PAPER ID-310162

Roll No:

BTECH
(SEM VII) THEORY EXAMINATION 2023-24
BIOECONOMICS

TIME: 3 HRS   **M.MARKS: 100**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   Attempt *all* questions in brief.   **2 x 10 = 20**

Q no.	Question	Marks
a.	Define plant based biomass.	2
b.	Define "diversity of biomass"	2
c.	Define analog filters.	2
d.	Write use of Op-amp resistor circuits.	2
e.	Define aquatic biomass.	2
f.	Define biomass energy.	2
g.	Define alcohol fuels.	2
h.	How the land fill gases are used?	2
i.	Define anaerobic digestion as source of energy.	2
j.	Give some examples of liquid biofuels.	2

SECTION B

2.   Attempt any *three* of the following: **10 x 3 = 30**

a.	Describe circuit simulated modeling.	10
b.	Describe bio based economy.	10
c.	Write an ideal bio economy cycle of any developed country.	10
d.	Write the recycling process of plant based biomass.	10
e.	Write the principle and working of analog filters.	10

SECTION C

3.   Attempt any *one* part of the following: **10 x 1 = 10**

a.	Write the principle and applications of Op-amp models.	10
b.	Enumerate various types of filters. Describe any one.	10

4.   Attempt any *one* part of the following: **10 x 1 = 10**

a.	Enumerate various tools to support the transition to a bio economy.	10
b.	Write the role of Government in environmental economics.	10

5.   Attempt any *one* part of the following: **10 x 1 = 10**

a.	Write the concept of bio refineries.	10
b.	Describe the resources competition, complementarities and food security.	10

6.   Attempt any *one* part of the following: **10 x 1 = 10**

a.	Explain the bio based resources and value chain.	10
b.	Describe the use of biomass for the production of fuel and chemicals.	10

7.   Attempt any *one* part of the following: **10 x 1 = 10**

a.	Describe dynamic management of fossil fuel.	10
b.	Enumerate various biofuels. How the production of these fuels can be increased.	10