LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIFTH SEMESTER – APRIL 2023

UPB 5601 – PRINCIPLES OF AGRICULTURE

Date: 15-05-2023 Dept. No. Time: 01:00 PM - 04:00 PM Max.: 100 Marks

PART – A

Answer the following, each within 50 words

- 1. Define Agronomy.
- 2. What is organic farming?
- 3. What are the different forms of soil water?
- 4. Mention the causes of water logging.
- 5. Distinguish between rabi and kharif crops.
- 6. What is transplantation?
- 7. Distinguish between crop bound and crop associated weeds.
- 8. Comment on tillage.
- 9. What are pests? Give two examples.
- 10. What are biopesticides?

PART – B

(5 X 7 = 35 Marks)

(10 x 2 = 20 Marks)

Answer the following, each within 500 words; Draw diagrams and flowcharts wherever necessary

11. (a) Give a brief note on the principles of agronomy.

OR

- (b) Explain the cropping pattern followed in Indian agriculture
- 12. (a) Give a brief account on the various soil reclamation methods.

OR

(b) Give an account on tillage operations used for the establishment and growth of crops.

13. (a) Write notes on crop rotation, intercultivation and intercropping.

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OR
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(b) Describe the steps involved in cultivation of groundnut.

14. (a) Write an account on classification of weeds based on origin, association and life cycle. OR

(b) Briefly write about the characteristics of weeds.

15. (a) Write briefly about the various microorganisms used in biological control of pests. OR

(b) Give a brief account of integrated pest management.

PART – C

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary $(3 \times 15 = 45 \text{ Marks})$

- Give an account on classification of Agriculture. Add a note on merits and demerits of Green Revolution.
- 17. Write a detailed account on soil types of India.
- 18. Describe the agronomic practices followed in sugarcane cultivation.
- 19. Write an essay on the principles of weed management.
- 20. Write a detailed account on agricultural pests and their management.

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