

[A-28]

Sardar Patel University
Post Graduate Diploma in Computer Applications (PGDCA)
SEMESTER – I Examination
PS01CDCA24 : Network Fundamentals
Tuesday, 17th April, 2018

Time: 10:00 AM to 01:00 PM

Max Marks: 70

Q1. Choose the most appropriate option for each question.**[8]**

- i. The backbone cable is used in ____ topology, to connect all nodes in a linear way.
A) Ring
B) Mesh
C) Star
D) Bus
- ii. In 10Base2, 2 is used to denote ____ meters.
A) 200
B) 20
C) 2000
D) 185
- iii. In ____ mode of transmission both stations can transmit and receive at same time.
A) Simplex
B) Duplex
C) Half-Duplex
D) Full-Duplex
- iv. IPv4 has ____ bits of address space.
A) 16
B) 32
C) 64
D) 128
- v. ____ connector is used with twisted pair cables.
A) RJ45
B) RJ11
C) BNC
D) RJ35
- vi. Which of the following is a protocol?
A) URL
B) TCP
C) DNS
D) LDP
- vii. Which of the following term is not suitable with e-mail?
A) BCC
B) CC
C) Attachment
D) RCC
- viii. The full form of UTP is ____
A) Unused Twisted Pair
B) Unshielded Twisted Place
C) Unshielded Twisted Pair
D) None of these

Q2. Answer the following questions (Any seven):**[14]**

- i. Define the term bit-rate with example.
- ii List the layers of OSI reference model.
- iii. What are major limitations of radio waves?
- iv. Differentiate: circuit switching and packet switching
- v. What is DNS?

- vi. Write full form of: HTTP, FTP.
- vii. What is MODEM? What is its use?
- viii. Briefly explain the components of URL.
- ix. What are the major sources of light in fiber optics?

Q3. Answer the following questions:

- a. What do you mean by the term "Computer Network"? Explain applications of computer networks in various fields. [6]
- b. What is guided transmission media? Explain twisted pair cables in detail. [6]

OR

- b. Differentiate LAN, WAN, and MAN by giving suitable examples of each. [6]

Q4. Answer the following questions:

- a. Write a note on TCP/IP reference model. [6]
- b. What do you mean by the term "Multiplexing"? Explain any one technique of multiplexing. [6]

OR

- b. Explain parallel and serial transmission in detail. [6]

Q5. Answer the following questions:

- a. Write a note on Token Bus. [6]
- b. What is Ethernet? Explain various cabling schemes under IEEE 802.3. [6]

OR

- b. What is topology? Write the name of the topologies. Explain any one topology in detail. [6]

Q6. Answer the following questions:

- a. Explain the term "Satellite". List and explain different types of satellites. [6]
- b. Write a note on WWW. [6]

OR

- b. Write a note on Name Servers. [6]

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