Total No. of Questions: 22

Enrollment No : _____

MU/863

MEDICAPS UNIVERSITY

Faculty of Pharmacy

End Semester Examination May 2025

PY3CO23 Medicinal Chemistry -III

Programme	:	B.Pharm.	**Branch/Specialisation**	:	-
Duration	:	3 hours	**Maximum Marks**	:	75

Note: *All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.*

Section 1 (Answer all question(s))

		Marks	CO	BL
Q1.	Write structure and uses of any one β-lactam antibiotics.	2	1	2
Q2.	Classify aminoglycosides.	2	1	2
Q3.	Write name and uses any two 4-amino quinolines.	2	2	2
Q4.	Write the class and name of enzyme inhibited by Proguanil.	2	2	2
Q5.	Enlist the first line drugs of antitubercular antibiotics.	2	3	2
Q6.	Write name and uses of any two fluoroquinolone antibiotics.	2	3	2
Q7.	What do you mean by Antiprotozoal drugs?	2	4	2
Q8.	Classify Sulphonamides.	2	4	2
Q9.	Define Prodrug.	2	5	2
Q10.	What do you mean by Hammett constants?	2	5	2

Section 2 (Answer any 2 question(s))

		Marks	CO	BL
Q11.	What you understand by Beta Lactam antibiotics classify them? Write an exhausted note on chemistry of Penicillin.	10	1	2
Q12.	Explain the MOA and SAR of Quinolines as a antimalarial drug with Etiology of malaria.	10	2	2
Q13.	(i) Discuss chemistry and mode of action of tetracyclines (ii) Classify Macrolide antibiotics with examples and mechanism of action.	10	2	2

Section 3 (Answer any 2 question(s))

		Marks	CO	BL
Q14.	Give the structure, synthesis, mode of action and uses of Acyclovir.	5	3	2
Q15.	Give MOA, SAR and synthesis of Isoniazid.	5	3	2
Q16.	Write a note on Urinary Tract anti-infective agent.	5	3	2

Section 4 (Answer any 2 question(s))

		Marks	CO	BL
Q17.	Give the SAR, Synthesis and mechanism of action of Metronidazole.	5	4	2
Q18.	Give the Synthesis and MOA of Sulphacetamide sodium with SAR.	5	4	2
Q19.	Explain the SAR and mode of action of Imidazole derivatives as an Anti-Anthelmintics.	5	4	2

Section 5 (Answer all question(s))

		Marks	CO	BL
Q20.	Discuss how Prodrug approach is used to masking the taste and increase the bioavailability of drugs.	5	5	2
Q21.	Explain any five physicochemical parameters of QSAR.	5	5	2
Q22.	Write role of pharmacophore modelling and docking techniques in the drug discovery process.	5	5	2

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