

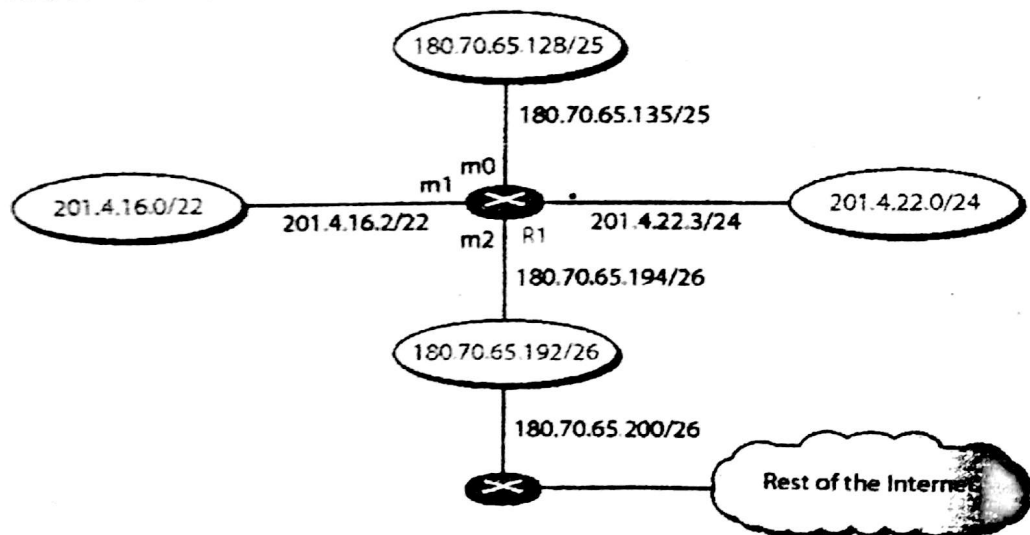
**SRM University**  
**Department of Information Technology**  
**Cycle test - II**  
**15IT303J (Computer Networks)**

**Date: 26.10.2017**

**Time: 3 Hours**

**PART – B (5 \* 4 = 20 Marks)**

21. Explain in brief the type of links in OSPF
22. Explain in brief the various forwarding Techniques of Routing.
23. Based on the configuration given below, make a routing table for router R1.



24. Differentiate between Aloha and Slotted Aloha Access method.
25. Differentiate between guided and unguided media
26. Differentiate between Adhoc and infrastructure network.
27. Calculate the propagation and Transmission time of 2.5 Kbyte message if the bandwidth of network is 1 Gbps. Assuming the distance between the sender and receiver is 12000 km and light travels at  $2.4 \times 10^8$  m/s

**SET C**

**PART – C (5\* 12 = 60 Marks)**

28. (a) Explain in detail about Distance vector Routing protocol with a neat diagram. In addition also explain about two and three node instability problem with a neat diagram.

**[OR]**

(b) Explain in detail BGP routing protocol with a neat diagram.

29. (a) Explain in detail CRC error detection algorithm. In addition for data word 1010011110 and divisor is 10111, show the CRC at the sender side. Now check at the receiver site if the data sent is error free or not

**[OR]**

(b) Construct a hamming code bit sequence for 10011101. Also say the receiver receives the following code 100101101111, find which bit is error.

30. (a) Explain in detail CSMA/CD protocol with a neat flowchart.

**[OR]**

(b) Explain in detail about Aloha and slotted Aloha protocol with a neat diagram.

31. (a) Explain in about different Go-Back-N ARQ protocol for different cases with a neat diagram

**[OR]**

(b) Explain in detail about stop and wait and sliding window flow control with a neat diagram.

32. (a) Explain in detail about Token Ring Frame Structure and also its operation.

**[OR]**

(b) Explain in detail the Bluetooth and types of network with a neat diagram