PRESIDENCY UNIVERSITY
BENGALURU

School of Engineering

Mid - Term Examinations - November 2024

Semester: V

Date: 04-11-2024

Course Code: CIV2006

Time: 02:00pm – 03:30pm

Course Name: Infrastructure Systems for Smart Cities

Max Marks: 50

Program: B.Tech (Civil Engineering)

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	Define the following terms in the context of urban infrastructure. (i) Capacity (ii) Sustainability	2 Marks	L1	CO1
2	Outline the challenges of smart implementation in the cities.	2 Marks	L1	CO1
3	List the various dimensions of smart city development.	2 Marks	L1	CO1
4	List the core infrastructure elements of a smart city.	2 Marks	L1	CO1
5	Define urban resilience in the context of smart cities.	2 Marks	L1	CO2

Part B

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

6a	i.	Write a note on (i) Smart environment and (ii) Smart economy	10 Marks	L2	CO1

Or

6b	i.	Explain the retrofitting type of area-based development covering implementation location, features, process, and bodies of implementation.	10 Marks	L2	CO1

7a	i.	Describe the convergence plan for funding the smart city initiatives.	**5 Marks**	L2	CO1
	ii.	Discuss briefly the mission monitoring process in smart implementation in smart cities.	**5 Marks**	L2	CO1

or

7b	i.	Describe with the help of a flow chart Stage 1 and Stage 2 of smart city challenge competition.	**10 Marks**	L2	CO1

8a	i.	Explain the Design - Implementation - Reflection framework of Smart Cities through citizen engagement.	**10 Marks**	L2	CO2

Or

8b	i.	Explain the need for inclusivity in smart city planning. List the actions that can be taken to enable economic and spatial inclusivity.	**10 Marks**	L2	CO2

9a	i.	What is urban resilience? Explain.	**5 Marks**	L2	CO2
	ii.	Outline the role of ICT in building urban resilience.	**5 Marks**	L2	CO2

Or

9b	i.	Explain any two case studies that showcase the implementation of urban consultation process.	**10 Marks**	L2	CO2