

Name:  
Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, Dec 2021**

**Course: BCA (BFSI)**  
**Program: R&S Scaling Network**  
**Course Code: CSBC3004**

**Semester: II**  
**Time 03 hrs.**  
**Max. Marks: 100**

**SECTION A**  
**(Scan and upload)**

**(5Qx 4M = 20 Marks)**

S.No.		Marks	CO
Q 1.	Elaborate the concepts SSH Operation in remote access.	4	CO1
Q2.	List the Benefits of a VLAN Design.	4	CO2
Q3.	Explain Purpose of STP Spanning Tree Protocol along with diagram.	4	CO3
Q4.	List different Wireless Technologies	4	CO4
Q5.	Elaborate on Basic Router Configuration Verification Commands	4	CO5

**SECTION B**  
**(Scan and upload)**

**(4Qx10M = 40 Marks)**

Q6.	Explain the purpose of VLANs in a switched network. Describe options for configuring inter-VLAN routing.	10	CO2
Q7.	Explain the purpose and operation of first hop redundancy protocols.	10	CO3
Q8.	Describe WLAN technology , standards, threats to WLANs.	10	CO4
Q9.	OR Explain how routers determine the best path. Describe the structure of a routing table.  Explain how routers forward packets to the destination. Configure basic settings on a router.	10	CO5

**SECTION-C**  
**(Scan and upload)**

**(2Qx 20M= 40 Marks)**

<b>Q10.</b>	Explain common problems in a redundant, L2 switched network. Apply Spanning Tree Protocol (STP) in a loop-prevention network protocol that allows for redundancy while creating a loop-free Layer 2 topology.	<b>10+10</b>	<b>CO3</b>
<b>Q11.</b>	<p>Apply 5 step process during Cisco switch is powered on. How we configure duplex communication. List the characteristics of Store-and-forward switching.</p> <p>Or</p> <p>Elaborate Use the switch LEDs to monitor switch activity and performance: SYST, RPS, STAT, DUPLX, SPEED, and PoE. Analyze, how frames are forwarded in a switched network.</p>	<b>20</b>	<b>CO1</b>