COMP9332 Network Routing and Switching Self-assessed Tutorial for SDN

- Q1. One of the major drivers for SDN is simplification. This is because
 - a) Network devices have become increasing simple due additional features
 - b) Network devices have become increasing complex due to the intelligence needed to be automous.
 - c) Cisco certified employees cost too much money.
 - d) None of the above.
- **Q2.** Which of the following listed below are modern data center needs.
 - a) Automation.
 - b) Scalability
 - c) Multipathing
 - d) Multitenancy
 - e) Network virtualization
 - f) All of the above.
- Q3. Which of the following characteristics can be used to forwarding the incoming packets.
 - a) MAC address.
 - b) IP address.
 - c) VLAN ID
 - d) A & B.
 - e) All of the above
- **Q4.** The following actions are performed by the switch
 - a) Forward
 - b) Drop
 - c) Consume
 - d) Replicate
 - e) a & b
 - f) All of the above
 - g) None of the above
- Q5. The SDN can be derived from the following abstractions
 - a) Distributed abstraction
 - b) Forwarding
 - c) Configuration or specification
 - d) All of the above
 - e) None of the above
- **Q6.** A Southbound API is

- a) OpenFlow interface that the controller uses to program the network devices
- b) Allowing software applications to be plugged into the controller
- c) All of the above
- d) None of the above.

Q7. A Northbound API is

- a) OpenFlow interface that the controller uses to program the network devices
- b) Allowing software applications to be plugged into the controller
- c) The northbound API of the controller is intended to provide an abstraction of the network devices and topology
- d) b&c
- e) All of the above

Q9. A flow is

- a) Set of packets transferred from one network endpoint (or set of endpoints) to another endpoint
- b) Bi directional
- c) None of the above
- d) All the above

Q10. The fundamental traits of SDN are

- a) Plane separation.
- b) Simplified device
- c) Centralized controller.
- d) Network automation and Virtualization.
- e) Openness
- f) None of the above
- g) All of the above

Q11. SDN applications are

- a) Built on top of the SDN of the controller
- b) They have the same functionality as the application layer OSI/ISO network level stack.
- c) All of the above
- d) None of the above

Q12. White box switches support

- a) Legacy mode
- b) Open flow mode
- c) Both Legacy and open flow mode
- d) None of the above

Q13. SDN controller

- a) Maintains view of the network
- b) Implements the policy decisions
- c) Provides a Northbound API for the application
- d) All of the above

Q14. Proactive flow is

- a) It's static flow
- b) Typically the application will set these flows when the application starts up, and the flows will persist until some configuration change is made
- c) Packets will be dropped if no match is found
- d) All of the above
- e) None of the above

Q15. The SDN application does which of the following

- a) configure the flows to route packets through the best path between two endpoints; (2) balance traffic loads across multiple paths or destined to a set of endpoint
- b) balance traffic loads across multiple paths or destined to a set of endpoints
- c) react to changes in the network topology such as link failures and the addition of new devices and paths
- d) Redirect traffic for purposes of inspection, authentication, segregation, and similar security-related tasks.
- e) All of the above

Q16. The following are the advantages of the SDN Via API's

- a) Provides some centralized control
- b) Provides agility and automation and enhance writing some orchestration tools easier
- c) It uses legacy management interfaces
- d) All of the above