

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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

1411 – PHARMACOLOGY

II YEAR

UNIT I – ANTIHYPERTENSIVE DRUGS

I. ELABORATE ON

10 MARKS

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

S.no	Questions	Reference	Blooms Taxonomy
1	Classify Beta-adrenergic Blockers . Discuss their mechanism of action, therapeutic uses, and adverse effect profile in detail.	August 2012	Analyze
2	Elaborate on the Renin-Angiotensin-Aldosterone System (RAAS) . Explain the mechanism of action, therapeutic uses, and contraindications of Angiotensin-Converting Enzyme (ACE) Inhibitors .	April 2024	Analyze
3	Describe the classification of Calcium Channel Blockers (CCBs) . Discuss their mechanism of action, indications, and major side effects, differentiating between Dihydropyridines and Non-Dihydropyridines.	August 2012	Analyze
4	Classify the drugs acting on the sympathetic nervous system for hypertension. Compare and contrast the pharmacological actions and side effects of Alpha-blockers and Beta-blockers.	April 2024	Evaluate
5	Discuss the pathophysiology of Essential Hypertension . Detail the current pharmacological approach for its management, including the rationale for combining different classes of drugs.	August 2012	Evaluate
6	Discuss the indications, contraindications, and precautions for initiating a patient on Beta-blocker	April 2024	Apply

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S.no	Questions	Reference	Blooms Taxonomy
	therapy. Justify their use in Congestive Heart Failure.		
7	Elaborate on the drug interactions associated with ACE Inhibitors and Calcium Channel Blockers, and discuss the clinical significance of these interactions.	August 2012	Analyze
8	Classify Vasodilators based on their site of action (arteriolar, venular, or mixed). Discuss the pharmacology, uses, and adverse effects of direct vasodilators.	April 2024	Analyze
9	A hypertensive patient is also diagnosed with Type 2 Diabetes Mellitus . Discuss the preferred class(es) of antihypertensive drugs and justify your choice with clinical evidence.	August 2012	Apply
10	Describe the mechanism of action, advantages, and disadvantages of Angiotensin Receptor Blockers (ARBs) , and compare them with ACE Inhibitors.	April 2024	Analyze

II.WRITE NOTES ON**5 MARKS****REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER**

S.no	Questions	Reference	Blooms Taxonomy
1	Write a note on the Mechanism of action and two uses of Alpha-blockers .	April 2024	Understand
2	Explain the mechanism responsible for the dry cough and angioedema associated with ACE inhibitors.	August 2012	Understand

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S.no	Questions	Reference	Blooms Taxonomy
3	Write notes on the pharmacological actions of Verapamil and its major adverse effects.	April 2024	Understand
4	Differentiate between Cardio-selective and Non-selective Beta-blockers with two examples for each.	August 2012	Understand
5	Write notes on the " First-Dose Phenomenon " seen with Prazosin and explain how it is managed clinically.	April 2024	Apply
6	Enumerate the contraindications and precautions for the use of Beta-blockers.	August 2012	Remember
7	Write a note on the Pharmacology of Sodium Nitroprusside and its role in hypertensive crises.	April 2024	Understand
8	Discuss the side effects of Dihydropyridine Calcium Channel Blockers , such as Nifedipine and Amlodipine.	August 2012	Understand
9	Write notes on the Vasopressor Reflexes and how antihypertensive drugs affect them.	April 2024	Understand
10	Briefly explain the role of Aldosterone Antagonists (e.g., Spironolactone) in the management of hypertension.	August 2012	Understand

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S.no	Questions	Reference	Blooms Taxonomy
1	Name three common side effects of ACE Inhibitors .	April 2024	Remember
2	Give two examples of a Cardioselective Beta-1 blocker .	August 2012	Remember
3	What is the mechanism of action of the direct vasodilator Minoxidil ?	April 2024	Remember
4	Define the term " Rebound Hypertension " and state its cause.	August 2012	Understand
5	What is the primary action of the Non-dihydropyridine CCB Diltiazem ?	April 2024	Remember
6	Name a drug belonging to the class Renin Inhibitors .	August 2012	Remember
7	List three indications for Beta-blockers other than hypertension.	April 2024	Remember
8	Name an Alpha-1 blocker used primarily for Benign Prostatic Hyperplasia (BPH).	August 2012	Remember
9	Define Postural Hypotension (Orthostatic Hypotension) .	April 2024	Understand
10	What is the black box warning associated with ACE Inhibitors regarding pregnancy?	August 2012	Remember
11	Give two examples of ' Balanced Vasodilators '.	April 2024	Remember

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S.no	Questions	Reference	Blooms Taxonomy
12	Mention the main clinical use of the Alpha/Beta-blocker Labetalol .	August 2012	Remember
13	List two non-pharmacological measures in the management of hypertension.	April 2024	Remember
14	Name a Thiazide Diuretic and mention its site of action.	August 2012	Remember
15	What is the advantage of Nebivolol over other conventional Beta-blockers?	April 2024	Understand
