**Studytonight – CN test 4 – Aditya Jain**

1. **Which of the following devices assigns IP address to devices connected to a network that uses TCP/IP?**
2. **DHCP Server**
3. NIC
4. Gateway
5. Hub

Soln: **Dynamic Host Configuration Protocol** (DHCP) is used to provide an IP address to all connected devices dynamically that uses TCP/IP.

1. **The data on a DVD is held in the form of ‘X’ on the disc. What does X refers to?**
2. **Small pits and bumps**
3. Small bits
4. Small bytes
5. None of the above
6. **Star topology is based on a Central Device that can be?**
7. Hub
8. Switch
9. Both Hub and Switch
10. None of the above

Soln: Both Hub and a Switch are used in Star Type Network.

1. **Hub is a ‘X’ device and Switch is a ‘Y’ device:**
2. X= Unicast and Y= Multicast
3. X=Multicast and Y=Unicast
4. **X=Broadcast and Y=Unicast**
5. None of these

Soln: Hub is a Broadcasting Device and Switch is a Unicasting Device because Switch have memory elements to store MAC Address.

1. **Switch is a Device of -------- Layer of OSI Model:**
2. **Network**
3. **Data Link**
4. Application
5. Session

Soln: Swithes operate on the second layer of the OSI model i.e. the Data Link Layer.

1. **Which of the following devices translates hostnames into IP address?**
2. **DNS Server**
3. Hub
4. DHCP Server
5. Firewall

Soln: a **Domain Name Server** (DNS) is responsible for translating hostnames into IP addresses.

1. **Which transmission media has the highest transmission speed in a network?**
2. Coaxial cable
3. Twisted pair cable
4. **Optical fiber**
5. Electrical cable
6. **Which of this is not a network edge device?**
7. PC
8. Smartphone
9. Servers
10. **Switch**

**Soln:** Network edge devices refer to host systems, which can host applications like web browser.

1. **Three of more devices share a link in -------- connection?**
2. Unipoint
3. **Multipoint**
4. Point to Point
5. None of the above
6. **The IETF standards documents are called?**
7. **RFC**
8. RCF
9. ID
10. None of the above
11. **The structure or format of data is called?**
12. **Syntax**
13. Semantics
14. Struct
15. None of the above

Soln: Not semantics because it defines how a particular pattern is to be interpreted, and what action is to be taken based on that interpretation.

1. **Communication between a computer and a keyboard involves --------- transmission.**
2. Automatic
3. Half-duplex
4. Full- duplex
5. **simplex**

Soln: Data flows in single direction i.e. from Keyboard to PC.

1. **Bluetooth is an example of:**
2. **Personal area network**
3. Local area network
4. Virtual private network
5. Wide area network
6. **A ---------- is a device that forwards packets between networks by processing the routing information included in the packet.**
7. Bridge
8. Firewall
9. **Router**
10. All of the above
11. **A list of protocols used by a system, one protocol per layer, is called?**
12. Protocol architecture
13. **Protocol stack**
14. Protocol suit
15. None of the above

Soln: A **protocol stack** refers to a group of **protocols** that are running concurrently that are employed for the implementation of network **protocol** suite. The **protocols** in a **stack** determine the interconnectivity rules for a layered network model such as in the OSI or TCP/IP models.