

**AMALA INSTITUTE OF MEDICAL SCIENCES**  
Amalanagar, Thrissur-680555, Kerala, PH.0487-2304116

SECOND PROFESSIONAL MBBS DEGREE( PHASE II)  
(2022 MBBS Batch)

**Schedule of Remedial Examination**

No. 20/24/PATHAIMS

Date: 13.09.2024

**THEORY**

SL No	DATE	DAY	TIME	VENUE	SUBJECT
1	28-10-2024	Monday	9.30am to 12.30pm	Respective Departments	Pharmacology
2	29-10-2024	Tuesday	-do-		Pathology
3	30-10-2024	Wednesday	-do-		Microbiology

**PRACTICAL AND VIVA**  
Time : 9.00 AM onwards

SLNo	DATE	DAY	SUBJECT
1	01-11-2024	Friday	Pharmacology
2	02-11-2024	Saturday	Pathology
3	04-11-2024	Monday	Microbiology

**NB :** Candidates should report at the venue at least by 15 minutes before start of written and practical exam on all days of examination.

Viva will follow the Practical.

Mobile phones are strictly prohibited

Dr. Deepti Ramakrishnan  
Curriculum co-ordinator  
(Phase -II)

Copy to : The Director /Associate Director / Principal / Vice Principals/AO/ HODs of Pharmacology/  
Microbiology/ Pathology/ Forensic Medicine/ Community Medicine/ Gen. medicine/  
Gen.surgery/Gynecology/Office file/Notice Boards/ Gents & Ladies Hostel/ Student representatives





AMALA INSTITUTE OF MEDICAL SCIENCES  
DEPARTMENT OF PHARMACOLOGY  
2022 MBBS REGULAR BATCH

Remedial Exam For Roll no:22005 and 20010  
Paper I

(Topics : General Pharmacology, ANS, Autacoids, Respiratory System, Blood, Diuretics, CVS, CNS)

Time: 3 Hours

27-01-2025  
Date: 17-12-2024

Max. Marks: 20+80 = 100 Marks

- Answer All questions neatly and legibly and to the point.
- MCQs should be answered first in the single answersheet provided.
- Write down the most appropriate response (a/ b/ c/ d) in the answer sheet provided. Write only the alphabet and NOT the whole answer.
- The answers to MCQs (Qn.No: i to Qn.No: xx) shall be written continuously on the writing sheet
- Return the MCQ response sheet within the allotted time. (30 minutes)
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together.
- Leave sufficient space between answers. Do not leave any blank pages between answers.
- Draw table/diagrams/flow charts wherever necessary.

I. Multiple Choice Questions

Question numbers (i-v) are Single response type:

- i. Which of the following anticoagulants is a direct inhibitor of thrombin?
- a) Abeiximab b) Rivaroxaban c) Dabigatran d) Warfarin
- ii. An opioid which has an antitussive action is:
- a) Dextromethorphan b) Chlorphedianol c) Codeine d) Noscapine
- iii. Which drug is the most useful in treating an episode of Antipsychotic induced dystonia:
- a) Lorazepam b) Promethazine  
c) Haloperidol d) Phenobarbitone
- iv. A 16-year-old girl was brought to the emergency department by her parents who found her with an empty pill bottle. She was confused and reported hearing ringing in her ears; her respiratory rate was 28 breaths per minute. You order investigations and her arterial blood reveals a pH of 7.2. Which of the following drugs did she most likely take?
- a) Paracetamol b) Aspirin c) Allopurinol d) Colchicine



**Question numbers (xi-xv) are Case scenario based:**

A 40 year old male suffered from attacks of chest pain and was diagnosed with Angina pectoris. On examination, his BP was found to be 170/110mm Hg. Lab investigations show FBS-160 mg/dl and serum cholesterol level was 270 mg/dl.

- xi. Which of the following antihypertensives is most suitable for initial therapy in this patient?
- a) Nifedipine      b) Hydrochlorothiazide      c) Enalapril      d) Propranolol
- xii. Which of the following drugs is used to reduce the frequency of angina pectoris as well as to terminate an acute attack:
- a) Isosorbide dinitrate      b) Pentaerythritol tetranitrate  
c) Diltiazem      d) Dipyridamole
- xiii. The patient was started on Atorvastatin for his raised cholesterol levels. The most common side effect of this drug is:
- a) Alopecia      b) Onycholysis      c) Muscle ache      d) Nephrotoxicity
- xiv. Which of the following drugs can be used in Hypertensive emergency except:
- a) Nicardipine      b) Glyceryl trinitrate  
c) Sodium nitroprusside      d) Propranolol
- xv. Which of the following antihypertensive combinations is irrational and therefore should not be used?
- a) Nifedipine + Hydralazine      b) Amlodipine + Atenolol  
c) Enalapril + Clonidine      d) Enalapril + Hydrochlorothiazide

**Question numbers (xvi-xx) consists of two statements - Assertion (A) and Reason (R).**

**Answer these questions by selecting the appropriate options given below.**

xvi. Assertion (A). Digoxin toxicity is difficult to be treated by hemodialysis



**Question numbers (xi-xv) are Case scenario based:**

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**Question numbers (xvi-xx) consists of two statements - Assertion (A) and Reason (R).**

**Answer these questions by selecting the appropriate options given below.**

- xvi. Assertion (A). Digoxin toxicity is difficult to be treated by hemodialysis



- v. Which of the following is NOT a Prodrug?  
a) Levodopa   b) Enalapril   c) Prednisone   d) Clonidine

Question numbers (vi-x) are Multiple response type:

vi. Potassium sparing diuretics are:

1. Spironolactone                      2. Amiloride  
3. Furosemide                            4. Mannitol  
a) 1&2                      b) 1&3                      c) 2&3                      d) 1&4

vii. Which of the following statements are true about Halothane:

1. Causes bronchodilatation    2. Nonirritant and noninflammable  
3. Good analgesic                      4. Good muscle relaxant  
a) 1&2                      b) 1,2&3                      c) 2&3                      d) 3&4

viii. Uric acid synthesis inhibitors among these are:

1. Allopurinol                              2. Probenecid  
3. Colchicine                                4. Febuxostat  
a) 1,2,3&4                      b) 1&2                      c) 3&4                      d) 1&4

ix. Which of the following are the adverse effects of Salbutamol?

1. Hyperkalemia    2. Tremor    3. Palpitation    4. Hypoglycemia  
a) 1&2                      b) 1&3                      c) 2&3                      d) 3&4

x. Which of the following are the uses of Alpha blockers:

1. Benign prostatic hypertrophy    2. Hypotension  
3. Peripheral vascular diseases    4. Nasal decongestion  
a) 1,2,3&4                      b) 1,2&3                      c) 2&3                      d) 1&3

2



Betsy

Dr. BETSY THOMAS  
MD, FRCOG, DNB, MICOG  
PRINCIPAL

AMALA INSTITUTE OF MEDICAL SCIENCES  
AMALA NAGAR, THIRISSUR-680 555



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PVK  
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# AMALA INSTITUTE OF MEDICAL SCIENCES

DEPARTMENT OF PHYSIOLOGY

**MBBS 2022 BATCH (Friday Batch)**

## Questions

Most commonly asked questions on GIT

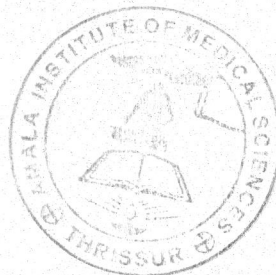
1. Briefly explain the mechanism of gastric juice secretion. Add a note on factors influencing the secretion.
2. Functions of bile or bile salts.
3. Gastric movements/Small intestine/Large intestinal movements
4. Write functions of saliva and briefly explain about regulation of salivary secretion.
5. Explain defecation reflex.
6. Regulation of pancreatic exocrine secretion
7. Phases of deglutition.
8. Factors affecting gastric emptying.
9. Gastric emptying time.
10. Law of intestine or gut.
11. Phases of gastric juice secretion with experiments.
12. Pathophysiology & treatment of Peptic ulcer.
13. Describe the function and regulation of pancreatic juice
14. Explain how fat is digested and absorb in GI tract.
15. Name the components of enteric nervous system and outline its functions
16. Proteolytic pancreatic enzymes.
17. Mechanism of HCl secretion by gastric parietal cells.
18. Motor migrating complex (MMC)
19. Basal electrical rhythm (BER)
20. Vomiting reflex.

### **Physiological basis of**

1. Post prandial alkaline tide.
2. Vagotomy decrease gastric acid secretion.
3. Resection of ileum causes steatorrhoea
4. Ranitidine or omeprazole is given in peptic ulcer.
5. Deglutition apnea
6. Receptive relaxation
7. Steatorrhoea occurs after pancreatectomy
8. Mass peristalsis.
9. Achlasia cardia

### **Draw and label**

1. Innervation of GIT





# AMALA INSTITUTE OF MEDICAL SCIENCES

DEPARTMENT OF PHYSIOLOGY

MBBS 2022 BATCH (Friday Batch)

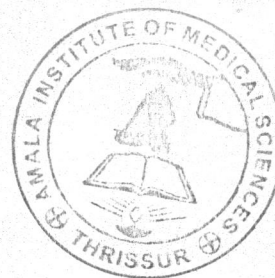
## Questions

Most commonly asked questions **Reproductive System**

1. Ovarian cycle
2. Oral contraceptive pills
3. Fetoplacental unit
4. Placental hormones
5. Tests for detection of ovulation
6. Corpus luetum
7. Sources of estrogen/functions of estrogen
8. Describe about spermatogenesis and hormonal factors regulating it
9. Functions of placenta
10. Intrauterine contraceptive devices
11. Describe endometrial changes during menstrual cycle/ovarian cycle.  
Add a note on hormonal regulation.
12. Milk ejection reflex / Neuroendocrine reflex
13. Pregnancy tests.
14. Down's Syndrome

**Physiological basis of -**

1. Intra uterine contraceptive devices prevents pregnancy
2. Amenorrhea during post partum lactation
3. Body temperature is raised during ovulation
4. Lactational amenorrhea
5. Sertoli cells are important in spermatogenesis
6. Use of oral contraceptive pill
7. Klinefelter's syndrome
8. Turner's Syndrome





# AMALA INSTITUTE OF MEDICAL SCIENCES

DEPARTMENT OF PHYSIOLOGY

**MBBS 2022 BATCH (Friday batch)**

## Questions

### Most commonly asked questions **Endocrine System**

1. Classification of hormones based on mechanism of action/chemical composition
2. Hypofunction of thyroid gland/myxoedema/cretinism
3. Describe the actions of parathyroid hormone. What is tetany?
4. Physiological actions of thyroid hormone
5. Mechanism of action of steroid hormones
6. Cushing's syndrome
7. Hormones affecting calcium metabolism/homeostasis
8. Actions of insulin/metabolic effects of insulin
9. Describe the actions of growth hormone
10. Regulation and functions of mineralocorticoids
11. Pituitary dwarfism
12. Describe the physiological action of glucocorticoids. Add a note on Cushing's syndrome
13. Name the posterior pituitary hormones and describe their actions
14. Hyperthyroidism
15. Endocrine functions of renal system
16. Neuroendocrine reflex with examples
17. Syndrome of inappropriate hyper secretion of ADH (SIADH)
18. Diabetes insipidus & Diabetes Mellitus
19. Aquaporin
20. Describe mechanism of action and regulation of aldosterone secretion
21. Acromegaly
22. Gigantism
23. Hypothalamo- Hypophyseal portal system/tract

### **Physiological basis of -**

1. Trousseau 'sign
2. Pigmentation seen in Addison's diseases
3. Exophthalmos and palpitation in hyperthyroidism
4. ATP play a major role in skeletal muscle relaxation
5. Parathyroidectomy leads to signs of neuromuscular hyper excitability
6. Chvostek's sign
7. Aldosterone escape
8. Short stature in Laron dwarfism
9. Carpal spasm in hypocalcemia
10. Polyuria polyphagia in diabetes mellitus
11. Patients of acromegaly may develop diabetes
12. Edema in Conn's syndrome
13. Adrenal diabetes.

### **Draw and Label**

1. Feedback regulation of thyroid hormone





AMALA INSTITUTE OF MEDICAL SCIENCES  
DEPARTMENT OF PHYSIOLOGY

Questions

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**Draw and Label**

1. Feedback regulation of thyroid hormone



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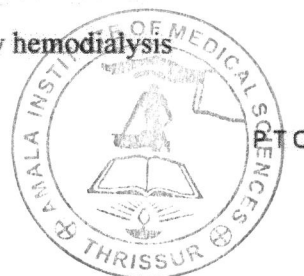
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- a) Nifedipine + Hydralazine      b) Amlodipine + Atenolol  
c) Enalapril + Clonidine      d) Enalapril + Hydrochlorothiazide

**Question numbers (xvi-xx) consists of two statements - Assertion (A) and Reason (R).**

**Answer these questions by selecting the appropriate options given below.**

xvi. **Assertion (A).** Digoxin toxicity is difficult to be treated by hemodialysis



**Reason (R).** Digoxin has a large volume of distribution

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xvii. **Assertion (A).** Monteleukast is a mast cell stabilizer

**Reason (R).** Monteleukast is effective in Aspirin induced and exercise induced asthma.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xviii. **Assertion (A).** Methadone is used to decrease withdrawal symptoms in Opioid dependence.

**Reason (R).** Methadone is a short acting drug

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xix. **Assertion (A).** Highly plasma protein bound drugs are largely restricted to the vascular compartment.

**Reason (R).** High degree of plasma protein binding makes the drug short acting.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xx. **Assertion(A).** Sumatriptan is used for the prophylaxis of migraine.

**Reason(R).** Sumatriptan is a 5-HT<sub>1D/1B</sub> agonist.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
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## II. Long Essays:

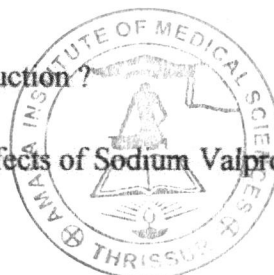
(2 x 10 = 20 Marks)

- NKP
2. Enumerate FOUR groups of Antidepressants with ONE example each. What are the uses of these drugs other than in Endogenous depression? Write briefly about Selective Serotonin Reuptake Inhibitors. (4 + 3 + 3 = 10)
3. A 30 year old man developed the following manifestations a minute after he received an injection of a radiocontrast media - wheezing, urticarial rashes with severe itching and progressive difficulty in breathing. His B.P. was recorded as 90/30 mm of Hg.
- a) What is your diagnosis? Write the drug of choice for this situation with the dose and strength. Describe the pharmacological basis for the use of this drug in this condition
- PAN
- b) What is its preferred route of administration? Write the rationale for preference of this route over other routes.
- c) What other measures should you take to manage this condition?
- d) Write TWO drugs useful to raise bloodpressure in hypotensive states. Explain the mechanism of action of any one of them. (3 + 2 + 3 + 2 = 10)

## III. Short Essays:

(6 x 6 = 36 Marks)

- BN
4. Write briefly about drug therapy in Myocardial infarction with the rationale for their use. Discuss the mechanisms of action of Antiplatelet drugs. (4+2 marks)
5. Enumerate THREE drug groups used in treatment of Bronchial asthma with the rationale for use. How will you manage Status epilepticus? (3 + 3 marks)
- PAN  
BR
6. Write the therapeutic uses and adverse effects of Neostigmine. Write briefly about parenteral iron preparations. (3 + 3 marks)
- PAN
7. Describe the drugs used for Preanaesthetic medication. Write briefly about peripherally acting Skeletal muscle relaxants (3 + 3 marks)
- PVK
8. Briefly describe drug biotransformation reactions. What are the consequences of microsomal enzyme induction? (3 + 3 marks)
- VKP  
PJK
9. Describe the mechanism of action, uses and adverse effects of Sodium Valproate. How will you treat Methanol poisoning? (4 + 2 marks)



**IV. Short Answers:**

**(6 x 4 = 24 Marks)**

- ES
- BR
- VKT
10. Therapeutic uses and adverse effects of Frusemide.
  11. Write briefly about the use of Prostaglandin analogues in Glaucoma
  12. Choose the appropriate drug and justify your choice: Ketorolac / Morphine in a patient with head injury.
  13. Write briefly about Z compounds.
  14. What are the therapeutic uses and adverse effects of Lignocaine ?
  15. How will you motivate a patient with hyperlipidaemia to adhere to your prescribed management ?

\*\*\*\*\*

Betsy

Dr. BETSY THOMAS  
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