Name:

Enrolment No:

End Semester Examination, December 2024

Course: Pharmacology & Toxicology
Semester: 3
Program: **BSc Microbiology** **Duration: 3 Hours**
Course Code: HSCR2035P **Max. Marks: 100**

Instructions: Attempt all the question, draw suitable diagrams and flowcharts where necessary

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	Antagonists are defined as a …….	1.5	CO1
Q2	Differentiate between competitive and non-competitive antagonist.	1.5	CO1
Q3	The process of …… is considered as a sink condition.	1.5	CO1
Q4	Therapeutic index is the ratio of……/……..	1.5	CO1
Q5	When two drugs are administered together…….is considered as Synergistic effect.	1.5	CO1
Q6	The quantal response is also known as all or none response (True/ False)	1.5	CO2
Q7	Insulin and glucagon are the example of Physiological antagonist (True/ False)	1.5	CO2
Q8	Bacteriostatic inhibits the growth of bacteria (True/ False)	1.5	CO2
Q9	Nitrates is the example of antianginal category (True/ False)	1.5	CO2
Q10	…….is the first antimicrobial agent.	1.5	CO2
Q11	Write the Name of fungus used for the manufacturing of antibiotics.	1.5	CO3
Q12	What is the name of ring present in the chemical structure of penicillin?	1.5	CO3
Q13	Define the term antibiotic.	1.5	CO3
Q14	Gray baby syndrome is the side effect of…….	1.5	CO3
Q15	Define the term pharmacovigilance.	1.5	CO3
Q16	Define carcinogenicity.	1.5	CO4
Q17	Define the term immunosuppressant.	1.5	CO4
Q18	Ototoxicity` is the side effect of……	1.5	CO4
Q19	Why are immunosuppressant used in organ transplants?	1.5	CO4
Q20	What is mutagenesis?	1.5	CO4

Section B

(4Qx5M=20 Marks)			
Q 1	Define metabolism, explain the phases of metabolism.	**5**	**CO2**
Q2	Define pharmacokinetics, explain in detail about absorption.	**5**	**CO2**
Q3	Explain in detail about the toxicological hazards with their implication on public health	**5**	**CO2**
Q4	Define Immunomodulators, explain both the categories in detail.	**5**	**CO2**
Section C (2Qx15M=30 Marks)			
Q1	Write the mechanism of action any 5 drugs (3x5) i. Streptomycin iv. Tetracycline ii. Penicillin G v. Amphotericin **iii.** Sulfasalazine vi. Cotrimoxazole	**15**	**CO3**
Q2	Define the term signal transduction, describe the mechanism of ligand gated ion channel and nuclear receptor. (5x3)	**15**	**CO3**
Section DC (2Qx10M=20 Marks)			
Q 1	Define toxicokinetic, explain the mechanism of toxicity. (2+8)	**10**	**CO4**
Q2	Describe in detail about mechanism of antimicrobial resistance.	**10**	**CO4**