

DO NOT WRITE ANYTHING ON QUESTION PAPER EXCEPT YOUR NAME, DEPARTMENT AND ENROLMENT No.

POSSESSION OF MOBILE IN EXAMINATION IS A UFM PRACTICE

Name of Student	 Enrolment No
Department / School	

BENNETT UNIVERSITY, GREATER NOIDA

Supplementary Examination, July 2019

COURSE CODE: ESEA 301 L

MAX. DURATION: 2 hours

COURSE NAME: Environment & Sustainability

COURSE CREDIT: 3

MAX. MARKS: 100

Note

- Please write the answers on answer sheet with part A followed by part B followed by part C.
- Please do not mix up part A answers with part B and part C. If you do so, your answers will not be checked, and the faculties will not be responsible for missing out marks.
- Do not write anything including answers to MCQs on the question paper. Doing so will be considered unfair means and may lead to cancellation of paper.

PART A

[20 marks]

- 1. What are the fundamental characteristics of an ecosystem? Describe the structure of an ecosystem. (5+5=10)
- 2. Describe energy flow in an ecosystem with appropriate example. (10)

PART B

[40 marks]

- 3. List 4 positive and 4 negative effects of mining. [do not explain] [8 marks]
- 4. A) What part of India has the highest potential for wind power? [2 marks]
 - B) What part of India has actually seen highest development of wind power? [2 marks]
 - C) Explain why A and B are different. [4 marks]



- D) Solar energy is generated as DC (direct current). How is it converted to AC (alternative current)? [4 marks]
- 5. A) What is the current problem that prevents widespread adoption of solar energy as power source? Explain. [3 marks]
 - B) What are India's three biggest source of non-renewable energy and their energy efficiency? [no explanation necessary] [3 marks]
- 6. A) Why nuclear power is considered non-sustainable? [2 marks]
 - B) What is a possible alternative to uranium that can make nuclear power relatively more sustainable [3 marks]
 - C) What are the percentage of U235 against U238 for civilian and military use? [3 marks]
- 7. India is going to face a severe water crisis next year. List out 5 engineering and 5 social solutions at Bennett University that is going to prevent water crisis. [6 marks]

PART C

[40 marks]

- 8. Answer the following questions, true or false [$10 \times 1 = 10 \text{ marks}$]
 - A. pH of acid rain is less than 5.6
 - B. Smog is combination of smoke and fog
 - C. Ozone is not a criteria pollutant
 - D. LCA includes social impacts
 - E. Grassland farming is not part of water shed management
 - F. Anthropocentrism considers all others life forms as prime importance
 - G. Coal is the one of the renewable sources of energy
 - H. Nuclear energy is the Cleanest sources of energy
 - I. State Pollution Control Board is responsible to monitor the pollution levels
 - J. The environmental protect act made Environmental Impact Assessment mandatory for industries

Answer all the questions, each question carries two marks [$10 \times 2 = 20$ marks]

- 9. Define Pollution and pollutants? Give examples
- 10. Give sources of noise pollution?
- 11. Define Life Cycle Assessment?
- 12. What are the effects of thermal pollution?
- 13. List any four ways by which an individual can help in the prevention of pollution?
- 14. Define disaster?
- 15. Define solid waste management?



- 16. Define Rainwater harvesting?
- 17. Define watershed management?
- 18. What are the types of non-renewable source of energy?

Answer the following questions [10 marks]

- 19. What are the challenges associated with e-waste management? (3)
- 20. What are the components of a rainwater harvesting system? (4)
- 21. What is climate change? What do you know about it? (3)

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