UPES
UNIVERSITY OF TOMORROW

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Supplementary Examination, May 2022

Course: ROUTING AND SWITCHING ESSENTIALS   Semester: IV
Program: BCA   Time: 03 hrs.
Course Code: CSBC 2008   Max. Marks: 100

Instructions: Kindly stick to the question and support every answer with a proper explanation.

SECTION A (5Qx4M=20Marks)			
S. No.		**Marks**	**CO**
Q 1	Explain different types of routings	4	CO2
Q 2	Define the VLAN. State various commands to establish VLAN	4	CO2
Q 3	Recall the various generation of Routers	4	CO1
Q 4	State steps to design LAN for 12 terminal using routers and switches	4	CO1
Q 5	Recall different means of communication media in LAN	4	C01
SECTION B (4Qx10M= 40 Marks)			
Q 6	Demonstrate the working of Distance Vector Routing. Highlight various advancement incorporated to overcome the drawback of distance vector.	10	CO3
Q 7	Elucidate different techniques that can be deployed in a network to transmit packet from one router to another.	10	CO1
Q 8	Illustrate the Access control List and state commands to establish access control list on a IGP	10	CO2
Q 9	"Protocols guide the flow of packet through any router". Interpret the working of Ingress Protocol **OR** "Protocols guide the flow of packet through any router". Interpret the working of Egress protocols	10	CO3
SECTION-C (2Qx20M=40 Marks)			
Q 10	"Router are the most important component of any network". Design the complete architecture of Router, Explain each component in details	20	CO1
Q 11	Write detail note to appraise the role of the following: 1. Static Routing 2. Complex Functionality of Router **OR** Write detail note to appraise the role of the following: 1. Dynamic Routing 2. Modes of Operation in Virtual LAN	10+10	C03