Chapter 1 - QUIZ - LAN Design

1. Which three options correctly associate a layer of the hierarchical design model with its function? (Choose three.)
   A. Core -- interface for end devices
   B. Distribution -- traffic control and security policies
   C. Access -- interface for end devices
   D. Distribution -- high-speed backbone
   E. Core -- high-speed backbone
   F. Access -- implementation of security policies

2. With respect to network design, what is convergence?
   A. implementation of standard equipment sets for LAN design
   B. implementation of a core-distribution-access design model for all sites in an enterprise
   C. a point in the network where all traffic “converges” before transmission to the destination, normally the core switch
   D. combining conventional data with voice and video on a common network

3. Which three options are the potential benefits of a converged network? (Choose three.)
   A. simplified data network configuration
   B. simplified network changes
   C. combines voice, video, and applications in one computer
   D. conventional voice equipment can be used for new VoIP implementations
   E. combines voice and data network staffs
   F. simpler maintenance than hierarchical networks
   G. lower quality of service configuration requirements

4. What factor may complicate user communities analysis?
   A. application changes may radically affect predicted data growth
   B. server to server traffic may skew user port usage data
   C. application usage is not always bound by department, or physical location
   D. different organization applications may share data stores

5. Match the term on the left to the associated definition on the right.

a.	wire speed	➔	data rate that each port on the switch is capable of attaining
b.	port density	➔	number of ports available on a single switch
c.	forwarding rates	➔	processing capabilities of a switch by quantifying performance of the switch by how much data it can process per second
d.	link aggregation	➔	ability to utilize multiple switch ports concurrently for higher throughput data communication

6. What would be the port capacity of a single port on a 48-port Gigabit Ethernet switch?
   A. 48 Gbps
   B. 10 Mbps
   C. 1000 Mbps
   D. 100 Mbps

7. A switch that uses MAC addresses to forward frames operates at which layer of the OSI model?
   A. Layer 1
   B. Layer 2
   C. Layer 3
   D. Layer 4

8. What is a feature offered by all stackable switches?
   A. predetermined number of ports
   B. fully redundant backplane
   C. support for Gigabit connectivity
   D. low bandwidth for inter-switch communications
   E. PoE capability

9. What function is performed by a Cisco access level switch?
   A. inter-VLAN support
   B. routing
   C. providing PoE
   D. link aggregation

10. Drag the features listed on the left to the Cisco layer to which they are associated.

a.	port security	➔	Access Layer
b.	Layer 3 support	➔	Core Layer
c.	redundant components	➔	Core Layer
d.	VLANs	➔	Access Layer
e.	10 Gigabit Ethernet	➔	Core Layer
f.	PoE	➔	Access Layer

11. Which two characteristics describe the core layer of the hierarchical network design model? (Choose two.)
   A. redundant paths
   B. high-level policy enforcement
   C. PoE
   D. controls access of end devices to network
   E. rapid forwarding of traffic