

Enrollment No.....



Faculty of Commerce / Engineering / Management

End Sem (Odd) Examination Dec-2018

CM3AE01/ EN3HS03 / MS3AE01 Environmental Sciences

Programme: B.Com.(Hons.) /

Branch/Specialisation: All

B.Tech. / BBA

**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. The Water act was enacted in the year: **1**  
 (a) 1974 (b) 1986 (c) 1980 (d) 1972
- ii. Which of the following is allowed in organic farming? **1**  
 (a) Synthetic Fertilizers (b) Buffer Zones  
 (c) Persistent Pesticides (d) Hormones
- iii. Which of the following gases has maximum contribution to enhanced greenhouse effect? **1**  
 (a) CFC's (b) CH<sub>4</sub> (c) CO<sub>2</sub> (d) N<sub>2</sub>O
- iv. Which one of the following cause global warming? **1**  
 (a) Carbon dioxide (b) Oxygen  
 (c) Nitrogen (d) Hydrogen
- v. .... is the form of cyclone. **1**  
 (a) Alpha (b) Typhoons  
 (c) Willy willies (d) Both (b) and (c)
- vi. Per capita use of water is the highest in **1**  
 (a) USA (b) India (c) Kuwait (d) Indonesia
- vii. The type of succession occurring on a bare rock is called **1**  
 (a) Helosere (b) Lithosere (c) Hydrosere (d) None of these
- viii. Western ghats are rich in endemic species of **1**  
 (a) Birds (b) Lions  
 (c) Amphibians (d) Turtles

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- ix. Which of the following is not a Green Economy initiative? **1**  
(a) UNEP Initiative  
(b) UNESCAP initiative  
(c) Drilling for oil in the Arctic  
(d) None of these
- x. Ecological architecture **1**  
(a) Uses the lowest cost materials  
(b) Seeks to minimize the Ecological Footprint of building  
(c) Avoid the use of any waste material in construction  
(d) Use mainly burnt bricks
- Q.2 i. Why should you study Environmental Science as a subject? **2**  
ii. What is carrying capacity and How does it relate to Ecological Footprint? **3**  
iii. What is meant by environmental impact assessment and environmental auditing? **5**
- OR iv. What psychological care should be provided during the phase of disaster? Discuss the rehabilitation measures taken by the government after disaster. **5**
- Q.3 i. What do you mean by Disaster management? Name any one institute which is working on disaster management. **2**  
ii. What is the scientific assessment of global warming and climate change? **3**  
iii. How are solid waste managed? Explain at least four methods with their advantages and disadvantages **5**
- OR iv. Discuss case study related to terrorist incidence and bomb threat. **5**
- Q.4 i. What do you mean by soil erosion and soil salinity? **2**  
ii. What are the uses of various types of minerals? Discuss the major environmental impacts of mineral extraction. How can you as an individual conserve different natural resources? **8**
- OR iii. Write any two detailed case studies related to natural disaster? **8**  
Considering the year, place, major reasons, effects and initiatives taken by government

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- Q.5 i. Define ecological succession. **2**  
ii. Differentiate between food chain and food web with example **3**  
iii. What are hotspots of biodiversity? Which are the hot spots found in India? Discuss their salient features. **5**
- OR iv. What are biotic and abiotic components of an ecosystem? Discuss the model of energy flow in an ecosystem? **5**
- Q.6 Attempt any two:  
i. What can India do to promote a Green Economy and Green Technology? Explain by taking any example **5**  
ii. Explain HVAC system. Considering system with diagram, advantages and disadvantages **5**  
iii. Discuss the green building concept and its rating system considering GRIHA and LEED. **5**

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## Marking Scheme

### CM3AE01-EN3HS03-MS3AE01 Environmental Sciences

					Effects it will cause according to scientists.	1.5 marks	
Q.1	i. The Water act was enacted in the year: (a) 1974		<b>1</b>		iii. Solid waste managed	1 mark	<b>5</b>
	ii. Which of the following is allowed in organic farming? (b) Buffer Zones		<b>1</b>		At least four methods	3 marks	
	iii. Which of the following gases has maximum contribution to enhanced greenhouse effect? (c)CO <sub>2</sub>		<b>1</b>	OR	iv. Terrorist incidence and bomb threat.	1 mark	<b>5</b>
	iv. Which one of the following cause global warming? (a) Carbon dioxide		<b>1</b>		Place Date	1 mark	
	v. .... is the form of cycloneI (d) b and c both		<b>1</b>		Complete incidence	3 marks	
	vi. Per capita use of water is the highest in (a)USA		<b>1</b>		Along with measures taken by government	1 mark	
	vii. The type of succession occurring on a bare rock is called (b) Lithosere		<b>1</b>		Q.4 i. Definition of soil erosion	1 mark	<b>2</b>
	viii. Western ghats are rich in endemic species of (c) Amphibians		<b>1</b>		Definition of soil salinity	1 mark	
	ix. Which of the following is not a Green Economy initiative? (a) UNEP Initiative		<b>1</b>		ii. Uses of various types of minerals	4 marks	<b>8</b>
	x. Ecological architecture (b) Seeks to minimize the Ecological Footprint of building		<b>1</b>		Major environmental impacts of mineral extraction	2 marks	
				As an individual conserve different natural resources	2 marks		
Q.2	i. Reasons for studying Environmental Science Any two reasons	(1 mark * 2)	<b>2</b>	OR	iii. Case studies related to natural disaster - Any two		<b>8</b>
	ii. Definition carrying capacity and ecological footprint Relation with ecological footprint	1.5 marks 1.5 marks	<b>3</b>		Considering the year, place 1 mark for each	2 marks	
	iii. Detailed minimum three factors for Environmental assessment Environmental auditing.	2.5 marks 2.5 marks	<b>5</b>		Major reasons 2 marks for each	4 marks	
OR	iv. Any three psychological care Any three rehabilitation measures	2.5 marks 2.5 marks	<b>5</b>		Effects and initiatives taken by government		
Q.3	i. Definition of disaster management Name of institute working on disaster management	1.5 marks 0.5 mark	<b>2</b>		1 mark for each	2 marks	
	ii. Global warming and climate change	1.5 marks	<b>3</b>		Q.5 i. Definition of ecological succession.		<b>2</b>
					ii. Any three differences food chain and food web with example		<b>3</b>
					iii. Hotspots of biodiversity	1 mark	<b>5</b>
					Hot spots found in India	2 marks	
					Silent feature	2 marks	
				OR	iv. Biotic and abiotic components of an ecosystem	2.5 marks	<b>5</b>
					Model of energy flow in an ecosystem	2.5 mark	
					Q.6 Attempt any two:		
					i. Definition of Green economy and Green Technology	2 marks	<b>5</b>
					Example any like hybrid car or product	3 marks	
					ii. HVAC system	1 mark	<b>5</b>
					Considering system with diagram	3 marks	
					Advantages and disadvantages	1 mark	
					iii. Green building concept	1 mark	<b>5</b>
					Its rating system considering GRIHA and LEED .	4 marks	

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