

Faculty of Science

End Semester Examination May 2025

FS3AE03 Environmental Studies

Programme	:	B. Sc. (Hons.)	Branch/Specialisation	:	FS
Duration	:	3 hours	Maximum Marks	:	60

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary.
 Notations and symbols have their usual meaning.

Section 1 (Answer all question(s))

- | | Marks CO BL |
|---|--|
| | 1 1 2 |
| Q1. Which of the following is an example of sustainability? | <input type="radio"/> Deforestation <input type="radio"/> Land Slide
<input checked="" type="radio"/> Crop Rotation <input type="radio"/> Flood |
| Q2. About _____ of energy is used to build new biomass in ecological pyramid. | <input type="radio"/> 15% <input type="radio"/> 20%
<input type="radio"/> 30% <input checked="" type="radio"/> 10% |
| Q3. Which of the following is not a biodiversity hot spot of India? | <input type="radio"/> The Himalayas <input checked="" type="radio"/> The Aravalis
<input type="radio"/> The Western ghats <input type="radio"/> Indo-Burma region |
| Q4. Out of following which part of bio geographical region is having the highest percentage of geographical area? | <input checked="" type="radio"/> Deccan Plateau <input type="radio"/> Trans- Himalayan region
<input type="radio"/> Indian Desert region <input type="radio"/> The Gangetic plain |
| Q5. Recently Govt. of Madhay Pradesh (M.P.) has taken a decision of destroying waste of Union Carbide Factory of Bhopal at Pithampur Indore. This type of waste is consider to be- | <input type="radio"/> Solid waste <input type="radio"/> Metallic waste
<input checked="" type="radio"/> Industrial waste <input type="radio"/> MIC waste |
| Q6. If in a particular area BOD (Biological Oxygen Demand) or COD (Chemical Oxygen Demand) increases than it indicates which type of pollution- | <input type="radio"/> Industrial pollution <input type="radio"/> Air pollution
<input type="radio"/> Land pollution <input checked="" type="radio"/> Water pollution |
| Q7. As a part of Kyoto & Montreal Protocol Conference of the Parties (COP) summits are organized by United Nations out of following which is latest summit and on on which theme? | <input type="radio"/> COP Dubai (UAE) "Transition Away from Fossil Fuel"
<input checked="" type="radio"/> COP Sharm el-Sheikh (Egypt) "Establishing Lost & Damage Fund" <input type="radio"/> COP Baku (V) "Investing in a livable planet for all"
<input type="radio"/> COP Glasgow,United Kingdom of Great Britain and Northern Ireland "Implementing Paris Agreement" |
| Q8. Which of the following bodies under Wildlife Protection Act, 1972 specially related to Forensic Science? | <input type="radio"/> National Tiger Conservation Authority (NTCA)
<input type="radio"/> National Board for Wildlife (NBWL) <input type="radio"/> State Board for Wildlife (SBWL)
<input checked="" type="radio"/> Wildlife Crime Control Bureau (WCCB) |

Q9. How India is dealing with the condition of environment change on human health & welfare? 1 3 2

- By "National Missions" running through to 2017: Solar Energy; Enhanced Energy Efficiency; Sustainable Habitat
- National Clean Energy Fund (NCEF) in 2010 for financing and promoting clean energy initiatives and funding research in the area of clean energy in the country
- By launching Bharat Stage (BS) Emission Norms
- All of these

Q10. Which of the following environmental movements is not matched with there place and leader? 1 3 2

- Bishnoi Movement, Marwar region, Rajasthan state. Leaders: Amrita Devi
- Chipko Movement, Tehri-Garhwal district of Uttarakhand. Leaders: Sunderlal Bahuguna, Gaura Devi, Sudesha Devi, Bachni Dev
- Save Silent Valley Movement, Singhbhum district of Bihar Leaders: the tribals of Singhbhum
- Appiko Movement, Uttara Kannada and Shimoga districts of Karnataka State Leaders: Pandurang Hegde

Section 2 (Answer all question(s))

Marks CO BL

Q11. Define the terms ecology and ecosystem. 2 1 1

Rubric	Marks
Definition of Ecology - 1 marks and Definition of Ecosystem- 1 marks	2

Q12. What are ecological pyramids? Give its type and draw. 3 2 3

Rubric	Marks
Definition of Ecological Pyramids- 1 Types- 1 marks - Diagram- 1 marks	3

Q13. (a) What is sustainable development? Explain the concept of sustainability & its importance in human welfare. 5 2 2

Rubric	Marks
Definition and concept of Sustainability- 4 marks and its importance in human welfare- 1 marks	5

(OR)

(b) Give any five differences between food chain and food web.

Rubric	Marks
5 differences in Food Chain & Food Web with diagram- 5 marks	5

Section 3 (Answer all question(s))

Marks CO BL

Q14. What are renewable & non-renewable resources? Give four examples of each. 2 3 1

Rubric	Marks
Explanation of renewable resources with example- 1 marks and Explanation of Non-renewable resources with example- 1 marks	2

Q15. (a) Describe any four factors responsible for the loss of biodiversity. What are the demerits and suggestions to overcome them?

8 3 2

Rubric	Marks
4 factors responsible of loss of Biodiversity- 4 marks, demerits- 2 marks and suggestion - 2 marks	8

(OR)

(b) Explain the complete biogeographical classification of India in detail.

Rubric	Marks
Definition of Bio geographical - 2 marks, Name and explanation Bio geographical Classification of India- 5 marks , Importance of Bio geographical Classification - 1 marks	8

Section 4 (Answer all question(s))

Marks CO BL

Q16. Define air pollution, water pollution, and nuclear pollution with proper examples.

3 4 1

Rubric	Marks
Definition of Air pollution with example- 1 marks, Definition of Water Pollution with example 1 marks & Definition of Nuclear Pollution with example1 marks	3

Q17. (a) Write a short note on:

7 4 3

- Solid Waste management with example
- Industrial Waste management with example

Rubric	Marks
Solid Waste management with example- 3.5 marks and Industrial Waste management with example - 3.5 marks	7

(OR)

(b) Write a short note on:

- Soil Pollution its cause & remedy
- Noise Pollution its cause & remedy

Rubric	Marks
Soil Pollution its cause & remedy- 3.5 marks Noise Pollution its cause & remedy- 3.5 marks	7

Section 5 (Answer all question(s))

Marks CO BL

Q18. Discuss the causes of photochemical smog, acid rain and ozone layer depletion and its remedial measures.

4 4 2

Rubric	Marks
Cause of Photo-chemical Smog with remedial measures- 1 marks Cause of Acid-Rain with remedial measures- 1 marks Cause of Ozone Layer depletion with remedial measures- 1 marks Impact on Health - 1 marks	4

Q19. (a) Explain the main highlights of:

6 5 1

- Wild Life Protection Act 1972
- Forest Conservation Act 2023 (Amendment)

Rubric	Marks
Wild Life Protection Act 1972- 3 marks	6
Forest Conservation Act 2023 (Amendment) - 3 marks	

(OR)

(b) Describe the key points related to:

- Montreal & Kyoto Protocols
- Environment protection Act 1986

Rubric	Marks
Montreal & Kyoto Protocols- 3 marks	6
Environment protection Act 1986- 3 marks	

Section 6 (Answer any 2 question(s))

Marks CO BL

Q20. Describe the factors that impact on environment due to human population growth. Also discuss its effects and remedies. 5 2 1

Rubric	Marks
factors that impact on environment due to Human Population growth	2.5
its effect and remedies.	2.5

Q21. Write any ten points on disaster management in case of earthquakes & floods. 5 2 1

Rubric	Marks
10 Points on Disaster management in case of Earthquakes & Flood- 5 marks	5

Q22. Describe environmental movements:

5 5 1

- Chipko Movement
- Silent Valley Movement

Rubric	Marks
Chipko Movement- Introduction- 1 marks explanation- 2 marks importance- 2 marks	5
Silent Valley Movement- 1 marks explanation- 2 marks importance- 2 marks	
Narmada Bachao Andolan-1 marks explanation- 2 marks importance- 2 marks	
