

End Semester Examinations - 2015-16 Even Semester - May 2016

14CS2027 Internet Routing Architecture

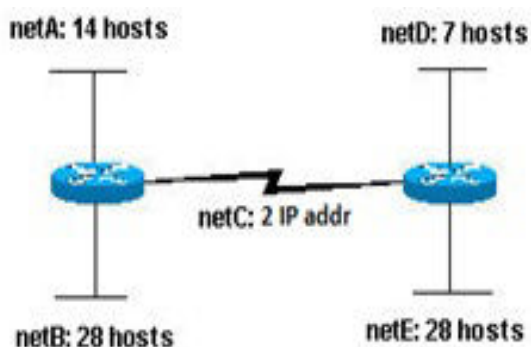
Set B

Time : 3 hrs
Total Marks: 100

1. A. Write notes on the recent history of the Internet. (8 marks)
- B. Explain the outcome of NSFNET solicitation for routing administration. (12 marks)

OR

2. A. Elaborate on the different services offered by ISP and service level agreements in detail. (12 marks)
- B. Consider the following network is assigned a class C address 204.15.5.0/24. Develop a subnetting scheme using VLSM in order to create the network with the given host requirements. (8 marks)



3. A. Discuss the ways by which the segregating the worlds in Autonomous system results in a more manageable networks. (12 marks)
- B. Differentiate static and dynamic routing with example. (8 marks)

OR

4. Explain the BGP message header format and the four different message types with diagram. (20 marks)
5. A. List the various BGP attributes and describe any five BGP path attributes that are part of BGP UPDATE message. (12 marks)
- B. Write short notes on various BGP-4 aggregation techniques handle CIDR and supernetting. (8 marks)

OR

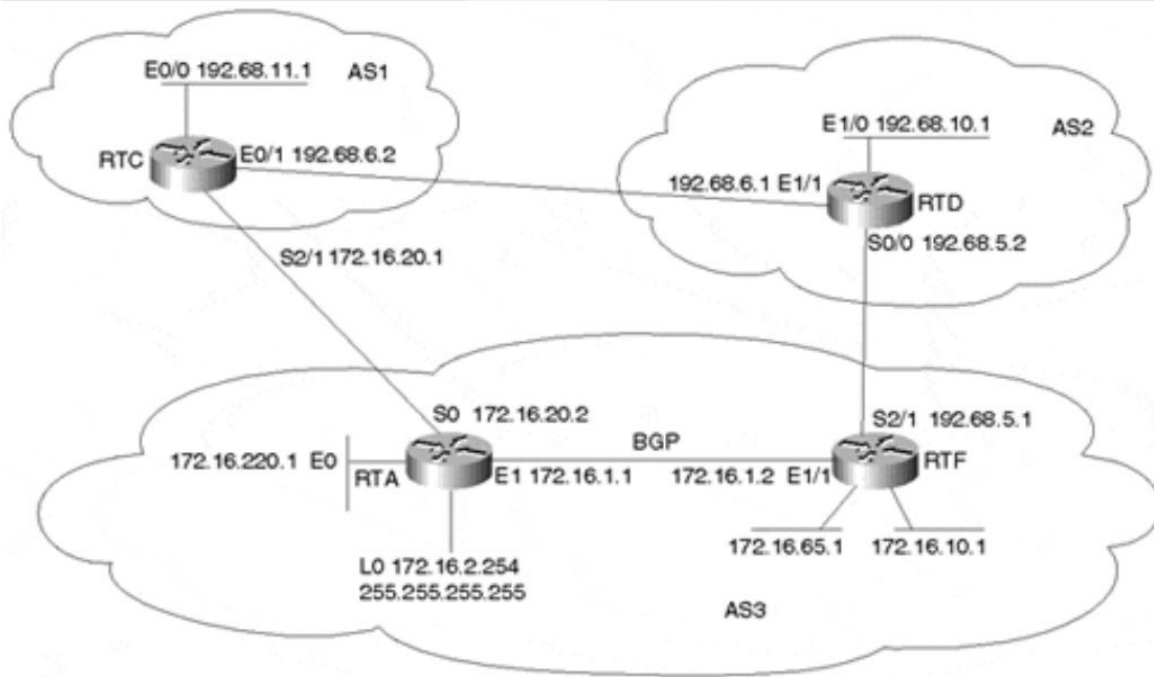
6. Discuss how redundancy, symmetry and load balancing can be ensured for single-homing and multi-homing networks with single and multiple providers. (20 marks)
7. A. Explain how policy routing is followed for controlling the flow of traffic. (10 marks)
- B. Brief on the factors that lead to route instability and describe the BGP mechanism to build stability on the Internet. (10 marks)

OR

8. Illustrate the methods by which large scale autonomous system can be managed with examples. (20 marks)
- 9.

A. Explain and write the configuration of all the router's to establish BGP peering sessions for the below given network topology. Use OSPF as an IGP to establish the required underlying connectivity internally. (10 marks)

B. Write the configuration of any five BGP attributes to be configured on the routers for the given below network topology. (10 marks)



Wishing you All the Best