

(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

1411 – PHARMACOLOGY

II YEAR

UNIT III – NSAIDS

I. ELABORATE ON

10 MARKS

REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER

S.no	Questions	Reference	Bloom's Taxonomy
1	Classify NSAIDs based on their chemical structure and selectivity. Discuss in detail the mechanism of action, therapeutic uses, and adverse effects of Aspirin .	AUGUST 2026	Analyze
2	Discuss the Dual Inhibition of Cyclooxygenase (COX) . Compare and contrast the pharmacological actions, uses, and adverse effects of Non-selective NSAIDs (e.g., Ibuprofen) and Selective COX-2 Inhibitors (e.g., Celecoxib).	APRIL 2025	Evaluate
3	Elaborate on the mechanism of action, clinical applications, and major side effects of Selective COX-2 Inhibitors . Discuss the specific rationale for their development and the associated cardiovascular risks .	FEBRUARY 2024	Analyze
4	Describe the detailed mechanism by which NSAIDs cause gastric mucosal damage and ulceration . Discuss the preventive measures and the pharmacological agents used to mitigate this gastrointestinal toxicity.	AUGUST 2024	Understand
5	Discuss the role of Prostaglandins (PGs) in the physiological processes of inflammation, pain, and fever. Explain how NSAIDs interfere with these processes to exert their therapeutic effects.	APRIL 2023	Analyze

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S.no	Questions	Reference	Bloom's Taxonomy
6	Describe the signs, symptoms, and management of NSAID-induced Nephropathy . Detail the mechanism of their adverse effects on the kidney and its implications for perfusion patients.	FEBRUARY 2023	Apply
7	Discuss the mechanism of action and therapeutic uses of Paracetamol (Acetaminophen) . Justify why it is <i>not</i> classified as an NSAID and explain the emergency management of its acute overdose.	AUGUST 2023	Evaluate
8	Elaborate on the different therapeutic uses of Aspirin based on its dosage (low vs. high). Discuss its specific role as an antiplatelet agent and the irreversible nature of this effect.	APRIL 2022	Analyze
9	Discuss the clinical indications and contraindications for the use of Indomethacin . Detail its specific adverse effect profile, distinguishing it from other common NSAIDs.	FEBRUARY 2021	Apply
10	Describe the Drug Interactions of NSAIDs with other commonly used medications, particularly Anticoagulants (Warfarin) and Anti-hypertensives. Explain the pharmacological basis for these interactions.	AUGUST 2020	Analyze

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II.WRITE NOTES ON

5 MARKS

REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER

S.no	Questions	Reference	Bloom's Taxonomy
1	Write notes on the mechanism and therapeutic uses of Ibuprofen .	APRIL 2024	Understand
2	Discuss the clinical importance of the antiplatelet action of Aspirin .	AUGUST 2021	Apply
3	Write notes on the pathophysiology and risk factors for Reye's Syndrome .	FEBRUARY 2020	Understand
4	Differentiate between COX-1 and COX-2 enzymes in terms of their physiological roles.	APRIL 2019	Analyze
5	Discuss the rationale for using Misoprostol in conjunction with NSAIDs.	AUGUST 2019	Apply
6	Write notes on the mechanism of acute hepatic toxicity of Paracetamol.	FEBRUARY 2018	Understand
7	Explain the mechanism of action of Diclofenac and its therapeutic advantages.	APRIL 2017	Understand
8	Write notes on the major hypersensitivity reactions associated with NSAIDs.	AUGUST 2017	Understand
9	Discuss the clinical implications of the short half-life of Ibuprofen versus the long half-life of Piroxicam.	FEBRUARY 2016	Analyze
10	Briefly explain the pharmacology and clinical application of Topical NSAIDs .	APRIL 2016	Apply

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S.no	Questions	Reference	Bloom's Taxonomy
1	Name two Non-selective NSAIDs .	AUGUST 2026	Remember
2	What is the mechanism of action of Celecoxib ?	APRIL 2025	Remember
3	Give two common adverse effects of Ibuprofen .	FEBRUARY 2024	Remember
4	State the active antidote for Paracetamol overdose .	AUGUST 2024	Remember
5	What is the primary clinical application of Ketorolac ?	APRIL 2023	Remember
6	Define the term Analgesic .	FEBRUARY 2023	Remember
7	Which COX enzyme is considered " housekeeping "?	AUGUST 2022	Remember
8	Give two contraindications for the use of Aspirin .	APRIL 2022	Remember
9	State the mechanism of Antipyretic action of NSAIDs.	FEBRUARY 2021	Understand
10	What is the advantage of using a Prodrug NSAID (e.g., Sulindac)?	AUGUST 2021	Understand
11	Name one Non-acid NSAID .	APRIL 2020	Remember
12	What is the main disadvantage of Piroxicam ?	FEBRUARY	Understand

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S.no	Questions	Reference	Bloom's Taxonomy
		2020	
13	Give two uses of Diclofenac .	AUGUST 2019	Remember
14	State one cardiovascular risk associated with COX-2 inhibitors .	APRIL 2018	Understand
15	Name an NSAID primarily used for the closure of Patent Ductus Arteriosus (PDA) .	FEBRUARY 2017	Remember