

**Date: 19-01-2022**

**0122 E491**

**Second Year MBBS Examination**

**II MBBS Pharmacology Paper 2**

**Time: 3 hours**

**Max Marks: 100**

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 Anti-tuberculosis drugs. Mention the mechanism of action, adverse drug reactions and uses for Rifampicin.**

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**b) Categorize different**

**(4+2+2+2=10)**

Antimicrobials. Describe various Mechanisms of action for antibiotics and antimicrobials with suitable examples.

## **2. Answer Any Two of** <sup>[5+3+2=10]</sup> **the following**

**a)** A patient of 50 years of age was prescribed tab Metronidazole by his physician. The recommended dose co him was 400 mg thrice per day X 5 days. On 4th day in late evening the patient attended a cocktail party with dinner in celebration of his friends 50th birthday. Comment on outcome of this interaction and state management of this condition.

**b)** A 34 year old female patient who was suffering from urinary infection was

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prescribed Ciprofloxacin by her physician for the duration of 5 days duration. On the 3rd day after taking the morning dose around 11.00 am, as the lady was going to her office, she noticed reddish colour rash and itching on her body parts exposed to sunlight [face, neck, forearm & hand). Comment on the likely cause for the rash and describe preventive as well as curative measures to overcome the same in future.

c) A women of 44 years of age visited a doctor's clinic with symptoms of fever, headache and running nose. She was diagnosed to be suffering from allergic rhinitis and so was prescribed drugs Erythromycin along with Terfenadine by her doctor. Explain the consequence of this drug interaction and the measures to prevent it.

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

**a)** Mention the adverse drug effects and uses for Ciprofloxacin.

**b)** Compare and contrast between Metronidazole and Mebendazole.

**c)** State the mechanism of action and indications for Chloroquine.

**d)** Describe the processes of development of resistance to antimicrobials.

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

**a)** Give examples of antimicrobials that are unsafe in pregnancy.

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- b) State the pharmacological basis of using pyridoxine with Isonicotinic acid [INH].**
- c) Mention antimicrobials that are concentrated in prostate along with its significance.**
- d) State the rationale of combining Sulfamethoxazole and Trimethoprim in a FDC.**
- e) Give the line of treatment of Lepra reaction.**
- f) Mention the rationale of using Ampicillin with Probenecid.**

## **Section 2**

### **5. Answer any one of the**

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**following**

**a) Classify Anti-diabetic drugs. Describe the mechanism of action, adverse drug reactions (ADRs] and Indications for Metformin.**

**[4+4+2+2=10]**

**b) Classify Anti-asthma**

**drugs. Give the mechanism of action, adverse drug reactions and uses for**

**Salbutamol**

**[3+3+2+2=10]**

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

**a) A patient of 40 years old suffering from moderate gastritis was prescribed tablet "Digene" brand containing Aluminium hydroxide and Magnesium hydroxide. He felt relieved after 2 days of treatment.**

**Comment on the rationality of drag**

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interaction regards the ingredient of the said tablet.

**b)** A 37 year old patient presented to the physician the complaints of breathlessness and wheezing. This symptoms use to also occur and aggravate during the night time and interrupt his sleep. He was diagnosed to be having moderate bronchial asthma.

Enumerate the drugs used in this patient stating their respective mechanism of action. Also mention various dosage forms and devices used to administer the drags for bronchial asthma.

**c)** State the contraceptive method that you as a gynaecologist would recommend a newly married women of 25 years old. She is perfectly healthy and is interested to plan her family.

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

- a)** Give the Source, mechanism of action and uses for Castor oil.
- b)** State the pharmacological basis of combining estrogen with progestin in an Oral Contraceptive pill.
- c)** Define a Liniment. Give the mechanism of action & uses for Turpentine oil liniment.
- d)** Mention 4 drugs with their respective formulation/s used in Ocular pharmacology.

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

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- a)** Write briefly on Tetanus toxoid.

- b) Mention the therapeutic role of Omalizumab in bronchial asthma.**
- c) Differentiate between Purgatives and Laxatives with examples.**
- d) Describe briefly the merits and demerits of Radioactive Iodine.**
- e) State the properties of Calamine lotion.**
- f) Give the mechanism of action for Metoclopramide.**