QP Code: RD22MTECH165 | Reg. No | | | | | | | | | | | AY 22 & AY21

GIET UNIVERSITY, GUNUPUR – 765022

M. Tech. (Third Semester) Examinations, December – 2023

MPEBT3011 - Biopharmaceutical and Pharmaceutical Technology

(Biotechnology)

Time: 3 hrs | Maximum: 70 Marks

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

PART – A **(2 x 10 = 20 Marks)**

Answer ALL questions

		CO #	Blooms Level
a.	What are the routes for elimination of drug from the body?	CO1	K1
b.	Define drug kinetics.	CO1	K2
c.	What are the different liquid dosage forms of drugs?	CO1	K1
d.	Define pinocytosis.	CO2	K2
e.	Enlist the ideal characteristics of an ointment.	CO2	K2
f.	What are liposomes?	CO3	K1
g.	Define recombinant therapeutics.	CO3	K2
h.	What is PK/PD modelling?	CO3	K1
i.	Write the factors contributing to immunogenicity?	CO4	K2
j.	What is interleukin?	CO4	K2

PART – B **(10 x 5 = 50 Marks)**

Answer ***ANY FIVE*** questions

		Marks	CO #	Blooms Level
2. a.	Explain in details on pharmacokinetic process.	6	CO1	K2
b.	What are the strategies for prolonging the action of a drug?	4	CO1	K1
3.a.	Illustrate the bioavailability of a drug.	6	CO1	K2
b.	Write in brief on renal drug excretion.	4	CO1	K2
4. a.	Discuss on topical application drugs.	6	CO2	K2
b.	What is advanced drug delivery systems? Explain briefly.	4	CO2	K1
5.a.	Discuss on design and development of oral controlled release drug administration.	6	CO2	K2
b.	Write the role of binders in solid dosage forms with examples.	4	CO2	K2
6. a.	Explain the detail procedure for production of humulin.	6	CO3	K3
b.	Write briefly on monoclonal antibodies.	4	CO3	K1
7.a.	Give an account of production of a vaccines.	6	CO3	K3
b.	What are the principles of pharmacology?	4	CO3	K2
8. a.	Explain the mechanism of action of various hormonal agonist and antagonist's mechanism.	6	CO4	K3
b.	Write on the structural differences among the different immunoglobulins.	4	CO4	K2

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