

Enrolment No. : \_\_\_\_\_

**RNGPIT, Bardoli**

**MODEL QUESTION PAPER  
NOVEMBER 2023**

**Date:** 04/11/2023**Department:** Civil Engineering**Page:** 01 of 02

Duration/Term: 27/07/2023 to 30/12/2023	Concerned Department: Civil Engineering
Name of Subject: Infrastructure for smart Cities	Semester: 7 <sup>th</sup>
Subject Code: 3170628	Class: Civil- 20
Total Marks: 70	Hours: 02 Hours 30 Minutes

Question No	Questions	Marks
Q. 1 (A)	Write about the goals of smart cities.	03
(B)	Explain public safety and security in a smart city.	04
(C)	What are the factors required to become a smart city?	07
Q. 2 (A)	Write about the economic benefits of green building.	03
(B)	What is green building? Explain concept of green building	04
(C)	Discuss key technologies needed for smart city.	07
<b>OR</b>		
(C)	Give advantages and disadvantages of smart city.	07
Q. 3 (A)	Explain smart grid.	03
(B)	Describe the desired criteria for housing in smart cities.	04
(C)	Discuss current security and privacy protection technologies for smart city.	07
<b>OR</b>		
Q. 3 (A)	Explain the concept of green building.	03
(B)	Explain energy and ecology in the context of smart city.	04
(C)	Describe the aim and objects of solar smart city.	07
Q. 4 (A)	Give some suggestions to improve existing water conveyance system.	03
(B)	What are the issues and challenges with existing urban sanitation system?	04
(C)	Write about the IOT based smart wastewater management system.	07
<b>OR</b>		
Q. 4 (A)	Write the advantages of ITS.	03
(B)	What is smart mobility and how it can be improved?	04
(C)	Give your views on road safety policies.	07
Q. 5 (A)	What is smart city challenge?	03
(B)	Describe flood forecasting and warning systems in India.	04
(C)	Write a note on water resources conservation.	07

	<b>OR</b>	
<b>Q. 5 (A)</b>	What do you mean by smart water management?	<b>03</b>
<b>(B)</b>	Explain how urbanization is connected to environment.	<b>04</b>
<b>(C)</b>	Describe various flood mitigation measures.	<b>07</b>

***\*\*\*Best of Luck\*\*\****