

USN

RV COLLEGE OF ENGINEERING®

(An Autonomous Institution affiliated to VTU III Semester B. E. Examinations MARCH-2024

ENVIRONMENT AND SUSTAINABILITY (BASKET COURSE)

Time: 03 Hours Maximum Marks: 100

Instructions to candidates:

- 1. Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
- 2. Answer FIVE full questions from Part B. In Part B question number 2 is compulsory. Answer any one full question from 3 and 4, 5 and 6, 7 and 8 & 9 and 10.

PART-A

1	1.1	Define the terms Eco-system and Bio-diversity.	02
	1.2	List various Energy cycles in nature.	02
	1.3	Illustrate what is carbon sequestration.	02
	1.4	Mention the significance to stop man wildlife conflicts.	02
	1.5	Describe the importance of GDP.	02
	1.6	Highlight any four threats to Bio-diversity.	02
	1.7	Mention any two major causes for climate changes.	02
	1.8	Suggest the significance of EIA as a tool for sustainable practices.	02
	1.9	What is performance measurement in business.	02
	1.10	Enumerate the prominence of CSR.	02

PART-B

2	a	Classify different types of ecosystems. Explain in brief any two ecosystems with	
		their structure and composition.	08
	b	Describe the idealization made in Engineering Mechanics and also the	
		characteristics of a force.	08
3	a	Explain carbon cycle with sketch.	08
	b	Enumerate the concept of sustainable urbanization and the need for the same.	08
		OR	
4	a	Explain ocean thermal energy conversion with its advantages and limitations.	08
	b	Explain nitrogen cycle with sketch.	08
5	a	What is environmental audit? Explain the steps in environmental audit.	08
	b	Enumerate the economic and social aspects of sustainability.	08
		OR	
6	a	Explain the linear and cyclic resource management systems.	08

b	What are the advantages and limitations of industrial ecology?	08

7	a	Define the following i) Climate change ii) Carbon credit iii) Carbon footprint iv)	08
		Environmental impact assessment.	
	b	Explain the concept of 5R.	08
		OR	
8	a	Enumerate ISO 14000 series standards.	08
	b	Define green buildings, enumerate the green building materials and write the	08
		advantages of green buildings.	00
9	a	Explain the principles of CSR.	08
	b	Explain the concept of charity and corporate philanthropy.	08
		OR	
10	a	Enumerate the environmental aspect of CSR.	08
	b	Explain how CSR has evolved in India.	08