THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0323] **MARCH 2023** Sub. Code: 2088 (SEPTEMBER 2022 EXAM SESSION)

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS) PCI Regulation 2017 - SEMESTER VIII PAPER XIII - DIETARY SUPPLEMENTS AND NUTRACEUTICALS

Q.P. Code: 562088

I. Elaborate on: Answer any TWO questions.

Time: Three hours

- 1. Define and classify nutraceuticals with examples.
- 2. Discuss fructo-oligosaccharides and Tocopherols as nutraceuticals in detail.
- 3. Discuss the GMP on food safety in detail.

II. Write notes on: Answer any SEVEN questions.

- 1. Summarize the positive effects of processing on potential of nutraceuticals with suitable examples.
- 2. Define HACCP. Explain the principles involved in HACCP.
- 3. Outline the role of free radicals in Diabetes mellitus.
- 4. Enlist the examples of functional foods for prevention of chronic diseases.
- 5. Explain the reactive oxygen species.
- 6. Elaborate the stepwise effects of free radicals on lipids.
- 7. Compare and contrast ROS and RNS on the basis of production site, function, clearance pathways and examples.
- 8. Explain Super Oxide Dismutase (SOD) with special emphasis on its isoforms.
- 9. Write a note on maternal and child nutrition.

III. Short answers on: Answer ALL questions.

- 1. Occurrence and chemical structure of Lycopene.
- 2. Medicinal benefits of Xanthophylls.
- 3. Chemical structure and medicinal benefits of Quercitin.
- 4. AGMARK.
- 5. Define nutraceuticals.
- 6. Biological source and medicinal benefits of Tea.
- 7. Vitamin E.
- 8. Microalgae.
- 9. Omega 3 fatty acid.
- 10. Types of inflammation.

 $(10 \ge 2 = 20)$

 $(7 \times 5 = 35)$

 $(2 \times 10 = 20)$

Maximum: 75 Marks