N. B. (1) All questions are compulsory

Marks: 80

- (2) Figures to the right indicate full marks
- Q.1A) Answer the following

16**M**

i. Define prodrug. Give one example

Definition with example

ii. Define a) Partial agonist b) Therapeutic index

Definitions

iii. Define a). Apparent Volume of distribution; b) Clearance

Definitions

iv. Enlist centrally acting antihypertensive agents

Drugs affecting ANS beta 1 etc.....

v. Explain the term placebo effect

Explanation

vi. Write the Mechanism of action of sodium Nitroprusside.

Explanation of MOA

vii. Classify anti- arrhythmic drugs.

All sub classes

viii. 'Salmeterol and ipratropium bromide are preferred in the treatment of asthma'. True or False and justify

True works through beta 2 receptors....

Q.1B) Answer the following

4M

i. Define Biotransformation.

Definition

ii. Enlist the factors affecting absorption.

List only

iii. Classify adrenergic receptors.

All sub classes

iv. Write name of drugs belongs to class of osmotic diuretics.

List of drugs

Q.2 A) Answer any TWO of the following

8M

i. Describe the classification of Sympathomimetic agents and discuss the pharmacodynamics of adrenaline on Heart and eye.

All sub classes with an emphasize on

ii. Classify anticholinesterases and discuss related therapeutic uses.

All sub classes with an emphasize on



iii. Classify skeletal muscle relaxants. Differentiate between depolarizing and non-depolarizing muscle relaxants.

All sub classes with an emphasize on

Q.2 B) Answer any ONE of the following

4M

i. Classify different routes of administration. Write the advantages and disadvantages of oral route of administration.

All sub classes with an emphasize on

ii. Write a short note on plasma protein binding.

Explanation

Q.3 A) Answer any TWO of the following

8M

i. Classify antihypertensive drugs. Write a short note on Captopril.

All sub classes with an emphasize on

ii. Write a note on pharmacotherapy of calcium channel blockers

All sub classes with an emphasize on

iii. Classify anti-anginal drugs. Elaborate on vasodilators used in the treatment of angina.

All sub classes with an emphasize on

Q.3 B) Answer any **ONE** of the following

4M

i. Classify antihyperlipidemic agents and write a note on pharmacotherapy of Statins.

All sub classes with an emphasize on

ii. Write a short note on Quinidine.

Explanation

Q.4 A) Answer any TWO of the following

8M

i. Classify skeletal muscle relaxant. Compare depolarizing and nondepolarizing blocking agents.

All sub classes with an emphasize on

ii. Classify sympatholytics and discuss related the pharmacotherapy of alpha adrenergic blocking agent All sub classes with an emphasize on

iii. Describe synthesis, storage, release, and metabolism of acetylcholine

synthesis, storage, release, and metabolism of acetylcholine.	
Q.4 B) Answer any ONE of the following	4M
i. Discuss the clinical uses of Anticholinergic drugs Therapeutic role ii Discuss the pharmacotherapy of dantrolene mechanism of action and clinical use	
Q.5 A) Answer any TWO of the following	8M
i. Discuss physiology of ion channels with examples	
physiology of ion channels with examples	
ii. Enlist the different families of receptors and explain transducer mechanism of G- protein c	oupled
receptors.	
All types plus GPCR explanation	
iii. Write a short note on competitive and non competitive antagonism with examples	
Difference with example	
Q.5 B) Answer any ONE of the following	4 M
i. Discuss Phase II with example	
Explanation with example	
ii. Write a note on Phase I with example	
Explanation with example	
Q.6 A) Answer any TWO of the following	8M
i. Classify Diuretics. Compare and contrast thiazides and potassium sparing diuretics.	
All sub classes with an emphasize on	
ii. Write the mechanism of action of high ceiling diuretics with its uses and complications.	
Explanation	
iii. Elaborate on the role of calcium channel blockers in the management of cardiovascular	
disorders.	
All sub classes with an emphasize on	

i. Enlist patient related factors modifying drug actions. Explain any two factors with example.

4M

Q.6B) Answer any ONE of the following

ii. . Write a short note on tolerance and drug dependence