Skipped Chunk 1:  
Match the following concepts related to software testing methodologies with their corresponding testing focus:  
1. Testing Methodology Focus  
I. Unit Testing A. Verification of application behavior under peak loads  
II. Integration Testing B. Validation of individual components separately  
III. Performance Testing C. Ensuring that interface contracts between modules are met  
IV. White-box Testing D. Evaluation of internal paths and code structure  
Choose the correct answer from the options given below:  
(1) I-B, II-C, III-A, IV-D  
(2) I-D, II-A, III-B, IV-C  
(3) I-B, II-D, III-A, IV-C  
(4) I-C, II-A, III-D, IV-B  
Answer Key: 1   
Solution:  
• Unit Testing: Focuses on individual components to ensure each functions correctly on its own, hence option I-B.  
• Integration Testing: Tests the interaction between integrated units or modules to check if they work together correctly, corresponding to option II-C.  
• Performance Testing: Assesses how the system performs under various conditions, including load and stress, aligning with option III-A.  
• White-box Testing: Involves looking inside the codebase to test internal structures and workings, accurately described by option IV-D.  
Hence, Option (1) is the right answer.  
  
Match the following network architectures with their characteristic descriptions:  
1. Network Architecture Characteristic  
I. Peer-to-Peer A. Relies primarily on centralized management  
II. Client-Server B. Nodes equally share resources and responsibilities  
III. Mesh C. Each node connects directly to every other node  
IV. Star D. Uses a common central switch to connect nodes  
Choose the correct answer from the options given below:  
(1) I-A, II-B, III-C, IV-D  
(2) I-B, II-A, III-D, IV-C  
(3) I-B, II-A, III-C, IV-D  
(4) I-C, II-D, III-B, IV-A  
Answer Key: 3   
Solution:  
• Peer-to-Peer: Each node acts as both client and server, sharing resources without a centralized server, fitting option I-B.  
• Client-Server: Utilizes a central server to manage clients and resources, which corresponds to option II-A.  
• Mesh: Characterized by every node connecting directly to each other, making the network robust, which aligns with option III-C.  
• Star: All nodes are connected to a single central node, usually a hub or switch, described by option IV-D.  
Hence, Option (3) is the right answer.  
  
Match the following network protocols and models with their primary layer or function in network communication:  
1. Protocol/Model Layer/Function  
I. HTTP A. Application Layer  
II. Ethernet B. Data Link Layer  
III. IP C. Network Layer  
IV. TCP D. Transport Layer  
Choose the correct answer from the options given below:  
(1) I-B, II-A, III-D, IV-C  
(2) I-A, II-B, III-C, IV-D  
(3) I-D, II-C, III-A, IV-B  
(4) I-C, II-D, III-B, IV-A  
Answer Key: 2   
Solution:  
• HTTP: Operates at the application layer, providing protocols for web communications, thus I-A.  
• Ethernet: Functions at the data link layer, handling the physical and data link aspect of network communications, fitting II-B.  
• IP: Sits at the network layer, responsible for logical addressing and routing, corresponding to III-C.  
• TCP: Works on the transport layer, managing end-to-end communication between hosts, described by IV-D.  
Hence, Option (2) is the right answer.  
  
Match the following types of network addresses with their appropriate descriptions:  
1. Address Type Description  
I. Physical Address A. Identifies devices globally on the internet  
II. Logical Address B. Used within a local network to identify devices  
III. Port Address C. Identifies specific processes or services on a machine  
IV. Specific Address D. Refers to IP addresses that are routable and not confined to local networks  
Choose the correct answer from the options given below:  
(1) I-B, II-D, III-C, IV-A  
(2) I-A, II-C, III-D, IV-B  
(3) I-B, II-A, III-D, IV-C  
(4) I-D, II-B, III-A, IV-C  
Answer Key: 1   
Solution:  
• Physical Address: Also known as MAC address, used locally to identify devices on a local network, hence I-B.  
• Logical Address: Typically refers to IP addresses used globally but can be specific to routable addresses, aligning with II-D.  
• Port Address: Identifies specific processes or services using ports on a device, described by III-C.  
• Specific Address: Refers to global IP addresses, distinguishing them from non-routable addresses, fitting IV-A.  
Hence, Option (1) is the right answer.