



# VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE

Matunga, Mumbai-400 019

Autonomous Institute affiliated to University of Mumbai

|                      |  |              |                     |
|----------------------|--|--------------|---------------------|
| EXAMINATION          | End Semester Examination<br>MAY 2021                           | DATE OF EXAM | 12/05/2021          |
| SEMESTER & PROGRAM   | Sem-I, 1 <sup>ST</sup> YEAR M.Tech.<br>(Computer Engineering ) | TIME         | 11:00 AM to 01:00PM |
| TIME ALLOWED         | 2 HR.  | MARKS        | 60                  |
| COURSE NAME – (CODE) | TCP/IP AND NP(CO5003T)   |              |                     |

- Instructions
1. All questions carry equal marks.
  2. Figures to the right indicate full marks.
  3. Assume suitable and necessary data.

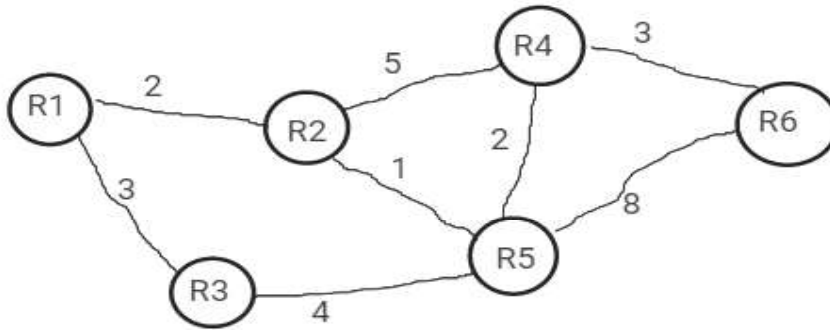
Q.1 a. List out various conditions in which retransmission occurs. Write in detail about it. (06) CO2

b. The following is a dump of UDP header in hexadecimal format (04) CO1  
5EFA00FD001C3297

What is the total length of user datagram? Is the packet from client to server or vice versa?

c. Write about how SYN-flooding attack is done. (02) CO3

Q.2 a. (10) CO2



In the above figure, R1, R2, R3, R4, R5 and R6 represents routers. Find out best path from R1 to R6 using Belmann Ford algorithm. Show complete routing table maintained at router R1.

b. List out different functions provided by NMAP tool. (02) CO3

Q.3 a. Write in detail about how DNS resolver find IP address for the host *ce.vjti.ac.in*. (10) CO4  
Show different techniques.

b. An IPv4 packet has the first few hexadecimal digits as shown below. (02) CO1  
0X4500005C000300005906.... How many hops can this packet take before being dropped?