

B.E (Full Time) DEGREE END SEMESTER EXAMINATIONS, MAY/JUN 2012
CIVIL ENGINEERING BRANCH
SECOND SEMESTER
PH 9163 PHYSICS FOR AGRICULTURE AND IRRIGATION ENGINEERING

Time: 3 hours

Max Marks: 100

PART A (10x2=20)

Answer all questions

1. What is ionization and what are two different types of ionization?
2. What are the different biophysical methods used in plant production?
3. Write short notes on soil compaction?
4. Define slaking and explain in detail significance of slaking?
5. Define three general categories and dose ranges of food irradiation?
6. What is food irradiation and what are the radiations used for food irradiation?
7. Define void ratio and Porosity?
8. Write short notes on spectral signatures?
9. Write short notes on active and passive sensors?
10. What is the three different types of leaf arrangements in plants?

PART B (5x16=80)

Answer all questions

11. Explain in detail the various new methods used in agriculture and also the various effects of biophysical method in agriculture?

12. Explain in detail disinfestations and Extension of shelflife?

OR

Explain in detail various interaction of ionizing radiation?

13. Describe in detail different types of soil?

OR

What is infiltration and explain the different factors that influence infiltration?

(P.T.O)

14. Explain in detail about Pattern recognition?

OR

Explain in detail digital image processing?

15. With a neat diagram explain the leaf structure and structure of chloroplast?

OR

Explain in detail Light reactions and Dark reactions?