

[288/A49]

SEAT No. \_\_\_\_\_

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# SARDAR PATEL UNIVERSITY

Master of Computer Applications (M.C.A.) IV - Semester Examination  
PS04CMCA03 Computer Networks - II  
Wednesday, 24<sup>th</sup> October, 2018

Time: 2:00 pm to 5:00 pm

Max. Marks: 70

**Q.1 Give answers of following Multiple choice questions: [8]**

- (i) In 10Base2, 10 show the \_\_\_\_\_.  
a. Speed      b. Frequency      c. Power      d. Voltage
- (ii) \_\_\_\_\_ assuring that a message comes from the true sender?  
a. Authentication      b. Integrity      c. Confidentiality      d. None of these
- (iii) \_\_\_\_\_ is the process of converting cipher text into plain text.  
a. Decryption      b. Authentication      c. Digital Sign      d. Encryption
- (iv) The datalink layer concerns with \_\_\_\_\_.  
a. Bits      b. Packets      c. Frames      d. None of these
- (v) The IEEE 802.11 standard is used to define wireless \_\_\_\_\_.  
a. LAN      b. MAN      c. WAN      d. All of these
- (vi) The two-wire connections between each subscriber's telephone end office are known as \_\_\_\_\_.  
a. Tall office      b. End office      c. Local loop      d. None of these
- (vii) Which field(s) is/are used during non-transparent fragmentation?  
a. Offset      b. Flag      c. Packet Number      d. All of these
- (viii) Which of the following types of waves travel in all directions?  
a. X-rays      b. Gamma      c. Radio waves      d. Infrared

**Q.2 Do as directed (Any Seven): [14]**

- (i) Difference between flow control and congestion control
- (ii) Difference between Piconet and Scatternet.
- (iii) What do you mean by Gigabit Ethernet?
- (iv) List two applications of satellite communication.
- (v) Differentiate between Co-channel and Adjacent channel interference in wireless cellular topology.
- (vi) What is handoff? Difference between soft handoff and hard handoff.
- (vii) Discuss the concept of tunneling in brief.
- (viii) Write the full form of FDM & UDP.
- (ix) Explain caesar cipher with an example.

**Q.3 [A] Explain Fast Ethernet in detail. [6]**

**[B] Explain Congestion control in detail. [6]**

OR

**[B] Discuss the comparison between fibre optics and satellite communication in detail. [6]**

(2)

(PTO)

- Q.4 [A] Explain LEO, MEO & GEO satellite communication in detail. [6]  
[B] Explain transparent and non-transparent fragmentation in detail. [6]

OR

- [B] Explain transposition cipher with an example. [6]

- Q.5 [A] Write a note on firewall. [6]  
[B] Explain Distance Vector routing algorithm with an example. [6]

OR

- [B] Discuss virtual private networks. [6]

- Q.6 [A] Explain Mobile Telephone System. [6]  
[B] Define: Encryption & Decryption. Explain RSA algorithm with an example. [6]

OR

- [B] Define : Wireless Geolocation. Explain the general architecture of geolocation system. [6]

—X—  
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