Roll No: | | | | | | | | | | | |

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

Date: 05/10/2026 **Time:** 02:00 PM - 03:30 PM

Course Code: CSN2503 **Course Name:** Advanced Computer Networks

Semester: Fifth Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	44	46

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	**Define** an enterprise network and **list** any two characteristics of a well-designed enterprise network.	2	CO1	BT1
2	**Explain** the difference between core networks and distribution networks.	2	CO1	BT2
3	**Define** Layer-3 switching and **state** one of its functions.	2	CO2	BT1
4	**Explain** static VLAN membership and dynamic VLAN membership.	2	CO2	BT2
5	**List** any two major components of an IEEE 802.11 WLAN.	2	CO2	BT1

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	**Explain** the physical network design process. **Illustrate** the role of access networks, distribution networks and core networks in an enterprise network.	10	CO1	BT2
7	**Explain** DSL, ADSL and broadband access technologies. **Compare** their characteristics and applications in remote network connectivity.	10	CO1	BT2

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	**Analyze** the different factors that should be considered while designing a WAN for a geographically distributed organization.	10	CO1	BT4
9	**Compare and contrast** SLIP and PPP. **Explain** how PPP provides additional functionality for point-to-point communication.	10	CO1	BT2

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	A company has separate departments for HR, Finance and Engineering. All departments use the same physical switching infrastructure. **Apply** VLAN concepts to design a logical network for these departments. **Illustrate** how VLANs can improve network segmentation.	10	CO2	BT3
11	**Analyze** the operation of Layer-3 switching. **Differentiate** Layer-2 switching and Layer-3 switching with respect to their functions, addressing and applications.	10	CO2	BT4

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	**Analyze** the architecture of a Wireless LAN based on IEEE 802.11. **Illustrate** the relationship between stations, access points, BSS, ESS and the distribution system	10	CO2	BT4
13	An organization has employees working from different geographical locations who need secure access to internal resources. **Evaluate** the use of VPN technology for this requirement and **explain** how IP tunneling enables secure communication over the Internet.	10	CO2	BT5