

**End Semester Examination, 2021**

**Semester - III**

**Food Science & Nutrition**

**PAPER - MFSN-302**

*Full Marks : 40*

*Time : 2 Hours*

**Group - A**

**1. Answer any five (5) questions of the following : **5x2=10****

- a) What do you mean by drug biotransformation ?
- b) Define epigenetics.
- c) What do you mean by nutraceuticals ?
- d) Give any two examples of probiotics food.
- e) Define  $LP_{50}$  Value of toxic substance.
- f) Define the term 'phytoestrogen.'
- g) What do you mean by gene imprintation ?
- h) Define metabolomics.

**Group - B**

**2. Answer any four of the following : **4x5=20****

- a) "Obesity is controlled by  $W_3$ -fatty acid" – Explain the state from the view point of nutrigenomics. 5
- b) 'Glucose exposure to embryo at critical phase control the onset of diabetes in future life' – Justify

*(Turn Over)*

- the statement from the view point of nutriepigenetics. 5
- c) Describe the possible ways by which nutrients can able to modulate the drug absorption from interstine. 5
- d) Write in brief about human genome project. 5
- e) Write a short note on 'Amylase inhibitor'. 5
- f) 'Let food be thy medicine and medicine be thy food'–Justify the statement. 5

**Group – C**

**3. Answer any one of the following : 1x10=10**

- a) Describe the chemical reactions involved in epigenetics. Write the Major differences between nutriepigenetics and nutrigenomics. Write any one model about nutrient-gene interaction. 4+4+2
- b) Write the health beneficial effects of lycopene. How does vitamin-D exerts its positive immunomodulatory roles though 'Nutrient-gene' interaction. 4+6