## SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH



#### (A DEEMED TO BE UNIVERSITY)

## **MBBS Phase II Examination - January 2023**

Time: 150 Minutes Max Marks: 80 Marks

## Pharmacology Paper I QP Code C2061

(Your answer should be specific to the question asked Draw neat labeled diagrams wherever necessary)

## **Long Essay**

#### $10 \times 2 = 20 \text{ Marks}$

- 1. A 26 years old gymnastics instructor had presented with complaints of muscle weakness in his face and upper arms, which had worsened over the past two months. He also complained of double vision, weakness in the jaw while chewing and difficulty in swallowing. On examination, he had bilateral ptosis after repeated blinking exercises. When he smiles he appears to be snarling. Electromyography test had revealed progressive weakness of upper arm muscles. (1+3+2+4)
- a. What is your diagnosis?
- b. Explain the confirmatory test.
- c. List the drugs used in this clinical situation
- d. Explain the beneficial role of drugs from different category useful in this condition
- **2.** Enumerate the drugs used in epilepsy. Explain the mechanism of action of drugs used in absence seizures and their adverse effects (4+6)

### **Short Essay**

### $5 \times 12 = 60 \text{ Marks}$

- 3. List drugs used as transdermal patch with one use for each. List the advantages of this route(3+2)
- 4. Mention five drugs which inhibit microsomal enzymes and explain one drug interaction for each(2.5+2.5)
- 5. List four alpha-1 agonists and write their uses and adverse effects (2+2+1)
- 6. Explain mechanism of action of lignocaine. Explain eutectic mixture and write one use (2+2+1)
- 7. Explain the mechanism of action, uses and adverse effects of ramipril (1.5+2+1.5)
- 8. Enumerate the class II antiarrhythmics, explain the mechanism of action of any one drug and itsuses (2+2+1)
- 9. List 3-hydroxy-3-methyl glutaryl coenzyme A (HMG-CoA) reductase inhibitors and write theiruses and adverse effects (2+1+2)
- 10. Explain the mechanism of action, uses and adverse effects of frusemide (1+2+2)
- 11. Mention two fibrinolytic agents. List the uses and adverse effects (1+2+2)
- 12. Explain the uses and contraindications to morphine (2+3)
- 13. Enumerate uses and adverse effects of amitriptyline (2+3)
- 14. Define empathy, apathy and sympathy. Explain three components of empathy (3+2)



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## MBBS Phase II Examination - January 2023

Time: 150 Minutes Max Marks: 80 Marks

## Pharmacology Paper II QP Code C2062

(Your answer should be specific to the question asked Draw neat labeled diagrams wherever necessary)

## Long Essay Marks

 $10 \times 2 = 20$ 

- 1. A 20 years old female had come to the Surgery outpatient department with the complaints of swelling in the neck. She had complained of restlessness, excessive sweating, intolerance to hot weather and irregular menstrual cycles with excessive bleeding. She gave history of weight loss inspite of good appetite. On examination, pulse was 98 beats/min, blood pressure was 140/90mmHg, respiratory rate was 35 cycles /min, temperature was 101° F and pallor was present. On examination of swelling, it was firm, non-tender, pulsatile and mobile. Laboratory investigations revealed haemoglobin was 9gm% and serum TSH levels were 0.05μU/ml.
  - a. What is your probable diagnosis?
  - b. Enumerate the drugs used to treat this condition.
  - c. Explain mechanism of action and adverse effects of any 2 groups of drugs. (1+3+6)
- 2. List the macrolides. Explain the mechanism of action, uses and adverse effects of azithromycin(2+2+4+2)

# **Short Essay Marks**

 $5 \times 12 = 60$ 

#### Marks

- 3. List four newer insulin preparations. Explain the mechanism of action and specific adverseeffects of insulin (2+2+1)
- 4. List the uses and adverse effects of methylprednisolone (2.5+2.5)
- **5.** Explain the uses and adverse effects of ceftriaxone (3+2)
- **6.** Explain the mechanism of action, uses and adverse effects of dapsone (2+2+1)
- 7. Explain the mechanism of action, therapeutic uses and adverse effects of chloroquine (2+2+1)
- 8. List three nonnucleoside reverse transcriptase inhibitors (NNRTIs) and explain their uses and adverse effects (1.5+2+1.5)
- **9.** Explain general adverse effects caused by cancer chemotherapeutic agents (5)
- 10. Explain the mechanism of action, uses and adverse effects of omeprazole (2+2+1)
- 11. List four drugs from different groups used in the prophylaxis of bronchial asthma and explaintheir mechanism of action (1+4)
- 12. Explain the mechanism of action, uses and adverse effects of piroxicam (2+2+1)
- 13. Explain the mechanism of action, uses and adverse effects of sirolimus (2+2+1)
- 14. Explain the mechanism of action, uses and adverse effects of voriconazole (2+2+1)

## SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

#### (A DEEMED TO BE UNIVERSITY)

### M.B.B.S Phase-II Degree examination January 2023

Time:3 hours Max Marks:100

#### **PHARMACOLOGY- PAPER 1**

Your answer should be specific to the question asked Draw neat and labeled diagrams wherever necessary

LONG ESSAY 2 X 10 = 20 Marks

- 1. Define Bioavailability. Explain the drug and patient factors affecting bioavailability (1+9)
- 2. Enumerate drugs used in hypertension. Explain mechanism of action, uses and adverse effects of enalapril (4+2+2+2)

SHORT ESSAY 10 X 5 = 50 Marks

- 3. List the uses of atropine and its substitutes
- 4. Explain the mechanism of action and list uses and adverse effects of sodium valproate (1.5+2+1.5)
- 5. Explain the mechanism of action, uses and adverse effects of nitrates (1.5+2+1.5)
- 6. Explain the mechanism of action, uses and adverse effects of diclofenac (1.5+2+1.5)
- 7. Explain the term tolerance, toxicity, teratogenicity, side effect and photosensitivity with one example for each (1+1+1+1+1)
- 8. Explain the mechanism of action, uses and adverse effects of frusomide (1+2+2)
- 9. Explain the mechanism of action, uses and adverse effects of diazepam (2+2+1)
- 10. Explain types of antagonism with examples
- 11. Explain the mechanism of action, uses and adverse effects of propranolol (2+2+1)
- 12. List the advantages and disadvantages of oral route and intravenous route of drug administration with examples (2.5+2.5)

SHORT ANSWERS 10 X 3 = 30 Marks

- 13. Write the mechanism of action and two uses of heparin
- 14. Mention three uses of neostigmine
- 15. Mention three general anaesthetic agents
- 16. Mention two iron preparations given intravenously and write two uses
- 17. Mention the mechanism of action and one use of digoxin
- 18. Mention three techniques of administration of bupivacaine with one procedure performed for each technique
- 19. Mention three pre-anaesthetic medications and write the rationale for their use
- 20. Mention three uses of adrenaline.
- 21. Explain mechanism of action, write one use and one adverse effect of atorvastatin.
- 22. Explain mechanism of action, write one use and one adverse effect of streptokinase

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#### M.B.B.S Phase-II Degree examination January 2023

Time:3 hours Max Marks:100

#### **PHARMACOLOGY- PAPER 1**

Your answer should be specific to the question asked Draw neat and labeled diagrams wherever necessary

#### LONG ESSAY (Answer any 2)

2 X 10 = 20 Marks

- 1. Define Bioavailability. Explain the drug and patient factors affecting bioavailability (1+9)
- 2. List anticholinergic drugs. Explain their pharmacological actions and uses. (4+3+3)
- 3. List drugs used as preanaesthetic medication. Explain the basis for the use of each drug (2+2+2+2)

## SHORT ESSAY (Answer any 10)

10 X 5 = 50 Marks

- 4. Explain the mechanism of action, uses and adverse effects of sodium valproate (2+2+1)
- 5. List the calcium channel blockers. Explain their uses and adverse effects (1+2+2)
- 6. List the advantages and disadvantages of oral route and intramuscular route of drug administration with examples (2.5+2.5)
- 7. Explain the mechanism of action, uses and adverse effects of succinylcholine (1+2+2)
- 8. Enumerate the clinical uses of crystalloids and colloids (5)
- 9. Explain their mechanism of action, uses and adverse effects of atorvastatin (2+1.5+1.5)
- 10. List the uses of opioids and explain their contraindications (2+3)
- 11. Explain the mechanism of action, uses and adverse effects of enalapril (2+2+1)
- 12. Mention reversible cholinesterase inhibitors and their uses (1+4)
- 13. Explain types of antagonism with examples
- 14. Explain the mechanism of action, uses and adverse effects of diclofenac (1.5+2+1.5)
- 15. Enumerate the antiplatelet agents. Write their uses and adverse effects (2+3)

#### SHORT ANSWERS ( No choices )

10 X 3 = 30 Marks

- 16. Explain the mechanism of action and one use of pralidoxime
- 17. Mention mechanism of action and two uses of warfarin
- 18. Explain mechanism of action, write one use and one specific adverse effect of hydrocholrothiazide
- 19. List three Selective Serotonin Reuptake Inhibitors (SSRIs) and write three uses
- 20. Define plasma half life and write the clinical significance
- 21. Explain the mechanism of action of diazepam and write two uses
- 22. List three uses of adrenaline
- 23. Mention mechanism of action and two uses of nitroglycerine
- 24. Define teratogenicity and write two examples
- 25. Explain mechanism of action, one use and one adverse effect of streptokinase