

S. No. of Question Paper : 13342
Unique Paper Code : 2174001009
Name of the Paper : Medicines in Daily Life
Name of the Course : B.Sc. (H)
Semester : I/III/V/VII
Duration : 2 hours
Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **four** questions.
3. Each question carries 15 marks.

1. (a) Objective type questions (choose the correct option) :

- i. Aspirin contains _____ as its pharmacologically active compound:
(a) Paracetamol
(b) Acetylsalicylic acid
(c) Ibuprofen
(d) Morphine
- ii. A scientific tool used for identification of new drug targets is:
(a) Molecular modelling
(b) Pharmacophore mapping
(c) Structure-activity relationship analysis
(d) All of these
- iii. The concept and term 'chemotherapy' was originally proposed by:
(a) Alexander Fleming
(b) Paul Ehrlich
(c) Edward Jenner
(d) Robert Koch
- iv. Health is best described as:
(a) Merely absence of illness
(b) A state of complete physical, mental and social wellness
(c) Only bodily fitness
(d) Ability to fight infections
- v. The biological process through which a drug is removed from the body is called:
(a) Metabolism
(b) Excretion
(c) Pharmacodynamics
(d) Pharmacokinetics

(b) Fill in the blanks:

- i. _____ act as an Anticoagulant drug.
- ii. Ibuprofen is classified under the group of medicines called _____.
- iii. Amlodipine is a drug used to treat _____.

- iv. The _____ isomer of Cetirizine is more active.
 - v. Sodium nitrite is used as an antidote against _____.
- (c) Write short notes on Health, Disease, and Drug, along with appropriate examples. (5,5,5)
2. (a) Define chemotherapy. Discuss its basic principles and explain why it plays a crucial role in modern medical treatment.
 (b) Explain Structure–Activity Relationship (SAR) and discuss its significance in improving drug molecules.
 (c) Discuss the challenges of drug discovery? (5,5,5)
 3. (a) Write the chemical structure, synthesis, uses and adverse effects of Aspirin.
 (b) Identify the common structural ring/moiety present in both Norfloxacin and Ciprofloxacin.
 (c) Describe the chemical structures and uses of Morphine and Codeine, and state their major side effects. (5,5,5)
 4. (a) Write the drug class and active ingredient of Albendazole. Mention the natural remedies used in place of this drug.
 (b) What are antacids? Describe their ideal characteristics. Give the names and chemical structures of **any two** antacid drugs.
 (c) Explain the role of vitamins and dietary supplements in maintaining overall health. (5,5,5)
 5. (a) Describe the natural sources known to exhibit blood-pressure-lowering activity, and mention their bioactive components.
 (b) Explain antidepressant drugs. Write two examples. Also describe natural approaches used to manage depression.
 (c) Write the chemical structure, synthetic route, and therapeutic applications of paracetamol. (5,5,5)
 6. (a) Write the uses, possible adverse reactions, and natural substitutes for Fluconazole.
 (b) Describe the therapeutic uses, natural substitutes, and adverse reactions of the diuretic medicine Lasix (Furosemide).
 (c) Write short notes on **any two** of the following:
 (i) Antidiabetic drugs
 (ii) Classification of drug
 (iii) CADD (5,5,5)