

Total No. of Pages : 02

M.Code : 74167

Max. Marks : 60

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.

1. Answer briefly :

- (a) Discuss the mode of action of paraquat.
- (b) Write a note on UDP glucuronyl transferase?
- (c) What do you know about semiochemicals?
- (d) Discuss the biochemical significance of carotene.
- (e) Give one example each of antiseptics and antifreeze.
- (f) What does EDB stand for? What is it used for?
- (g) How are essential nutrients classified? Why is there a need to classify them?
- (h) Define Extrusion Technique. What is its significance?
- (i) Give the structure and name of the product formed by oxidation of malathion by carboxylesterases.
- (j) What is pymetrozine? Discuss its role as agrochemical.

SECTION-B

2. Write down the names and characteristics of various solvents used in pesticide formulations.
3. What is the difference between a systemic and non-systemic fungicide? List the advantages and limitations of systemic fungicides.
4. Outline the synthesis of butachlor from diethylaniline.
5. Discuss the structure, chemistry and use of tridemorph.
6. Discuss the structure, synthetic route and function of captan in detail.

SECTION-C

7. (a) Name and classify five important pests of cotton. Discuss biology, damage and management practices of any one of them.
(b) Discuss in detail the structure and synthetic strategy of benthocarb, with its significance.
8. (a) Write a detailed note on cytokinins. Give significance and synthetic route of any one cytokinin of your choice.
(b) Discuss in detail the structure and synthetic strategy of glyphosate with its significance.
9. (a) Discuss the phase I reaction of parathion, chlorpyrifos, forate and quinalphos.
(b) Describe in detail about pyrethrum. Give its significance and synthetic strategy.

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.