SARDAR PATEL UNIVERSITY
Master of Computer Applications (M.C.A.) III - Semester Examination
PS03CMCA25 Computer Networks - II
16th April, 2019
Tuesday

Time: 2:00 pm to 5:00 pm   Max. Marks: 70

1.   **Select most appropriate option for each of the following questions :**   **[8]**

  (i)   How many keys are used in symmetric key cryptography ?

       (A) One   (B) Two   (C) Three   (D) Four

  (ii)   Which of the following is not a routing algorithm?

       (A) Shortest Path   (B) Hierarchical   (C) Distance Vector   (D) RSA

  (iii)   What is the data transmission speed supported by 100Base-TX ?

       (A) 10 Mbps   (B) 100 Mbps   (C) 1 Gbps   (D) None of these.

  (iv)   In 1000BaseFX, F stands for _____ .

       (A) Frequency   (B) Fiber Optics   (C) Frame   (D) Fragmentation

  (v)   The _____ layer is responsible to decide the route of packet.

       (A) Physical   (B) Datalink   (C) Network   (D) Transport

  (vi)   Iridium project is an example of _____ satellites.

       (A) LEO   (B) MEO   (C) GEO   (D) None of these.

  (vii)   Frequency is measured in _____

       (A) Hertz   (B) volts   (C) degrees   (D) None of these

  (viii)   Full form of VPN is _____

       (A) Virtual Public Network   (B) Vertical Private Network

       (C) Virtual Private Network   (D) Vertical Public Network

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

  (i)   Explain the meaning of **congestion.**

  (ii)   Write any two **advantages** of using satellite communication over fiber optic communication.

  (iii)   List names of various **guided media.**

  (iv)   Define: **Footprint, Transponder.**

  (v)   Differentiate : **adaptive** and **non-adaptive routing algorithms.**

  (vi)   Write the full forms of **GPRS** and **SMS.**

  (vii)   Why **fragmentation** is required?

  (viii)   Define: **Base station** and **Mobile station.**

  (ix)   What do you mean by a **substitution cipher** ?

3.   **[A]**   Explain the Fast Ethernet cabling schemes.   **[6]**

     [B]   Write a short note on satellite communication.   **[6]**

OR

     [B]   Explain Local loop and modem in detail.   **[6]**

(1)

(P.T.o.)

4. [A] Differentiate : virtual circuit subnets and datagram subnets. [6]

[B] Discuss the distance vector routing algorithm with an example. [6]

OR

[B] What is flooding? List various applications of flooding. [6]

5. [A] Explain the transposition cipher with an example. [6]

[B] Explain the transparent fragmentation technique in detail. [6]

OR

[B] Write a short note on Firewalls. [6]

6. [A] Explain : wireless transmission. [6]

[B] Write a short note on SMS. [6]

OR

[B] Short note on mobile telephone system. [6]

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