

**M.VOC. 1<sup>st</sup>SEMESTER EXAMINATION-2022**

**Department of Nutrition, MugberiaGangadharMahavidyalaya**

**PAPER-FUNCTIONAL FOODS AND NUTRACEUTICALS (FTNM15T)**

**[THEORY]**

Full Marks: 30 Time: 2 Hours

*The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable*

1. Answer any five questions. 5x2
  - a. Define functional food.
  - b. Write difference among hypertonic, hypotonic and isotonic sports drink.
  - c. What is bulking agent?
  - d. What is nutrigenomics?
  - e. Name two fat replacers used in dairy products to reduce the calorie of dairy food.
  - f. Name two bio-flavours produced by microorganism.
  - g. “Natural food ingredient is a rich source of different functional components”. – Comment on the statement.
  - h. Differentiate between milk allergy & lactose intolerance.
  
2. Answer any two questions 2x5
  - a. How functional food and neutraceuticals used for management of cardio vascular disease?
  - b. Write down dietary formulations of infant food.
  - c. Write down safety concerns of nano coating.
  - d. Write down effects of nutrients act as gene modulator on puberty.
  
3. Answer any one question. 10x1
  - a. Define phytochemicals. Write various types of phytochemicals and their sources. How phytochemicals work on human immune system. (2+4+4)
  - b. What is beta-glucan? Elaborate different functional benefits of beta-glucans. What are the different types of isoflavones present in soy-protein products? Describe the role of probiotic on blood cholesterol treatment. (1+5+2+2)