

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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

1411 - PHARMACOLOGY

II YEAR

UNIT I - ANTI ANGINAL 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 drugs used in angina. Write on the mechanism of action, bioavailability, and side effects of Nitrates (Organic Nitrates).	2013 (August)	Analysis/Application
2.	Classify Beta-blockers . Discuss their pharmacological actions, therapeutic uses (specifically in angina and post-MI), adverse effects, and contraindications.	2015 (February)	Analysis/Evaluation
3.	Describe the classification of Calcium Channel Blockers (CCBs). Discuss their mechanism of action and differentiate between Dihydropyridines and Non- dihydropyridines in the management of Angina Pectoris.	2012 (August)	Analysis
4.	Compare and contrast the mechanism of action, uses, and adverse effects of Nitrates and Betablockers in the treatment of Chronic Stable Angina.	2015 (February)	Analysis
5.	Discuss the pathophysiology of Myocardial Infarction and briefly outline the roles of Antianginal ,	2013 (August)	Analysis/Application



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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

S.No.	Questions	Reference	Blooms Taxonomy
	Antiplatelet, and Anticoagulant drugs in its immediate management.		
6.	Explain the Oxygen Demand-Supply equation in the context of Angina. Describe how the three major classes of antianginal drugs act to restore this balance.	2015 (February)	Evaluation
7.	Write an essay on the pharmacology of isosorbide dinitrate and isosorbide mononitrate, including their uses, routes of administration, and tolerance issues.	2013 (August)	Analysis/Understanding
8.	Discuss the utility of Metabolic Modulators (e.g., Ranolazine) in the treatment of Angina.	2015 (February)	Understanding/Application
9.	Discuss the principles of combination therapy in chronic stable angina. Justify the rationale for combining a Beta-blocker with a Dihydropyridine CCB.	2012 (August)	Evaluation
10.	Classify Anti-arrhythmic drugs . Discuss the pharmacology of a Class IV anti-arrhythmic agent (CCB) and its use in managing arrhythmias associated with coronary artery disease.	2015 (February)	Analysis/Understanding



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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

II.WRITE NOTES ON 5 MARKS

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

S.No.	Questions	Reference	Blooms Taxonomy
1.	Expalin in detail about Angina petcoris and classify the drugs acting on it.	2012 (August)	Understanding
2.	Mechanism of action, uses, and side effects of Beta-blockers in cardiac conditions.	2015 (August)	Understanding/Application
3.	Explain Gen 1 drugs of Beta blockers	2013 (August)	Understanding/Analysis
4.	Write notes on Sublingual Nitroglycerin (GTN) , including its clinical role and method of use.	2015 (February)	Understanding/Application
5.	Differentiate between Non- Dihydropyridine and Dihydropyridine Calcium Channel Blockers (CCBs).	2012 (August)	Understanding
6.	Describe the mechanism of action of Aspirin and its role as an antiplatelet agent in preventing anginal attacks.	2015 (February)	Understanding
7.	The role of Calcium Channel Blockers (CCBs) in Prinzmetal's Angina (Variant Angina).	2017 (February)	Application
8.	Write a note on Nitrate Tolerance and how it is managed clinically.	2016 (February)	Understanding/Application



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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

S.No.	Questions	Reference	Blooms Taxonomy
9.	What is the mechanism of action of the antianginal drug Trimetazidine?	2016 (February)	Remembering/Understanding
10.	Write notes on Amlodipine .	2017 (February)	Understanding

I. WRITE SHORT NOTES ON

3 MARKS

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

S.No.	Questions	Reference	Blooms Taxonomy
1.	Mode of action of nitrates in angina.	2018 (February)	Understanding
2.	Name two Calcium Channel Blockers (CCBs) used for Angina.	2016 (February)	Remembering
3.	Write shortly on Diltiazem .	2013 (August)	Remembering/Understanding
4.	Name two examples of Cardioselective Beta-blockers.	2017 (February)	Remembering
5.	Coronary artery diseases (Short answer).	2016 (February)	Remembering
6.	What is the main action of Verapamil on the heart?	2013 (August)	Remembering
7.	The role of Calcium Channel Blockers (CCBs) in	2023	Remembering



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

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

S.No.	Questions	Reference	Blooms Taxonomy
	Stable Angina .	(August)	
8.	Mention two adverse effects of Nitrates .	2018 (February)	Remembering
9.	Name an antianginal drug that works by selectively inhibiting the late sodium current	2023 (April)	Remembering
10.	Define First Pass Metabolism	2018 (February)	Remembering
11.	What is the significance of the calcium channel in the action of CCBs?	2023 (April)	Understanding
12.	Give two uses of Beta-blockers other than hypertension and angina.	2018 (February)	Remembering
13.	Name a drug used for chemically induced stress testing in cardiology (e.g., Dipyridamole).	2023 (April)	Remembering
14.	What is the clinical benefit of using a long-acting nitrate?	2018 (February)	Understanding
15.	Vasodilators (Short answer).	2023 (April)	Remembering