)

Also, explain a protocol associated with each of the network.

4. Compare the following :
 - (a) Connection oriented service and connectionless service
 - (b) Routers and Gateways
5. What is switching ? Explain packet switching and its uses.
6. What do you understand by transmission media ? Explain fiber optics cable with its advantages.
7. What is broadcast network ? Explain token bus with its advantages and disadvantages.
8. Explain CSMA and CSMA/CD.
9. Discuss for example, each of the physical media required for transporting information from one place to other. Also discuss their relative merits and demerits.

10. Write short notes on any two of the following :

- (a) Time Division Multiplexing
- (b) TCP/IP
- (c) Token ring
- (d) Communication satellites



2018

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The questions are of equal value.

Answer any five questions.

1. What do you mean by Computer Network ? What are the essential components of networks ? Also explain the basic needs of networks.
2. Differentiate between virtual circuit subnet and datagram subnet. Which switching method is used in telephone networks ?
3. Discuss the function of Bridge, Router and Gateway in brief.
4. What do you mean by network topology ? Explain different types of topologies with its advantages and disadvantages.

ZD - 4/2

(Turn over)

5. Write the short notes on the following :
- (a) Ethernet Card
 - (b) Fiber Optics
 - (c) Firewall
 - (d) FTP
6. What do you mean by IP address ? Explain its structure.
7. What is OSI reference layer ? Explain the functions of Data Link Layer and Transport Layer.
8. What is client-server architecture ? Discuss it's use in detail.
9. Explain the following :
- (a) TCP/IP
 - (b) Time Division Multiplexing
 - (c) DNS
 - (d) ISDN
10. Explain CSMA/CD and CSMA/CA in details.

