Question Banking

UNIT 1 Introduction to Software Defined Networking (SDN)

1. What are the Challenges of traditional networks?
2. State Fundamental characteristics of SDN.
3. Explain Plane Separation, Simplified Device and Centralized control?
4. Give a brief description of Network Automation, Virtualization and Openness?
5. Draw and explain SDN Operation/Architecture.
6. What are API's?
7. Explain Northbound API"s, Southbound API"s, East/West API"s.
8. Write short note on: ONF, SDN Devices.
9. Draw and explain Traditional Switch Architecture.
10. What is Control, Data and management Planes? Explain each.
11. Explain SDN architecture with neat diagram.
12. Explain centralized & distributed control & data planes.
13. Explain SDN interfaces with neat diagram.
14. Compare software Defined Network & Traditional Network
15. What are the challenges of traditional network.

UNIT 2 OPEN FLOW & SDN CONTROLLERS

1. What is an Open Flow Protocol? Why it is used?
2. Explain various types of flow in detail.
3. Explain Proactive and Reactive Flow.
4. Why are timers used? Explain various types of Timers?
5. Write Open Flow Advantages and Disadvantages.
6. Draw and explain Open Flow Controller in detail.

7. What are the various Open Flow Ports?
8. What is an Open Flow switch? Why is it used?
9. Compare Open v Switch Features.
10. Explain Pipeline Processing.
11. Explain Matching in detail.
12. Explain SDN controller with neat diagram.
13. Explain physical & logical ports in Open Flow switches.
14. Explain various open flow message type.
15. Explain flow tables with neat diagram.
16. Illustrate in detail open flow protocol.
17. Analysing the evolving network requirement that led to emergence of SDN.
18. State applicability of Open Flow protocol in SDN Controllers.
19. Implement software-defined network (SDN) based firewall.
20. Explain Mininet.
21. Explain a platform for building network control applications.
22. Give a brief description of SDN Open Flow Controllers.