

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH

M B B S Phase II Examination, March 2024

Time: 180 Minutes

Max Marks: 80 Marks

Pharmacology I

QP CODE: C2061

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

Long Essay $10 \times 2 = 20$ Marks

1. Explain the terms bioavailability with patient factors, enzyme induction and inhibition with their clinical significance (6+2+2)
2. A 80 year old man had presented with complains of shaking of hands, difficulty in walking and excessive salivation from past one year. On examination he had resting tremors. His had shuffling gait. The doctor prescribed him a fixed dose combination drug, after which the symptoms gradually reduced. (2+3+5)
 - a. What is your clinical diagnosis? Which is the probable fixed dose combination prescribed?
 - b. Explain the rationale of this combination with its mechanism of action.
 - c. List other drugs used to treat this condition and explain their mechanism of action.

Short Essay $5 \times 12 = 60$ Marks

3. Mention the route and preferred anticholinergic drug for the clinical conditions where these drugs are used (5)
4. List four alpha-2 agonists. Write their uses (2+3)
5. Explain the mechanism of action and clinical uses of neuromuscular blockers (2+3)
6. Explain five different techniques of lignocaine administration with one procedure performed for each technique (5)
7. Explain the mechanism of action, uses and adverse effects of verapamil (1+2+2)
8. List three positive inotropic agents used in congestive cardiac failure with their mechanism of action (1.5+3.5)
9. List four drugs from different groups used in hyperlipidaemia and explain their mechanism of action (1+4)
10. Mention three potassium sparing diuretics and Explain their mechanism of action (1.5+3.5)
11. Explain the mechanism of action, uses and adverse effects of low molecular weight heparins (2+2+1)
12. Explain the uses of benzodiazepines and write the treatment for diazepam overdose (3+2)
13. Explain the mechanism of action, clinical uses and adverse effects of fluoxetine (1.5+2+1.5)
14. Define pity, sympathy and compassion. Explain the significance of communication with family member of a sick patient (3+2)

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M B B S Phase II Examination, March 2024

Time: 180 Minutes

Max Marks: 80 Marks

Pharmacology II QP CODE: C2062

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Draw neat labeled diagrams wherever necessary*

Long Essay 10 × 2 = 20 Marks

1. A 30 year 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. (1+3+6)

- What is your probable diagnosis?
- Enumerate the drugs used to treat this condition.
- Explain mechanism of action and adverse effects of any 2 groups of drugs.

2. List drugs used in viral infections. Explain the mechanism of action and uses of acyclovir and nevirapine (4+3+3)

Short Essay 5 × 12 = 60 Marks

- List aromatase inhibitors. Explain their uses and adverse effects (1+2+2)
- Mention drugs used in diabetic ketoacidosis with their rationale (2.5+2.5)
- Mention three clinical conditions where penicillin G is used as a prophylactic agent. Explain mechanism of action of penicillin (3+2)
- Explain the mechanism of action, uses and adverse effects of gentamicin (2+2+1)
- Explain the mechanism of action, uses and adverse effects of azithromycin (2+2+1)
- Explain the mechanism of action, uses and adverse effects of dapsone (2+2+1)
- Mention two drugs used in cerebral malaria and explain their mechanism of action and adverse effects (2.5+2.5)
- Explain the mechanism of action, uses and adverse effects of rabeprazole (2+2+1)
- Explain the mechanism of action of any three group of drugs used in bronchial asthma. Write the instructions for the use of metered dose inhaler (3+2)
- Explain mechanism of action of any five disease modifying antirheumatoid drugs (DMARDs) (5)
- Explain the mechanism of action, uses and adverse effects of tacrolimus (2+2+1)
- Explain the mechanism of action, uses and adverse effects of amphotericin B (2+2+1)

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Degree examination March 2024

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. Classify antidepressants. Explain mechanism of action and uses and adverse effects of imipramine (4+2+2+2)
2. Classify anticholinergic drugs. List their uses and explain the receptor basis for use. (4+6)

SHORT ESSAY

10 X 5 = 50 Marks

3. List the selective serotonin reuptake inhibitors(SSRIs). List their uses (2+3)
4. Explain the mechanism of action and drug treatment of digoxin overdose with justification (2+3)
5. List the advantages and disadvantages of subcutaneous route and intravenous route of drug administration with examples (2.5+2.5)
6. List three drugs from different groups used in hyperlipidaemia and write their uses and adverse effects (1.5+1.5+2)
7. List the drugs used in myasthenia gravis with the rationale for their use and explain edrophonium test (4+1)
8. List the uses of Sympathomimetics (5)
9. Explain the uses and contraindications to morphine (2+3)
10. Explain the uses and adverse effects of potassium sparing diuretics (3+2)
11. Explain the mechanism of action, uses and adverse effects of alteplase (2+2+1)
12. Define biotransformation and explain any four Phase II biotransformation reactions with examples (1+5)

SHORT ANSWERS

10 X 3 = 30 Marks

13. Enumerate three skeletal muscle relaxants and write three uses
14. Mention three drugs for which therapeutic drug monitoring has to be done
15. Mention three drugs used for hypertension in pregnancy with their mechanism of action
16. Mention three antifibrinolytics with their uses
17. Explain mechanism of action and write two uses of carbamazepine
18. Explain mechanism of action, write one use and one drug interaction of phenobarbitone
19. Define physiological antagonism with two examples
20. List three differences between timolol and tamsulosin
21. Mention three drugs used in acute attack of myocardial infarction and explain their basis for use
22. Explain mechanism of action, write one use and one adverse effect of heparin

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PHARMACOLOGY- PAPER 2

Your answer should be specific to the question asked

Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. List drugs used in the treatment of malaria. Explain the mechanism of action, adverse effects and uses of chloroquine (4+2+2+2)
2. List oral antidiabetic drugs. Write the mechanism of action, uses and adverse effects of pioglitazone (4+2+2+2)

SHORT ESSAY

10 X 5 = 50 Marks

3. List uterine stimulants. Explain their mechanism of action and uses (1+4)
4. Explain uses and mention advantages of amoxicillin over ampicillin (3+2)
5. Explain mechanism of action, uses of loperamide and racecadotril (2.5+2.5)
6. Explain the mechanism of action and uses of sirolimus (3+2)
7. Explain the mechanism of action of any three group of drugs used in bronchial asthma. Write the instructions for the use of metered dose inhaler (3+2)
8. List first generation antihistaminics and write their uses and adverse effects (2+2+1)
9. Explain the mechanism of action, uses and adverse effects of clindamycin (2+2+1)
10. List the ovulation inducing agents and explain the mechanism of action of each drug (1+4)
11. Mention three newer drugs used in delayed type of chemotherapy induced vomiting and explain their mechanism of action (2+3)
12. Explain the mechanism of action, uses and adverse effects of zoledronate (2+2+1)

SHORT ANSWERS

10 X 3 = 30 Marks

13. Mention mechanism of action and two uses of tacrolimus
14. Explain mechanism of action, write one use and one specific adverse effect of amphotericin B
15. Explain mechanism of action and two uses of ranitidine
16. Explain three drug interactions with theophylline
17. Explain the mechanism of action, write one use and one adverse effect of acarbose
18. Mention three clinical uses of azelastine
19. Mention three uses and three adverse effects of ornidazole
20. Explain the mechanism of action and write four uses of prednisolone
21. List three drugs from different group used in vomiting and write three uses
22. Mention three beta lactamase inhibitors and write the combinations