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S. No. of Question Paper : 6813

Unique Paper Code : 217377

**D**

Name of the Paper : **Herbicides—Paper-12**

Name of the Course : **B.Sc. (Prog.)**

Semester : **III**

Duration : **3 Hours**

Maximum Marks : **75**

*(Write your Roll No. on the top immediately on receipt of this question paper.)*

Attempt any five questions.

All questions carry equal marks.

1. Answer the following :

- (a) Define Algaecide with suitable example.
- (b) Define non-selective herbicide with suitable example.
- (c) Define the importance of pre-emergence herbicide with example.
- (d) Discuss contact herbicide with examples.
- (e) Effects of herbicide application in soil.

P.T.O.

2. What happen when ?

- (a) Water soluble herbicide is used in rainy season.
- (b) Paraquat type herbicides are used in soil.
- (c) Contact herbicides are used as foliar spray.
- (d) Paraquat is incorporated with triallate during spray.
- (e) Glyphosate used in soil containing heavy metals.

3. Depict the structural formula for the following :

- (a) 2, 4-D and Asulam
- (b) Dicamba and MCPA
- (c) Barban and Dalapon
- (d) Simazine and Bromocil
- (e) Chlorosulfuron and Monuron

4. Classify the following according to the chemical classification :

- (a) Isoproturon and Paraquat
- (b) Simazine and 2, 4-D

- (c) Bromocil and Monuron
  - (d) Barban and Dalapon
  - (e) Asulam and Dicamba.
5. (a) How would you prepare total herbicide using pyridine as a reactant, give chemical equations ?
- (b) Why paraquat is less effective in soil use ? Explain.
- (c) Chlorosulfuron is not recommended to use in wet and light soil. Explain.
- (d) Explain the role of paraquat in chemical ploughing.
- (e) Explain the rapid deactivation of Glyphosate in soil.
6. (a) Discuss the preparation of herbicide using, 2-chlorobenzene sulphonyl isocyanate, with chemical equations.
- (b) What happens when Dalapon absorbs water ? Explain.
- (c) Discuss the herbicidal action of Simazine.
- (d) What happens when chlorosulfuron is applied in acidic soil ?
- (e) Write chemical structure for the hydrolyzed product of Isoproturon.

7. (a) Discuss the preparation of herbicide using, cyanogen chloride and ethyl amine, give chemical equation.
- (b) Name with structural formula of two compounds used both as selective and non-selective Herbicide.
- (c) Write chemical structure for the hydrolyzed product of Monuron.
- (d) Discuss demethylation with suitable example.
- (e) Which is more selective : MCPA-Na or 2, 4-D-Na ? Give reason.