Roll No	2	0	2	1	1	0	2	3	8

National Institute of Science and Technology (Autonomous)

B. Tech 3rd Semester (2021 Batch)				Branch	All
Subject Code	19CM3MC01T	Subject Name	Environmental Science & Engineering		
Time	1.5 hrs	Exam	Mid Term Examination	Max. Marks	50
Examination Superintendent		Prof.Pradeepta Biswal, Prof. Prajapati Naik, Prof. Alok Patra, Dr. Manabendra Patra			
Name of the Instructor(s)		Dr. Manabendra Patra			
Date of Examination		21-11-2022 (2nd Sittting)			

Answer Question No.1 from PART-I *which is compulsory, any four from PART-*II *and any one from* PART-III.

The figures in the right hand margin indicate marks.

PART-I

(Answer all the questions)

Q1.		CO	Level	(1) Knowledge (2) Comprehension (3) Application (4) Analysis (5) Synthesis (6) Evaluation	2 x 5
	(a)	2	2	What do you meant by heterotroph?	2
	(b)	2	2	What do you meant by ecological Pyramid?	2
	(c)	2	2	What is a food web?	2
	(d)	1	1	What are the objectives of wild life protection act	2
	(e)	1	1	What is Umbrella Act?	2

PART-II

(Answer Any Four questions out of Six)

Q2.		CO	Level	(1) Knowledge (2) Comprehension (3) Application (4) Analysis (5) Synthesis (6) Evaluation	6 x 4
	(a)	1	2	What do you meant by environmental auditing? What are its objectives? Explain various steps involve in the process.	6
	(b)	2	2	Differentiate between food chain & food web	6

	(c)	3	3	What are the effects of turbidity on water bodies?	6
	(d)	2	3	What are biogeochemical cycles? Draw diagrammatically of Oxygen cycle	6
	(e)	1	2	Explain ecological succession?	6
	(f)	1	1	What are the Indian environmental laws made for protection of environment?	6

PART-III

(Answer Any One question out of Two)

		CO	Level	(1) Knowledge (2) Comprehension (3) Application (4) Analysis (5) Synthesis (6) Evaluation	
Q3.	(a)	1	2	Give the classification of types of ecosystem with suitable examples. Explain the energy flow in an ecosystem process with the help of an energy flow model.	16
Q4.	(a)	2	2	Explain different steps of nitogen cycle with a proper illustration	8
	(b)	2	2	What is an environmental gradient? Draw a universal tolerance curve for tolerance level of environmental factor.	8