



RV College of Engineering  
Mysore Road, RV Vidyanikethan Post,  
Bengaluru - 560059, Karnataka, India

Question Paper ID: 846830

Course Code: CV232TA

USN 12RV2415005

RV College of Engineering

(An Autonomous Institution Affiliated to VTU)

R V Vidyanikethan Post  
Mysuru Road Bengaluru - 560 059

III Semester B.E. Regular / Supplementary Examination February/March 2026

Environment and Sustainability

Time : 3 Hours

Maximum Marks : 100

**Instructions to the students**

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**

Question No	Question	M	CO	BT
1.1	What are the causes and effects of soil pollution?	02	1	1
1.2	How can water pollution be controlled?	02	2	2
1.3	Explain the need for renewable energy sources.	02	1	1
1.4	Explain geothermal energy plants.	02	2	2
1.5	What is an environmental audit?	02	3	1
1.6	Explain the concept of green technology with an example.	02	3	2
1.7	Define carbon credit.	02	3	1
1.8	Mention any two indicators of climate change.	02	3	2
1.9	What is stakeholder management in CSR?	02	3	1
1.10	What is the Global Reporting Initiative (GRI) in sustainability reporting?	02	4	2

**Part B**

Question No	Question	M	CO	BT
2a	Explain the types of biodiversity and discuss the major threats to biodiversity with examples.	08	1	1
2b	Write detailed notes on the causes, effects, and control measures of air and noise pollution.	08	1	2

3a	Discuss hydrogen energy, its applications, and its benefits as a renewable energy source.	08	1	1
3b	Discuss Carbon sources and carbon sinks	08	1	1
<b>OR</b>				
4a	Describe the role and applications of ocean energy resources and tidal energy conversion.	08	2	2
4b	Describe the carbon cycle, carbon sequestration, and their significance in energy management.	08	2	2
5a	Explain the need for system thinking and design of cyclical system	08	3	2
5b	Explain the challenges to concept of sustainability.	08	3	2
<b>OR</b>				
6a	Explain the importance of sustainability practices in water, energy, food, land, forests, and waste management.	08	3	1
6b	Discuss linear vs. cyclical resource management systems and the role of the circular economy.	08	3	1
7a	Explain sustainability practices: Zero waste concept, 3R/6R concept and Circular Economy.	08	4	1
7b	Explain green buildings and green materials with reference to sustainable habitat.	08	4	1
<b>OR</b>				
8a	Explain Environmental Impact Assessment (EIA) and sustainable habitat concepts.	08	4	2
8b	Describe Material Life Cycle Assessment (LCA) and its role in sustainability.	08	4	2
9a	Explain the importance of CSR in promoting environmental sustainability and social welfare.	08	3	1
9b	Describe the relationship between CSR, corporate governance, and sustainability.	08	3	1
<b>OR</b>				
10a	Discuss how does sustainability help in managing investment risks?	08	4	2
10b	Explain the Dow Jones Sustainability Index?	08	4	2