 RV UNIVERSITY <i>Go, change the world</i> <small>an initiative of RV EDUCATIONAL INSTITUTIONS</small>	<p align="center">School of Computer Science and Engineering B.Tech (Hons.)</p> <p align="center">CIE-1 Question Paper (Set 1) Academic Year 2024-2025</p>		
Course: Computer Networks	Course Code: CS2120	Semester: IV	
Time: 1:50 PM	Duration: 50 minutes	Date: 14/02/2025	Max Marks: 20

Notes/ Instructions:

1. All questions are mandatory.
2. Possession of mobile phones or any internet-enabled devices during the exam will be treated as malpractice.
3. All protocols or terminologies should be written in full form.


Sl. No.	PART A	Marks	L1-L6	CO
1.	In a _____ communication system, one device must wait for the other to finish before sending data.	1	L1	1
2.	_____ is commonly used for serial communication between a computer and a Modem.	1	L1	1
3.	Mention 4G communication standards and technologies.	1	L1	1
4.	In client-server communication, the protocol commonly used to fetch web pages is _____	1	L1	1
5.	Unlike a hub, a switch can reduce network congestion by using a _____ address to forward data efficiently	1	L1	1
6.	A device that connects multiple networks and directs data packets between them is called _____	1	L1	1
7.	The time interval between sending a packet and receiving it at the destination is known as _____.	1	L1	2
8.	The protocol responsible for resolving domain names to IP addresses in TCP/IP networks is _____.	1	L1	2
9.	The OSI model's layer responsible for encryption and compression is the _____ layer.	1	L1	2
10.	A protocol for mapping IP addresses to MAC addresses is called _____	1	L1	2

Sl. No.	PART B	Marks	L1-L6	CO
11.	Compare the OSI model and TCP/IP protocol suite. Summarize functions in 4 layers of TCP/IP with protocols, PDUs and devices.	5	L2	2

Course Outcomes

1. Elaborate distance-based classification of networks and various mobile communication technologies in the Networking domain.
2. Analyze the system requirements of the Internet and its design parameters for supporting different types of applications.
3. Demonstrate the role of Spanning Tree Protocol in removing loops within a LAN.
4. Differentiate classful and CIDR schemes of IPv4 addressing and understand the functioning of Routing protocols used in the Internet.
5. Comprehend L4 protocols and working principles of VLAN, VPN, NAT and VoIP used by various Networking applications.

Marks Distribution									
L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
10	5					6	9		

 RV UNIVERSITY <i>Go, change the world</i> <small>an initiative of RV EDUCATIONAL INSTITUTIONS</small>	<p align="center">School of Computer Science and Engineering B.Tech (Hons.)</p> <p align="center">CIE-1 Question Paper (Set 2) Academic Year 2024-2025</p>		
Course: Computer Networks	Course Code: CS2120	Semester: IV	
Time: 1:50 PM	Duration: 50 minutes	Date: 14/02/2025	Max Marks: 20

Notes/ Instructions:

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Sl. No.	PART A	Marks	L1-L6	CO
1.	A telephone call typically follows a _____ transmission mode.	1	L1	1
2.	5G networks use _____ waves for high-speed data transmission.	1	L1	1
3.	A topology where all nodes are connected to a single backbone cable is called a _____ topology and centralised architecture is called _____	1	L1	1
4.	A router makes decisions based on the _____ address of a packet. Write an example of that address.	1	L1	1
5.	Which network device is used to create a Virtual Local Area Network.?	1	L1	1
6.	_____ extends the network by providing wireless connectivity.	1	L1	1
7.	Which performance metrics measure the capacity of the channel and the total amount of data transmitted successfully in a given time?	1	L1	2
8.	The sub-layer of the OSI model, responsible for interfacing with the network layer is _____ and with physical layer is _____.	1	L1	2
9.	The protocol responsible for ensuring reliable data transmission in TCP/IP model is _____.	1	L1	2
10.	The variation in delay between packets arriving at the destination is known as _____. It leads to _____	1	L1	2

Sl. No.	PART B	Marks	L1-L6	CO
11.	Explain the functions of each layer in the OSI model and describe how data flows from the top layer to the bottom layer during communication.	5	L2	2

Course Outcomes

1. Elaborate distance-based classification of networks and various mobile communication technologies in the Networking domain.
2. Analyze the system requirements of Internet and its design parameters for supporting different types of applications.
3. Demonstrate the role of Spanning Tree Protocol in removing loops within a LAN.
4. Differentiate classful and CIDR schemes of IPv4 addressing and understand the functioning of Routing protocols used in the Internet.
5. Comprehend L4 protocols and working principles of VLAN, VPN, NAT and VoIP used by various Networking applications.

Marks Distribution									
L1	L2	L3	L4	L5	L6	CO1	CO2	CO3	CO4
10	5					6	9		