END TERM EXAMINATION

FOURTH SEMESTER [MCA] MAY-JUNE-2013

PAPER CODE : MCA206	**SUBJECT : Advance Computer Networks**

Time : 3 hours   **Maximum Marks : 60**

Note : Attempt five Questions including Q.no. 1 which is compulsory .

   Select 1 Question from each unit

1 . Answer all the following\g questions briefly :-   (2 * 10 = 20)

   a) What do you mean by DQDB ?
   b) Explain Cable Modem and ADSL.
   c) What are different fault-tolerant features in FDDI ?
   d) Explain briefly one-way Hash function.
   e) Write a short note on Application Programming Interface (API) for IPV6.6 bone.
   f) Describe the term Home Agent and Foreign Agent in Mobile IP .
   g) What are the different phases included in communication between Remote host and Mobile Host ?
   h) What do you mean by Message Authentication and Entity Authentication ?
   i) Explain KDC .
   j) What are advantages of HTTP over Secure HTTP ?

UNIT-I

2. (a) What do you mean by Hidden Station and Exposed Station problem ?

   How can we solve this ?   (5)

   (b) What are the various MAC techniques in Wi-Fi ? Compare IEEE 802.11a, 802.11b

   And 802.11g standards of Wi-Fi .   (5)

3. (a) Explain the frame format of FDDI . How FDDI media access control works ?   (5)

   (b) Explain the architecture of HIPPI . What are the different layers of HIPPI protocol ? (5)

UNIT - II

4. (a) Explain the architecture of ATM . How VCI and VPI work in TP ? (5)

(b) Explain the term Neighbour Discovery . What are the Different types of

Neighbour Discovery process ? (5)

5. (a) Differentiate between Statefull and Stateless Address Assignment Protocols of IPV6. (5)

(b) What are the different types of Error Messages and Informational Messages

in ICMPV6 ?? (5)

UNIT-III

6. (a) Implement Dynamic Routing with the help of OSPF routing protocol to configure

five different connected networks with routers. (5)

(b) Describe the term Multicast Routing Protocols . Differentiate between DVMRP and

CBT routing protocols . (5)

7. (a) Explain Multicasting . Compare Sourse-Based Tree and Group-Based Tree in

Tabular form . (5)

(b) Explain the term R\Triangle Routing and Double Crossing in Mobile IP , What are

The solutions to improve Mobile IP Efficiency ? (5)

UNIT-IV

8. (a) Explain AH and ESP in IPSec Protocol . (5)

(b) Difference between Symmetric cryptography and asymmetric cryptography .

Discuss Caesar cipher and DES . (5)

9. (a) When we talk about authentication in SSL, do we mean message authentication

or entity authentication ?? Justify your answer . (5)

(b) What do you mean by TCP – transaction oriented application ? What are the different

types of four extensions to improve TCP performance ? (5)