

**Date: 18-01-2022**

**0122 E490**

**Second Year MBBS Examination**

**II MBBS Pharmacology Paper 1**

**Time: 3 hours**

**Max Marks: 100**

**Instructions:**

1. Answer to the points.
2. Figure to the right indicates marks.
3. Use separate answer books for each section.
4. Draw diagrams wherever necessary.
5. Write legibly.

**Section 1**

**1. Answer any one of the following**

**a) Classify Adrenergic drugs. (10)**

Mention the mechanism of action, adverse drug reactions and uses for Adrenaline.

**b) Define a "Receptor". [3+2+3+2=10]**

Classify various receptors providing suitable examples of drugs acting through them respectively. [2+5+3=10]

**2. Answer Any Two of the following**

**a)** A Schizophrenic patient of 51 yrs (12) of age who was on antipsychotic medications complaints of parkinson's like tremors and dyskinesia. Explain the mechanism underlying the adverse drug reaction and recommend which drugs to be used to continue treating schizophrenia.

**b)** A 40 year old gardener was brought by his wife to the hospital. His complaints were of getting vomiting, abdominal colic, diarrhoea, sweating, urination and dyspnoea. He also gave the history of spraying insecticide in the garden for 2 hours daily for last week. Identify the cause and describe how you will manage the case.

**c)** A 35 year old epileptic patient was prescribed tablet Phenytoin sodium by his

neurologist. As a prescriber, mention the instructions that you will give to the patient regards appropriate administration of the drug treatment.

### **3. Write Short Notes on Any Three of the following:**

- a) Therapeutic Drug Monitoring with (18) drug examples requiring the same
- b) Compare and contrast between Barbiturates and Benzodiazepines
- c) Mention the adverse drug reactions for Atropine
- d) State the importance of Doctor-patient communication with an example

### **4. Answer Any Five of the following briefly in 2 to 3 sentences**

- a) What is Hofmann's elimination? (10)  
Provide examples of drugs undergoing the same.
- b) Give the uses for chlorpromazine
- c) Describe the mechanism underlying Succinylcholine [SCh] apnoea

- d) State the pharmacological basis of using physostigmine in Dhatura poisoning
- e) What are substances of abuse? Give examples for the same
- f) Mention about diagnostic use of homatropine along with its mechanism

## Section 2

### 5. Answer any one of the following

- a) Classify Angiotensin Converting Enzyme inhibitors [ACEI], Describe their adverse drug reactions and therapeutic uses. [4+3+3=10]
- b) Classify Anticoagulants. Mention the mechanism of action, adverse drug reactions and indications for Heparin

### 6. Answer Any Two of the following

- a) A 55 year old patient of Hypertension with his B.P measuring 170mm/120 mm Hg was given clonidine by his physician. After 15 days the patient

voluntarily discontinued his treatment and was brought back to the hospital with elevated blood pressure. State the reason and write about the management of this condition.

**b)** A 50-yr old male presented with complaints of severe pain & swelling of right first metatarso-phalangeal joint [Rt.Great toe]X2 days. What is the likely diagnosis and list the drugs used to treat this condition.

**c)** A patient of 45 years of age has undergone total gastrectomy. Justify why the surgeon has advised him life long parenteral vitamin B 12

## **7. Write Short Notes on Any Three of the following:**

**a)** Comment on the Fixed Dose (18)

Combination [FDC] of Atorvastatin [10mg] + Ezetimibe [10mg]

**b)** Pharmacological basis of using Salicylic acid with Benzoic acid in Whitfield's ointment

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- c) Mention the adverse drug effects for Thiazide diuretics
- d) Enumerate the uses of Beta-blockers

**8. Answer Any Five of the following briefly in 2 to 3 sentences.**

- a) State the drug and its mechanism (10) regards causing Gray Baby syndrome in Neonates
- b) Describe the mechanism of action for Clopidogrel.
- c) Mention the role of Cetirizine in a factory worker suffering from allergic rhinitis.
- d) Give the rationale for using N-acetyl cysteine in Paracetamol [PCM] poisoning
- e) State the pharmacological basis of using Nifedipine as an anti-hypertensive drug
- f) Mention the adverse drug reactions noted with Oral Iron [Fe] formulations