

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T3 EXAM EXAMINATION- Dec 2017

B.Tech/M.Tech VIIth Semester and Ist Semester

COURSE CODE: 10M11CI112

MAX. MARKS: 35

COURSE NAME: ADVANCED COMPUTER NETWORK

COURSE CREDITS: 3

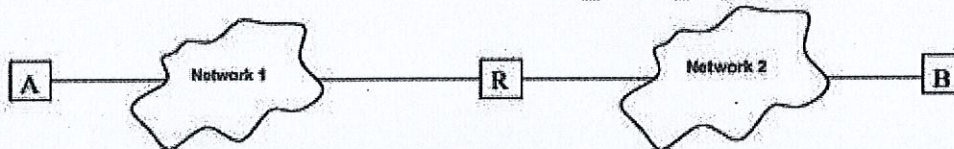
MAX. TIME: 2 Hrs

Note: All questions are compulsory. Carrying of a mobile phone during examinations will be treated as a case of unfair means.

Question 1:

[4+5 marks]

- What is fragmentation? Why is it needed? Evaluate IPv4 and IPv6 packet fragmentation methods.
- In the internetwork below (supports IPv4), user A in network 1 is sending data to user B in network 2. The user produces a message that is 16KBytes long (i.e., 16,384 bytes). Suppose that the network 1's MTU is 4,096 bytes and network 2's MTU is 1,024 bytes. Describe how the message will be transferred to user B over the different networks.



Question 2:

- Explain Broadcast, Unicast, Flooding, Multicast, Anycast? Why IPv6 only supports Unicast and Multicast? Explain IPv6 EUI-64 format address procedure? [2+2+2 Marks]
- Explain RPL protocol? Draw the DIO base object header format? Write 6 differences between Distance vector routing and Link state routing? [2+2+2 Marks]

Question 3:

- What do you see as the emerging threats in DDOS? Explain TCP SYN Attack with the help of a diagram? [1+4 Marks]
- Explain with the help of a header about RTP protocol? [4 Marks]
- Why HTTP is consider as stateless protocol. What are different request messages used in HTTP? [2+3 Marks]