



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING

SECOND SEMESTER – APRIL 2015

FP 2953 - FUNCTIONAL FOODS AND NUTRACEUTICALS

Date : 25/04/2015
Time : 01:00-04:00

Dept. No.

Max. : 100 Marks

PART - A

Answer ALL the questions:

(10 x 2 =20 marks)

1. State any three requirements for a functional food to acquire a disease claim.
2. What is a bio-autographic method?
3. Name any two therapeutic uses of curcumin.
4. List any four food sources of flavonoid polyphenolics.
5. Define monoclonal antibody.
6. What is humulin?
7. List the drugs that interact with mushroom extract.
8. Mention any four functional foods with anti-carcinogenic property.
9. Name any four bioactive components in spices.
10. Define nutraceuticals.

PART - B

Answer any EIGHT questions:

(8 x 5 = 40 marks)

11. Write a note on any one non-chromatographic methods used for the isolation of bioactive compounds.
12. What is the relation of functional food and nutraceutical science with other fields of science?
13. Write short notes on the health benefits of ALA.
14. Bring out health benefits and bioactive components of Bee pollen.
15. Discuss the mechanism of action of lecithin in human system.
16. Write short notes on spirulina.
17. Explain the role of bioactive peptides as a therapeutic agent.
18. What are the gastrointestinal challenges of functional foods?
19. Discuss the role of fruits and vegetables as functional foods.
20. Write short notes on the role of GAP and GMP in regulating nutraceuticals.
21. Explain the positive influence of functional foods on blood lipid profile.
22. Classify nutraceuticals based on its chemical nature.

PART - C

Answer any FOUR questions:

(4x10 = 40 marks)

23. Write in detail on the significant scientific agreement standards that govern health claims of functional foods.
24. Describe the role of various phytochemicals in the production of nutraceuticals for disease prevention.
25. Explain the role of plant based pharmaceuticals in expression of human proteins for disease alleviation.
26. How is human therapeutics produced using rDNA technology? Explain the production using an illustration.
27. Discuss the process of supercritical fluid extraction technology in nutraceutical production.
28. “Nutrigenomics is the application of high-throughput genomics tools in nutrition research” Discuss.
