Roll No.

PRESIDENCY UNIVERSITY
BENGALURU

School of Computer Science and Engineering
Mid - Term Examinations - November 2024

Semester: VII

Course Code: CSE3090

Course Name: 5G Networking

Program: B.Tech - CSE

Date: 05/11/2024

Time: 02.00pm to 03.30pm

Max Marks: 50

Weightage: 25%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.   **5Qx2M=10M**

1	What are the characteristics of second generation 2G?	**2 Marks**	**L1**	**CO1**
2	Define User Equipment (UE) with example.	**2 Marks**	**L1**	**CO1**
3	What are the expectations from 5G networks?	**2 Marks**	**L1**	**CO1**
4	Compare NFV & SDN.	**2 Marks**	**L3**	**CO2**
5	What is functional split? Mention the factors followed in it.	**2 Marks**	**L1**	**CO2**

Part B

Answer ALL Questions. Each question carries 10 marks.   **4QX10M=40M**

6	**6a.**	Describe the Evolution of cellular standards.	**6 Marks**	**L2**	**CO1**
	6b.	List the features 5G.	**4 Marks**	**L3**	**CO1**

or

7	**7a.**	Classify the main characteristics of 3GPP/ETSI standards.	**6 Marks**	**L3**	**CO1**
	7b.	Mention the use cases of 5G.	**4 Marks**	**L2**	**CO1**

8		Explain various 5G services along with neat sketch.	**10Marks**	**L2**	**CO1**
		or			
9	**9a.**	List the various enablers of 5G services.	**6 Marks**	**L3**	**CO1**
	9b.	Summarize the various requirements for the use cases.	**4 Marks**	**L3**	**CO1**
10		Mention the role of Network Function Virtualization (NFV) in detail with suitable diagram.	**10Marks**	**L2**	**CO2**
		Or			
11		Mention the role of Software Defined Networking (SDN) in detail with suitable diagram.	**10Marks**	**L2**	**CO2**
12		With neat sketch explain RAN architecture	**10Marks**	**L2**	**CO2**
		or			
13		What are the principles should be followed while selecting High-level requirements for the 5G architecture? Explain it.	**10Marks**	**L1**	**CO2**