

Hall Ticket Number:

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Code No. : 12223 N

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. II-Semester Main Examinations, August-2023

Environmental Science

(Common to CSE, AIML, EEE & IT O: Mech.)

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

| Q. No. | Stem of the question | M | L | CO | PO |
|----------------------------------|--|---|---|----|----|
| 1. | What are the effects of desertification? | 2 | 1 | 1 | 7 |
| 2. | Differentiate between renewable and non-renewable energy resources. | 2 | 2 | 1 | 7 |
| 3. | Explain how energy flows through atmosphere. | 2 | 1 | 2 | 7 |
| 4. | Draw any one food chain and explain. | 2 | 2 | 2 | 6 |
| 5. | Differentiate between National Park and reserve forest. | 2 | 2 | 3 | 7 |
| 6. | State biological diversity act, 2002 | 2 | 1 | 3 | 6 |
| 7. | Name any four air pollution control devices. | 2 | 1 | 4 | 1 |
| 8. | Write about abscission and epinasty in plants. | 2 | 2 | 4 | 6 |
| 9. | Name any two water conservation techniques at community level. | 2 | 1 | 5 | 1 |
| 10. | Explain EPA, 1986 | 2 | 2 | 5 | 6 |
| Part-B (5 × 8 = 40 Marks) | | | | | |
| 11. a) | Identify mitigative measures are to be taken to minimize the depletion of water resources. | 4 | 3 | 1 | 6 |
| b) | Describe the merits and demerits of constructing dams. | 4 | 3 | 1 | 7 |
| 12. a) | Evaluate salient features of pond ecosystem. | 4 | 3 | 2 | 7 |
| b) | Define food web along with an example. | 4 | 2 | 2 | 7 |
| 13. a) | Write about direct and indirect values of biodiversity. | 4 | 1 | 3 | 7 |
| b) | Describe the hotspots of biodiversity. | 4 | 3 | 3 | 7 |
| 14. a) | Explain the statement "One person's waste is another's wealth". | 4 | 4 | 4 | 8 |
| b) | Explain noise pollution and its control methods. | 4 | 3 | 4 | 6 |

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|--------|---|---|---|---|---|
| 15. a) | What are the measures to be taken to mitigate global warming and climate change? | 4 | 2 | 5 | 7 |
| b) | Support the statement "Responsible consumerism is the key to sustainable development". | 4 | 4 | 5 | 6 |
| 16. a) | Discuss the theory and practices of sustainability in the field of environmental studies. | 4 | 4 | 1 | 7 |
| b) | Define photoautotrophs, Chemoautotrophs, consumers and decomposers .give examples | 4 | 2 | 2 | 7 |
| 17. | Answer any <i>two</i> of the following: | | | | |
| a) | Explain the saying "India is a megadiverse nation". | 4 | 2 | 3 | 7 |
| b) | Analyze the causes and effects of water pollution. | 4 | 1 | 4 | 6 |
| c) | Write a short note on Sustainable Development Goals. | 4 | 2 | 5 | 8 |

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

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|------|-------------------------------|-------|
| i) | Blooms Taxonomy Level - 1 | 22.5% |
| ii) | Blooms Taxonomy Level - 2 | 37.5% |
| iii) | Blooms Taxonomy Level - 3 & 4 | 40% |
