SRM Institute of Science and Technology
NCR campus Modinagar
Department of Computer Science and Engineering
CSE 6th Semester
Subjective Question Bank (Unit 1)

Subject: Network Routing Algorithms (18CSE453T)

Short Question

1. Explain the classification of Routing Algorithms.
2. Explain the advantages of Router.
3. Describe the Routing Protocols in brief.
4. What is a network ID and host ID?
5. What is the possible range of IP addresses for the different classes?
6. What is CIDR?
7. What are the services provided by the transport layer protocols.
8. How do fast retransmit mechanism of TCP works.
9. Define the terms-

a) TELNET b) SNMP c) ARPANET d) FTP

10. Differentiate between OSI reference model and TCP/IP model.
11. What are the three types of internet addresses?
12. What are the functions of Transport layer in TCP/IP stack.
13. Explain about 3 Tier Architecture.
14. Explain detail about Cloud Architecture.
15. Briefly explain about Spine Leaf Architecture.
16. What is SNMP?
17. What is network management?
18. What kind of network management protocols are available?
19. What information can these network management protocols provide?

20. How many MIB trees are there?

21. List and briefly define the key areas that comprise network management.

22. Define fault as it applies to network management.

23. List two ways in which a network management system may be characterized as integrated.

24. List and briefly define the key elements of SNMP.

25. What functions are provided by SNMP?

26. What lower-layer protocol encapsulates SNMP messages?

27. Describe two different interpretations of the term MIB. 20.8 What are the differences among SNMPv1, SNMPv2, and SNMPv3?

28. What is PSTN? (Public Switched Telephone Network)

29. Why Do Businesses Prefer VoIP Over PSTN?

30. What are the Alternatives to PSTN?

31. Define mode of communication? List out various mode of communication.

32. Discuss example of communication technology.

33. Define communication subsystem? Explain in details with example

34. Why do we need international standards in telecommunications?

35. How has ITU-T influenced the exchange of information through communication technologies?

36. Desribe the IETF mission.

37. Write a short note on MFA forum.

38. What is the Merger in MFA forum?

39. Write mission of MFA forum.

40. Explain Type length value encoding

41. List the advantages of using a TLV representation data system solution.

42. How the parsing is done in TLV encoding scheme.

43. Explain the TLV encoding with an example.

44. Why TLV encoding results in less overhead?

45. Explain network protocol analyser and its main function.

46. Briefly discuss about the working of network protocol analysers.

47. What are the areas of usage of network analysers?

48. What are the illegal uses of network analysers?

Long Question

49. Explain the functions of Router and types of Router in detail.

50. What is classful addressing? Discuss Class A, Class B, Class C, Class D and Class E addresses with its ranges in decimal dotted notation and example

51. Differentiate between Protocol Architecture Stack and OSI Reference Model.

52. With a neat sketch, explain the function of OSI network architecture.

53. Draw and explain the TCP/IP protocol stack.

54. What is Network topology Architecture? Explain in detail.

55. Describe with diagram that shows how these components are connected with each other in the SNMP architecture.

56. One of the first steps in configuring a device to be managed is to give it an IP address. Why?

57. We have seen that SNMP uses UDP as its transport protocol. Why was UDP chosen over TCP?

58. What is the disadvantage of having the network management system operate at the application layer?

59. How Do PSTN Phone Lines Work?

60. Explain role of telecommunication in communication system. List out application of Satellite in real world communication.

61. What is IETF? Discuss the IETF missions in detail?