## 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.

Answer b

- **Q2.** Which of the following listed below are modern data center needs.
  - a) Automation.
  - b) Scalability
  - c) Multipathing
  - d) Multinenancy
  - e) Network virtualization
  - f) All of the above.

Answer f

- 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

Answer e

- **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

Answer f

- **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

Answer d

## **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.

Answer

#### **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

Answer d

#### **O9.** 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

Answer a

#### 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

Answer g

### 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

#### Answer a

## Q12. White box switches support

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

Answer c

## 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

Answer: d

#### **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

Answer d

## 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

Answer e

#### 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

# Answer d