

Enrolment No./Seat No _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE MINOR - SEMESTER-VI EXAMINATION – SUMMER 2024

Subject Code:116AD01

Date:27-05-2024

Subject Name:Concepts of Green & Smart Village

Time:10:30 AM TO 01:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	Marks
Q.1 (a) What are the managerial implications of green and smart villages?	03
(b) Explain water reduction in construction in buildings.	04
(c) What are the strategies and technologies suggested to develop and ideal smart and green village?	07
Q.2 (a) Explain passive heating in buildings.	03
(b) Explain advantages of use of locally available material for construction.	04
(c) Explain water and energy efficient buildings.	07
OR	
(c) Explain green products in lieu with green environment.	07
Q.3 (a) Describe the green technologies which are currently available.	03
(b) What are the various environment spheres?	04
(c) Explain Green hospital building design.	07
OR	
Q.3 (a) Explain water and waste management in the field of civil engineering.	03
(b) Explain eLearning for green healthcare.	04
(c) Describe: m-Health and p-Health systems.	07
Q.4 (a) Explain advanced technologies in the field of education.	03
(b) Explain smart pedagogy in the field of green and smart education.	04
(c) Explain precision farming in the field of green and smart agriculture.	07
OR	
Q.4 (a) Explain in brief about Smart water distribution networks in the field of green and smart agriculture.	03
(b) Explain smart teacher in the field of green and smart education.	04
(c) Describe: Smart greenhouses in green and smart agriculture.	07
Q.5 (a) Explain Wireless Sensor Networks.	03
(b) Explain Mobility-as-a-Service (MaaS) Strategy.	04
(c) Explain Connectivity in Green & Smart Energy Management.	07
OR	
Q.5 (a) Explain applications for Securing Application and Transactions.	03
(b) Explain Use of clean fuels like Bio-fuels and CNG.	04
(c) Explain Smart water distribution grids.	07
