

School of Science **School:**

Program/s: **BMS**

Semester: 3rd Year: 2nd

End Semester Examination **Examination:**

December - 2021 Examination year:

Course Name: Ecology & Environment Biology Course Code: BM111,

Total Marks: 09/12/2021 Date: **Total Pages:**

Time: 8.30 am to 10.30 am

Instructions:

→ All the Questions are Compulsory

→ Please read the questions carefully and answer accordingly

→ Draw a neat and labeled diagram wherever necessary.

Q. No.	Details	Marks	CO	BTL
Q.1	Do as directed	1x12=12	CO1	BTL1,2,3
	1. Which of the following is the correct definition of		CO2	
	'Biodiversity'? a) The variety of plant and animal life in the world or in a		CO3	: :
	a) The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.		CO4	
	b) It encompasses the interaction of all living species.		CO5	
	Climate, weather, and natural resources that affect human survival and economic activity.		CO6	
	c) Both A & B		CO7	
	d) None of the above	es X ·		
	2. Montreal protocol is related to	8 A =	208	
	a) Ozone Layer c) Extinct species b) Endangered Birds d) water pollution			
	3. Consider the following ecological factors:		* **	
	1. Precipitation		i Is	
	2. Temperature			
	· 3. Sunlight			
	4. Wind	= ,		-44
	Which of the above determine the characteristics of various biomes?		7 · g 25	
	a) 1, 2 & 3 Only c) 2, 3 & 4 Only			7
	b) 1, 3 & 4 Only d) 1, 2, 3 & 4			

4.	Gas released during Bhopal tragedy was		r -	
	a) methyl isocyanate c) sodium isothiocyanate			7
	b) potassium isothiocyanate d) ethyl isothiocyanate		9)	
				-
5.	Give the full form of IUCN.			
		-		
6.	Define 'ecological footprint'.			
				# P
7.	Consider the following pollutants:			
	1. Nitrogen dioxide	< 2		
	2. Sulphur dioxide			
	3. Carbon dioxide			
	Which of the above is/are considered for calculating National		- 1	
	Air Quality Index (NAQI)?			
	a) 1 & 2 Only c) 2 & 3 Only		* 1	
	b) 2 Only d) 1, 2 & 3	1 27 29		
8.	Which of the following statement is not correct			
	a) Pyramid of number can never be inverted			
	b) Pyramid of energy can never be inverted			
	c) Pyramid of number in a parasitic food chain will be inverted	17 s		
	d) Pyramid of biomass may be inverted or upright			D
	and a second of the second of		2 4	P
9.	Which of the following statements are correct regarding benthic	a // (27)		
	organisms?	# 1 A-M		
	1. Benthic organisms live in the bottom of the water mass.	15	n -	
	2. Practically every aquatic ecosystem has a well developed			
	benthos.			
	Select the correct option from the codes given below:			
7	a) Only 1 b) Only 2 c) Both 1 & 2 d) Neither 1 & 2			54 52 - 45
	a) recipies a) recipies a) recipies i a) rec	· · · · · · · · · · · · · · · · · · ·	8.8	× 1
10.	. Which of the following statements are correct with respect to	*		· V ₂ · · ·
	food chain?			
	1. A food chain starts with producers and ends with top			9
	carnivores.		6 -	
	2. The sequence of eaten and being eaten involves transfer of		2	
	food energy from trophic level to another.			
	3. An ecosystem may consist of several interrelated food			
	chains.	=		
	Select the correct option from the codes given below:			
	a) Only 1 & 2 b) Only 2 & 3 c) Only 1 & 3 d) 1, 2 & 3			
11.	When fertilizers and sewage enter a water body phytoplankton	L.		
				186 21
	and the first of the figure transfer of the contract of the first of t			

and algae grow rapidly. What is this phenomenon called? Answer in one word.		V.	11 2 11
12. Define 'carrying capacity'.			
Answer in brief (Any 7)	7x2=14	CO1	BTL1,2,3,
1. What is the significance about Greta Thunberg's arguments on		CO2	
climate change?		CO3	
2. If we completely remove the decomposers from an ecosystem,		CO4	9-10
its functioning will be adversely affected. State true or false		CO5	- · · · · · · · · · · · · · · · · · · ·
with justification.		-	
3. How does species loss affect the extinction risk of the		CO6	
remaining species?		CO7	
4. What is the importance of Bishnoi movement?	8 W =	N G E	7 8 8 X 2
5. How can the prevailing rate of species extinction be declined	a a	, e	
By 30% solely through protection of biodiversity hotspots?	No.		
6. Which of the following according to you is the major cause for		4 44	
loss of biodiversity amongst the four main causes of loss of		E 1	
biodiversity (Habitat loss and fragmentation, alien species			
invasion, over-exploitation and co-extinctions)? Justify your	5		
pick.		# 2 # 2	
7. What is the main reason for the decline in vulture population?	e 1 ge 1		
8. What is Minnamata disease?			
Write short notes on (Any 2)	2x3=6	CO1	BTL1,2,3
1. National air quality monitoring programme		CO2	
2. Pollution sources	5) 37	CO3	===
3. Blue baby syndrome		CO5	a.
		CO3	a ar
i William Carlos (al Section Carlos Control of Carlos Carlos Control of Carlos Carlos Control of Carlos Carlo	-		<u> </u>

Q.4	Answer in detail (Any 2):	2x5=10	CO1	BTL1,2,3
SE .	1. Describe the impact of at least three natural calamities on the		CO2	
	environment.		CO3	8
	2. What are the causes for ozone layer depletion? Give the		CO4	, 0
	Harmful effects of the mentioned problem. Are the		CO5	
	anthropogenic activities responsible for this environmental		CO6	,
	issue?		CO7	,
	3. Explain the ecosystem service. Write any four ecosystem services rendered by the natural ecosystem. Are you in support			* .
	or against imposing a charge on the service given by the		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	ecosystem?		na "11"	5