QP Code: RM22MSC115 Reg. No | | | | | | | | | | | AY 22

GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Fourth Semester) Examinations, May – 2024

20BTPC401 - Environmental Biotechnology

(Biotechnology)

Time: 3 hrs Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A **(2 x 10 = 20 Marks)**

Q.1. Answer **ALL** Questions **(2 x 10 =20 Marks)**

a.	Write characteristics of effluents.	CO1	K2
b.	What do you mean by xenobiotic compounds? Give examples of it?	CO2	K1
c.	Name microorganisms for biogas production.	CO5	K2
d.	What are biosurfactants? Give with examples?	CO5	K1
e.	Write uses of bioethanol.	CO5	K2
f.	What do you mean by biostimulation?	CO2	K1
g.	Differentiate between primary pollutants and secondary pollutants.	CO2	K2
h.	How to control air pollution?	CO1	K2
i.	Write the properties of efficient strain.	CO1	K2
j.	What do you mean by slope leaching?	CO5	K1

PART – B **(10 x 5 = 50 Marks)**

Answer ***ANY FIVE*** the questions		Marks	CO#	Blooms Level
2. a.	Explain about the role of microbes in the production of biosurfactants.	5	CO5	K3
b.	Explain the role of microorganism in biogeochemical cycle.	5	CO1	K3
3.a.	Discuss about the solid and hazardous waste management.	5	CO1	K3
b.	Discuss about the source, effect and control of soil pollution.	5	CO1	K3
4. a.	Explain about the methods and strategies of bioremediation with its application.	5	CO2	K3
b.	Write notes on microbial ecology.	5	CO1	K2
5.a.	Discuss about the uses and practical aspects of plant growth promoting rhizobacteria (PGPR).	5	CO4	K3
b.	Describe the mode of action and mechanism of biofungicides.	5	CO4	K3
6. a.	Explain about the concept of microbiologically enhanced oil recovery System.	5	CO5	K3
b.	Write about the use of xylanase and white rot fungi in paper production.	5	CO5	K2
7.a.	Give brief description about the microbes. process and biotechnological interventions used for optimization of production.	5	CO5	K2
b.	Write about the use and concept of baculoviruses.	5	CO4	K2
8. a.	Explain about microbial growth kinetics.	5	CO1	3
b.	Write notes on biofertilizer and its application.	5	CO1	3

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