

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY & PLANT BIO-TECH.

FIFTH SEMESTER – NOVEMBER 2009

PB 5409 - PRINCIPLES OF AGRICULTURE

Date & Time: 12/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

PART A

Answer all the questions

(20 marks)

I. Choose the correct answer

(5 x 1 = 5)

1. India is the largest producer of _____ in the world.
a) Rice b) Pulses c) Groundnut d) Sugarcane
2. _____ is the highest cereals producing state in India.
a) Madya Pradesh b) Tamil Nadu c) Maharastra d) Gujarat
3. _____ is an example for green manuring crop.
a) *Sesbania* b) *Pongamia* c) *Glyricidia* d) *Leucina*
4. _____ is utilized by plants to synthesize amino acids and the building blocks of proteins.
a) Potassium b) Calcium c) Zinc d) Nitrogen
5. IFOAM refers to _____
a) International Feature of Organic Agriculture Movements
b) International Federation of Organic Agriculture methods
c) International Federation of Organic Agriculture Movements
d) International Federation and Organization of Agriculture Movements

II. State whether the following statements are True or False *(5 x 1 = 5)*

6. Indian total geographical area is 328 million hectares.
7. Genetically generating offspring from non-sexual tissue is known as hybrid.
8. The piece of the plant at the root or bottom of the graft is called as scion.
9. Potassium is involved in opening and closing of stomata.
10. Weeds are the plants, which grow where they are not wanted.

III. Complete the following *(5 x 1 = 5)*

11. Green revolution started in the year _____.
12. The stem or root which is rooted is called as _____.
13. Chemical fertilizers are also called as _____.
14. _____ is the process of planting [seeds](#).
15. BMP refers to _____.

IV. Answer the following in about 50 words

(5 x 1 = 5)

16. Define agriculture.
17. Explain hybrid.
18. List out symptoms of nitrogen deficiency.
19. Define foliar spray?
20. What is crop rotation?

PART B

Answer the following each in about 350 words. Draw necessary diagrams.

(5 x 7 = 35)

21. a. Indian agriculture – fact, achievements, current concerns and targets.
or
b. Discuss physical properties of soil.
22. a. Write short notes on different types of irrigation.
or
b. What is green manuring? Add notes on advantages of green manuring.
23. a. Write a brief account on vermicomposting.
or
b. Give an account on the types of Indian soil.
24. a. Explain types of seedbed preparation.
or
b. Describe the effect of industrial effluents on water pollution.
25. a. Give an account on general principles of seed production.
or
b. Mention the advantages and disadvantages of organic and inorganic fertilizers.

PART C

Answer **any three** of the following questions in about 1200 words. Draw necessary diagrams

(3 x 15 = 45)

26. What are essential plant nutrients? Add notes on their functions.
27. Write detailed notes on the types of weed and its control measures.
28. Write an essay on organic farming.
29. Write detailed notes on biofertilizer.
30. Write an essay on modern agriculture practices.
