

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

**B.Sc. (Agriculture) (Sem.-5)**  
**CHEMISTRY OF AGROCHEMICALS**  
Subject Code : BSAG-503  
M.Code : 74167

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**Explain the following :**

- 1) Carbamates used as herbicides and fungicides.
- 2) Pesticides according to FAO.
- 3) A method of isolation of pyrethroids.
- 4) Structural isomerism.
- 5) Conformation of active isomer of HCH.
- 6) Structure of carbamate having rapid knock down action on insects.
- 7) Reaction of HCH with alcoholic KOH.
- 8) R and S configurational isomers of 2-iodopentane.
- 9) Dow's process.
- 10) Action of acids and alkalis on pyrethrins.

### SECTION-B

- 11) Discuss 3rd generation and 4th generation pyrethroids in details.
- 12) Discuss the sailent features of neem biopesticide.
- 13) Discuss the mechanism of the synthesis of analogues of DDT and their mode of action.
- 14) Discuss the synthesis of Aldrin and effect of Zn/AcOH on Aldrin.
- 15) Discuss brief history of pesticides and various alternatives to chemical pesticides.

### SECTION-C

- 16) Write down the synthesis of Carbendazim, carboxim and copper oxychloride fungicides.
- 17) Explain the synthesis of N-methyl carbamates and different precautions to be used for its synthesis.
- 18) Discuss synthesis, uses and mode of action of Parathion, paraoxon, Dichlorovos and chloropyriphos.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**