

SEMESTER EXAMINATION-2022
CLASS – B.Sc. SUBJECT - CHEMISTRY
PAPER CODE: BCH-S501
PAPER: PESTICIDE CHEMISTRY

Time: 3 hour

Max. Marks: 70

Min. Pass: 40%

Note: Question Paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any FIVE questions in about 150 words (5 X 6 = 30 Marks) each. Each question carries six marks.

Question 1: Explain the changing concept of pesticides.

Question 2: What do you understand by systemic and stomach insecticides? Explain with examples.

Question 3: What do you understand by acute and chronic toxicity? What is LD₅₀?

Question 4: From which plant, nicotine is obtained? Give structure of two nicotinoids.

Question 5: Name four types of pesticides on the basis of target organism with example.

Question 6: Give the preparation and uses of gammexene.

Question 7: Write a note on dimefox.

Question 8: Write a note on Arsenical pesticides.

Question 9: Write the synthesis of carbaryl.

Question 10: Give the synthesis and uses of butachlor.

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any FOUR questions in detail. Each (4 X 10 = 40 Marks) question carries 10 marks.

Question 11: Discuss the benefits of pesticides. Give a brief idea of structure activity relationship.

Question 12: Discuss the classification of pesticides on the basis of mode of entry / application.

Question 13: Give an account of herbicides alachlor, butachlor and glyphosate. Also explain their mode of action.

Question 14: What are organochlorines? Discuss the preparation, pesticidal property and mode of action of DDT.

Question 15: Write note on any **two** of the following:

(a) Carbaryl

(b) Pyrethrin

(c) Baygon

Question 16: What are organophosphorous pesticides? Explain their mode of action. Give preparation and uses of TEPP and parathion.

Question 17: Discuss important inorganic pesticides and their mode of action.

Question 18: Give the method to calculate acidity and alkalinity of water dispersible powder pesticides as per BIS specifications.