

Enrollment No.....



Faculty of Science
End Sem (Even) Examination May-2022

FS3AE03 Environmental Studies

Programme: B.Sc. (FS)

Branch/Specialisation: Forensic
Science**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. Sustainable development can be thought of in terms of three spheres i.e.: **1**
 (a) Environment, economy and society
 (b) Environment, ecology and society
 (c) Environment, economy and ecology
 (d) None of these
- ii. The set of ecosystems is called a _____. **1**
 (a) Biome (b) Climate (c) Subsystem (d) Structure
- iii. A Solar cell is an electrical device that converts the energy of light directly into electricity by the _____. **1**
 (a) Photovoltaic effect (b) Chemical effect
 (c) Atmospheric effect (d) Physical effect
- iv. Which one of the following areas in India is a hotspot of biodiversity? **1**
 (a) Sunderbans (b) Western Ghats
 (c) Eastern Ghats (d) Gangetic Plain
- v. The process of nutrient enrichment is termed as: **1**
 (a) Enrichment (b) Limiting nutrients
 (c) Eutrophication (d) Schistosomiasis
- vi. What is the most expensive component of solid waste handling? **1**
 (a) Collection (b) Storage (c) Treatment (d) Separation
- vii. Photochemical smog occurs in warm, dry and sunny climate. One of the following is not amongst the components of photochemical smog, identify it. **1**
 (a) NO₂ (b) O₃
 (c) SO₂ (d) Unsaturated hydrocarbon

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- viii. The provisions of environmental protection in the constitution were made under: **1**
 (a) Article 5-A
 (b) Article 21-B
 (c) Article 27-B (h)
 (d) Article 48-A and Article 51-A (g)
- ix. In India National Institute of Disaster Management is located at: **1**
 (a) Manipur (b) Punjab (c) Hyderabad (d) New Delhi
- x. Who among the following was associated with chipko movement? **1**
 (a) Sundarlal Bahuguna (b) Gaura Devi
 (c) Sudesha Devi (d) All of these
- Q.2 i. What is the scope of environmental studies? **2**
 ii. Define sustainable development. What are the objectives of sustainable development? **3**
 iii. What is an Ecosystem? Discuss its structure and function. **5**
 OR iv. Define food chain. Explain energy flow in an ecosystem. **5**
- Q.3 i. What are the causes of desertification? **2**
 ii. Define hotspots of biodiversity. What are the factors responsible for loss of biodiversity? Discuss its methods of conservation. **8**
 OR iii. Write a note on the following: **8**
 (a) Impact of dam building on forest.
 (b) Explain different bio-geographical classification of biodiversity in India.
- Q.4 i. What is noise pollution? Discuss its effects on human being. **3**
 ii. Define solid waste. Classify it. Discuss any four methods of solid waste disposal methods. **7**
 OR iii. What is Air pollution? Write causes of air pollution. Discuss its mitigation methods. **7**
- Q.5 i. Define Ozone layer. Discuss its depletion and effects. **4**
 ii. What is the need of an environmental law? Discuss the salient features of Wildlife protection Act. **6**
 OR iii. What is Photochemical Smog? How it can form? Write its effects. **6**

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- Q.6 Attempt any two:
- i. How growth of human population affects the environment? **5**
 ii. Write a case study on earthquake. **5**
 iii. Discuss Silent Valley movement. How it is different from Chipko movement? **5**

Marking SchemeFS3AE03 Environmental Studies

Q.1	i.	Sustainable development can be thought of in terms of three spheres i.e.:		1
		(a) Environment, economy and society	1 Mark	
	ii.	The set of ecosystems is called a _____.		1
		(a) Biome	1 Mark	
	iii.	A Solar cell is an electrical device that converts the energy of light directly into electricity by the _____.		1
		(a) Photovoltaic effect	1 Mark	
	iv.	Which one of the following areas in India is a hotspot of biodiversity?		1
		(b) Western Ghats	1 Mark	
	v.	The process of nutrient enrichment is termed as:		1
		(c) Eutrophication	1 Mark	
	vi.	What is the most expensive component of solid waste handling?		1
		(a) Collection	1 Mark	
	vii.	Photochemical smog occurs in warm, dry and sunny climate. One of the following is not amongst the components of photochemical smog, identify it.		1
		(c) SO ₂	1 Mark	
	viii.	The provisions of environmental protection in the constitution were made under:		1
		(d) Article 48-A and Article 51-A (g)	1 Mark	
	ix.	In India National Institute of Disaster Management is located at:		1
		(d) New Delhi	1 Mark	
	x.	Who among the following was associated with chipko movement?		1
		(d) All of these	1 Mark	
Q.2	i.	Any two scope of environmental studies	1 Mark each (1 Mark * 2)	2
	ii.	Definition of sustainable development	1 Mark	3
		Any two objectives of sustainable development	1 Mark each (1 Mark * 2)	
	iii.	Ecosystem	1 Mark	5
OR		Its structure	2 Marks	
		Function	2 Marks	
	iv.	Food chain	1 Mark	5
		Energy flow diagram	1.5 Marks	
		Explanation	2.5 Marks	

Q.3	i.	Any four causes of desertification	0.5 Mark each (0.5 Mark * 4)	2	
	ii.	As per explanation	8 Marks	8	
	OR	iii.	Write a note on the following:		8
		(a) Impact of dam building on forest	4 Marks		
		(b) Different bio-geographical classification	4 Marks		
Q.4	i.	Noise pollution	1 Mark	3	
		Any four effects	0.5 Mark each (0.5 Mark * 4)		
	ii.	As per explanation	7 Marks	7	
	OR	iii.	Definition of Air pollution	1 Mark	7
		Causes of air pollution	3 Marks		
		Its mitigation methods	3 Marks		
Q.5	i.	Definition of Ozone layer	1 Mark	4	
		Depletion	2 Marks		
		Any two effects	0.5 Mark each (0.5 Mark * 2)		
	ii.	Need of an environmental law	2 Marks	6	
OR		Salient features	4 Marks		
	iii.	Photochemical Smog	1 Mark	6	
		Formation	3 Marks		
		Its four effects	0.5 Mark each (0.5 Mark * 4)		
Q.6		Attempt any two:			
	i.	Growth of human population	2 Marks	5	
		Three effects on the environment	3 Marks		
	ii.	Write a case study on earthquake.		5	
		Date	1 Mark		
		Place	1 Mark		
		Causes	1 Mark		
		Effect	1 Mark		
		Govt Help	1 Mark		
	iii.	Silent Valley movement	3 Marks	5	
	Two differences	2 Marks			
