Subject Code: ITC701 Subject: Enterprise Network Design

Sem:VII Year: BE Branch:IT

Total Marks: 80

N.B.: (1) Question No.1 is compulsory.

(2) Make suitable assumptions wherever necessary but justify your assumptions.

| **Q.1** | **Select the correct answer(10*2M=20M)** |
|---|---|
| 1 | Planned Applications and Network Services includes |
| OPTION A | Planned Architecture types, Applications, Level of importance and Comments |
| OPTION B | Planned Application types, design, Level of importance and Comments. |
| OPTION C | Planned Application types, Applications, Level of importance and Comments |
| OPTION D | Planned Application types, Applications, Level of importance and Implementation |
| 2 | The PPDIOO network lifecycle |
| OPTION A | Reflects the phases of a standard network's lifecycle |
| OPTION B | Defines the steps in which the user has to maintain the network |
| OPTION C | Shows how to implement security in a phased manner |
| OPTION D | Reflects the phases of a standard requirement lifecycle |
| 3 | Enterprise Data center service devices deployed at the…….benefit only the servers that are directly attached to the specific access switch |
| OPTION A | Core Layer |
| OPTION B | Access layer |
| OPTION C | Distribution Layer |
| OPTION D | Layer 4 |
| 4 | The network size, in terms of the IP addressing plan, relates to _____ |
| OPTION A | the number of devices and interfaces that need an IP address. |
| OPTION B | the number of devices and interfaces that need an MAC address. |
| OPTION C | the number of devices and interfaces that need a routing information |

| | |
|---|---|
| OPTION D | the number of devices and interfaces that need a security ID |
| 5 | Which is not an Interior gateway protocols? |
| OPTION A | RIP |
| OPTION B | OSPF |
| OPTION C | IS-IS |
| OPTION D | BGP |
| 6 | ___ is the message used by the switch to transfer the control of the packet to the controller |
| OPTION A | Read-state |
| OPTION B | Features |
| OPTION C | Packet-out (Send - Packet) |
| OPTION D | Packet-in |
| 7 | A poorly designed IP addressing scheme usually has____ and ___ is not the impact of poorly designed IP addressing scheme |
| OPTION A | Summarizing routes |
| OPTION B | Routing routes |
| OPTION C | Redirecting routes |
| OPTION D | Updating Routes |
| 8 | Of the following which is not the advantage of route summarization |
| OPTION A | reduces the number of routes in the routing table |
| OPTION B | reduces the routing update traffic |
| OPTION C | overall router overhead in the router receiving the routes |
| OPTION D | Routers operating life increases |
| 9 | ___ extracts the information (statistics and events) from the hardware devices and sends to SDN application |
| OPTION A | SDN Switch (SDN Networking devices) |
| OPTION B | SDN Controller |

| | |
|---|---|
| OPTION C | SDN Application |
| OPTION D | SDN Interfaces |
| 10 | Which types of devices are usually found in the Ecommerce module? |
| OPTION A | Web servers, firewalls, NIDS appliances |
| OPTION B | SMTP mail servers, firewalls, Public FTP servers, DNS |
| OPTION C | Public FTP servers, DNS |
| OPTION D | ASAs, NIDS appliances, firewalls |
| **Q.2** | **Answer any two from the following (2*10M=20M)** |
| A | Explain the OSPF protocol in detail |
| B | What is route summarization, and why would a network need it? |
| C | How does a good routing protocol assure a good network design? Explain with example |
| **Q.3** | **Answer any two from the following (2*10M=20M)** |
| A | Describe various phases in the PPDIOO network life cycle. |
| B | Compare the Top-Down vs Bottom-Up Network Design Approach |
| C | Compare the Enterprise WAN architecture technologies |
| **Q.4** | **Write a short note on (Any Two 2*10M=20M)** |
| A | IPv6 |
| B | SDN Architecture |
| C | SONA framework |