UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, Dec 2020

Course: BCA   **Semester: V**
Program: - R&S SCALING NETWORK   **Time 03 hrs.**
Course Code: CSBC3004P   **Max. Marks: 100**

Instructions:

SECTION A
1. Each Question will carry 5 Marks
2. Instruction: Complete the statement / Select the correct answer(s)

S. No.	Question	CO
Q 1	What are two ways to access a Cisco switch for out-of-band management? (Choose two.) a) a connection that uses the AUX port b) a connection that uses the AUX port c) a connection that uses HTTP d) a connection that uses Telnet e) a connection that uses the console port f) a connection that uses SSH	CO1
Q 2	Refer to the exhibit. Based on the command output shown, what is the status of the EtherChannel? a) The EtherChannel is dynamic and is using ports Fa0/10 and Fa0/11 as passive ports. b) The EtherChannel is down as evidenced by the protocol field being empty. c) The EtherChannel is partially functional as indicated by the P flags for the FastEthernet ports. d) The EtherChannel is in use and functional as indicated by the SU and P flags in the command output.	CO 2

```
# show etherchannel summary

<output omitted>

Number of channel-groups in use: 1
Number of aggregators:           1

Group  Port-Channel  Protocol  Ports
------|-------------|---------|----------------------
1      Po1(SU)          -        Fa0/10(P)   Fa0/11(P)
```

Q 3	What are two functions of a router? (Choose two.)
	    a) It connects multiple IP networks.
	    b) It controls the flow of data via the use of Layer 2 addresses.
	    c) It determines the best path to send packets.
	    d) It manages the VLAN database.
	    e) It increases the size of the broadcast domain
		CO 1

Q 4	What are two purposes of dynamic routing protocols? (Choose two.)
	    a) discover remote networks
	    b) provide network security
	    c) reduce network traffic
	    d) provide a default route to network hosts
	    e) select best path to destination networks
		CO 2

Q 5	What three states are transient OPSF neighbor states that indicate a stable adjacency is not yet formed between two routers? (Choose three.)
	    a) established
	    b) loading
	    c) 2way
	    d) exstart
	    e) full
	    f) exchange
		CO4

Q 6	A network engineer has manually configured the hello interval to 15 seconds on an interface of a router that is running OSPFv2. By default, how will the dead interval on the interface be affected?
	    a) The dead interval will now be 60 seconds.
	    b) The dead interval will now be 30 seconds.
	    c) The dead interval will not change from the default value.
	    d) The dead interval will now be 15 seconds.
		CO1

SECTION B

1. Each question will carry 10 marks
2. Instruction: Write short / brief notes

Q 7	List features of OSPF. Draw diagram for OSPF progresses through several states while attempting to reach convergence along with explanation.	CO4
Q 8	Describe the basic features of EIGRP. Implement EIGRP for IPv4 with proper example.	CO3
Q 9	Compare VTP versions 1 and 2. List Steps to Configure VTP.	CO1
Q 10	Elaborate EIGRP Metrics with commands. Perform EIGRP operation through DUAL and the Topology Table.	CO3
Q 11	Describe hierarchical small business network designs.	CO1

SECTION-C

1. Each Question carries 20 Marks.

2. Instruction: Write long answer.		
Q 12	Classify Spanning Tree Redundancy at OSI Layers 1 and 2. Apply Spanning Tree Algorithm to identify network path. List Types of Spanning Tree Protocols.	**CO2**