

(Please write your Exam Roll No.)

Exam Roll No. 02-14004414

END TERM EXAMINATION

FOURTH SEMESTER [MCA] MAY-JUNE 2016

Paper Code: MCA-206

Subject: Advanced Computer Networks

Time: 3 Hours

Maximum Marks: 60

Note: Attempt any five questions including Q.no.1 which is compulsory.
Select one question from each unit.

- Q1 Answer all the following questions briefly: (10x2=20)
- (a) What is Carrier extension approach and frame bursting in Gigabit Ethernet?
 - (b) What is HFC network?
 - (c) What are the values of subtype fields in control frames?
 - (d) What is encrypted security payload in IPV₆?
 - (e) How is an ATM virtual connection identified?
 - (f) Why RIP uses UDP instead of TCP?
 - (g) Change the multicast IP address 232.43.14.7 to an Ethernet multicast physical address.
 - (h) What is the role of SACK in TCP?
 - (i) What is ISAKMP?
 - (j) Draw a block diagram showing the digital signature process.

Unit-I

- Q2 Discuss Six goals of the IEEE 802.3₂ design. Explain its two common implementations with its corresponding encoding & decoding mechanism. (10)
- Q3 Discuss in detail four IEEE 802.11 addressing mechanism. (10)

Unit-II

- Q4 Explain six extension headers types of IPv6 datagram. (10)
- Q5 Describe the architecture of ATM and its various layers. (10)

Unit-III

- Q6 What is multicast distances vector routing? Describe four decision-making strategies involved in DVMRP. (10)
- Q7 Describe the three phases involved in the communication between mobile host and remote host. (10)

Unit-IV

- Q8 Discuss the concept of send window and receive window for data transfer in TCP. What is Silly Window Syndrome and its proposed solution. (10)
- Q9 (a) Compare and contrast http and https. (5)
(b) How message authentication code (MAC) is generated? (5)
