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[A-125]

No. of printed pages: 2

SARDAR PATEL UNIVERSITY
Post Graduate Diploma in Computer Application
Semester – I External ATKT Examinations
PGDCA-104 – Network Fundamentals
Wednesday, 6th April, 2016

Time: 02:30 p.m. to 05:30 p.m.

Max Marks: 70

Q1. Choose the most appropriate option for each question.

[8]

- i. Interconnected collection of autonomous computers is known as _____.
A) internetwork B) computer network
C) web D) LAN
- ii. Transmission media are usually categorized as _____.
A) Guided - Unguided B) Metallic – Non-Metallic
C) Fixed - Unfixed D) none of these
- iii. The number of bits that can be transmitted by a channel, a link or a network per second is called _____.
A) data rate B) baud rate
C) bandwidth D) none of these
- iv. Which of the following topology requires minimum cabling?
A) star B) mesh
C) ring D) bus
- v. The signal from satellite is aimed at a specific area called _____.
A) uplink B) downlink
C) repeater D) foot print
- vi. Which of the following is not a valid form of CSMA?
A) p-persistence B) Non-persistence
C) 1-persistence D) None of these
- vii. Which of the following is **not** an advantage of using a computer network?
A) high reliability B) scalability
C) file sharing D) None of these
- viii. A _____ represents agreement between the communicating devices.
A) protocol B) layer
C) communication D) network

- Q2. Answer the following questions (Any Seven):** [14]
- a. What are the various transmission modes? Explain any one in brief.
 - b. List all the layers of OSI model.
 - c. Explain LAN in brief.
 - d. What is modulation?
 - e. Explain broadcasting in detail.
 - f. Define : router
 - g. Discuss DNS with suitable example.
 - h. Explain FDM in brief.
 - i. What is internetwork?

- Q3. Answer the following questions:**
- a. Write a note on computer networks. [6]
 - b. Discuss fiber optic cables. [6]

OR

- b. Compare packet switching and circuit switching. [6]

- Q4. Answer the following questions:**
- a. Explain mesh, star and tree topologies of LAN. [6]
 - b. Write a note on terrestrial microwave. [6]

OR

- b. Write a note on CSMA. [6]

- Q5. Answer the following questions:**
- a. Explain physical layer and network layer of OSI reference model in detail. [6]
 - b. Discuss TCP/IP model in detail. [6]

OR

- b. Explain IEEE standard 802.3 cabling scheme in detail. [6]

- Q6. Answer the following questions:**
- a. Write a note on electronic mail. [6]
 - b. Discuss Geosynchronous satellites. [6]

OR

- b. Write a note on WWW. [6]

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