

Unit 4 - Week 2

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Assignment-2

The due date for submitting this assignment has passed. **Due on 2020-02-12, 23:59 IST.**
 As per our records you have not submitted this assignment.

1) What are the two key design goals for Open vSwitch? 1 point

Flexible and fast-forwarding
 Scalability and partitioning
 Isolation and tunneling
 Reliability and filtering

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Flexible and fast-forwarding

2) Consider the following statements related to Software-defined networking (SDN) technology 1 point

Statement 1: SDN is an approach to network management that enables dynamic, programmatically efficient network configuration in order to improve network performance and monitoring making it more like cloud computing than traditional network management.

Statement 2: SDN attempts to centralize network intelligence in one network component by disassociating the forwarding process of network packets (data plane) from the routing process (control plane).

Only statement 1 is true
 Only statement 2 is true
 Both statements are true
 Both statements are false

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Both statements are true

3) Match the correct pairs: 1 point

P: VL2	I: Achieving high utilization with software-defined WAN.
Q: B4	II: Simple forwarding along the path
R: SWAN	III: Inside one site, it has the data center network, of cluster & border routers and uses the 'Quagga' software switch to run the routing protocols between the cluster border routers.
S: MPLS	IV: It uses: (i) flat addressing to allow service instances to be placed anywhere in the network, (ii) Valiant load balancing to spread traffic uniformly across network paths, and (iii) End-system based address resolution to scale to large server pools, without introducing complexity to the network control plane

P: IV, Q: I, R: II, S: III
 P: III, Q: I, R: II, S: IV
 P: IV, Q: III, R: I, S: II
 P: II, Q: IV, R: III, S: I

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 P: IV, Q: III, R: I, S: II

4) True or False ? 1 point

Server consolidation is an approach to efficiently pack virtual machines into a fewer number of servers to increase resource utilization and reduce power consumption.

True
 False

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 True

5) _____ is a network emulator which creates a network of virtual hosts, switches, controllers, and links. 1 point

Docker
 Hypervisor
 KVM
 Mininet

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Mininet

6) To offer hotspot free performance for arbitrary traffic matrices, VL2 uses two related mechanisms: 1 point

VLB and ECMP
 Flows and out-of-order delivery
 Clos network and EQMP
 Agility and Load balancing

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 VLB and ECMP

7) The key challenges of a Multi-Tenant Data Center are: 1 point

I. Performance uniformity
 II. Agility
 III. Scalability
 IV. Location independent addressing

I, II, III
 I, II, IV
 II, III, IV
 I, III, IV

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 I, II, IV

8) Consider the following statements: 1 point

Statement 1: In Single-root I/O Virtualization (SR-IOV), forwarding is no longer as flexible because it relies on a layer two switch that is built into the hardware of the NIC.

Statement 2: In Single-root I/O Virtualization (SR-IOV), the live VM migration becomes trickier, because the virtual machine is tied to physical resources of the machine.

Only statement 1 is true
 Only statement 2 is true
 Both statements are true
 Both statements are false

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Both statements are true

9) True or False ? 1 point

A virtual machine is a standard unit of software that packages up code with all its dependencies so that the application can run smoothly, rapidly, and reliably from one computing environment to another. VMs are a lightweight, efficient, and standard way for applications to move between environments and run independently.

True
 False

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 False

10) _____ is the original OpenFlow controller. It serves as a network control platform, that provides a high level programmatic interface for management and the development of network control applications. Its system-wide abstractions turn networking into a software problem. 1 point

Routing Control Platform
 4D architecture
 Ethane
 NOX

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 NOX

11) _____ is a centralized controller enforces enterprise network Ethernet forwarding policy using existing hardware. 1 point

Routing Control Platform
 4D architecture
 Ethane
 NOX

No, the answer is incorrect.
 Score: 0
 Accepted Answers:
 Ethane