



ADAMAS UNIVERSITY

END SEMESTER EXAMINATION

(Academic Session: 2020 – 21)

Name of the Program:	B.Sc. in Computer Science	Semester:	IInd
Paper Title:	Environmental Science	Paper Code:	EVS11108
Maximum Marks:	50	Time Duration:	3 Hrs
Total No. of Questions:	29	Total No of Pages:	3
(Any other information for the student may be mentioned here)	<ol style="list-style-type: none"> At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. Assumptions made if any, should be stated clearly at the beginning of your answer. 		

Group A			
Answer All the Questions (5 x 1 = 5)			
		Knowledge Level	
1	Differentiate between primary and secondary pollutants.	U	CO5
2	What are keystone, flagship and umbrella species?	R	CO2
3	What is a biome? Give examples.	R	CO1
4	“Ozone acts a pollutant is the troposphere and as a policeman in the stratosphere”- explain.	An	CO2
5	Mention disadvantages of geothermal energy?	U	CO3
Group B			
Answer All the Questions (5 x 2 = 10)			
6 a)	How do greenhouse gases cause global warming?	E	CO3
(OR)			
6 b)	What is incineration? Discuss the advantages and limitations of incineration. (1+4=5)	R	
7 a)	How seed bank can support biodiversity?	An	CO6
(OR)			
7 b)	Discuss the difference in the abiotic components of a forest ecosystem and a grassland ecosystem.	C	CO1
8 a)	How are clouds formed?	U	CO2
(OR)			
8 b)	How can aquatic ecosystems be classified based on salinity?		
9 a)	What do you mean by point and diffused sources of water pollution?	U	CO2
(OR)			
9 b)	What is hazardous waste?	U	CO3
10 a)	How can you reduce single use plastic from your everyday life?		CO1
(OR)			
10 b)	Differentiate between attached growth and suspended growth processes.	U	CO4
Group C			

Answer All the Questions (7 x 5 = 35)			
11 a)	What do you mean by ecological pyramid? Give one example for each a. Inverted pyramid of number b. Inverted pyramid of biomass	R	CO1
(OR)			
11 b)	i) What is genetic diversity? Give proper example. ii) Which species have shown the highest genetic diversity in India? iii) Discuss how religious ideology helped to protect the biodiversity? 2+1+2	R R C	CO2
12 a)	Write a short note on In situ Conservation of biodiversity.		
(OR)			
12 b)	i) Presently what threats are influencing the Indian biodiversity? ii) How rain water harvesting can actually be a sustainable water management practice? 3+2	E An	CO6
13 a)	What is “photochemical smog”? What are the major pollutants responsible for photochemical smog formation? Describe the chemical reactions for formation of PAN. (1+2+2=5)	E	CO3
(OR)			
13 b)	What are the fundamental steps involved in an EIA? Draw a simple flowchart describing the steps that are followed in an EIA process in India. (2+3=5)	Ap	CO2
14 a)	Why CFC has been phased out? What is the alternative of CFC being used as coolant? Is there any problem with the alternative coolant? (3+1+1=5)	U	CO4
(OR)			
14 b)	What is incineration? Discuss the advantages and limitations of incineration. (1+4=5)	An	CO1
15 a)	How does wind power get produced in wind turbine? What is the most important criteria for site selection for installation of wind turbine. (4+1=5)	Ap	CO4
(OR)			
15 b)	Write a short note on sources and long-time effects of soil pollution.	U	CO2
16 a)	Explain Preliminary, Primary and Secondary Treatment.	U	CO5
(OR)			
16 b)	What is biomass energy? Why is biomass energy called stored form of solar energy? Discuss the limitations of biomass energy. (1+2+2=5)	Ap	CO1
17 a)	Why is arsenic (As) a serious groundwater pollutant in the state of West Bengal?	Ap	CO5
(OR)			
17 b)	What is eutrophication? How are BOD and DO related to each other once a water body is polluted by effluent rich in organic matter (considering effluent discharge occurs only once and not repeated). (2+3=5)	An	CO2