

B.Sc. Semester-VI Examination, 2022-23**NUTRITION [Honours]**

Course ID : 62317 Course Code : SH/NUT/604/DSE-4

Course Title : Nutrigenomics

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***Answer all the questions.****UNIT-I**1. Answer any **five** of the following questions:

1×5=5

- What is nutri-epigenetics?
- Write the full forms of BLAST and MSA.
- What is E-value?
- Draw the diagram of rooted phylogenetic tree.
- What is clade?
- What is pharmacodynamics?
- Mention two major challenges of nutrigenomics.
- What is a taxon?

*[Turn Over]***UNIT-II**2. Answer any **two** of the following questions:

5×2=10

- What is health informatics? Describe the importance of health informatics. 1+4
- Explain the different types of standard BLAST. 5
- Define pharmacogenomics. Write about the advantages of pharmacogenomics and challenges over it. 1+2+2
- What is phylogenetic tree? Describe Cladogram and Phylogram with diagram. 1+2+2

UNIT-III3. Answer any **one** of the following questions:

10×1=10

- What is nutrigenomics? Briefly describe the mechanism of nutrient-gene interaction. Write about the importance of nutrigenomics in different disease control. What are SNPs? 2+3+3+2
- What is a biological database? Name three biological database. Write a short note on nucleic acid database. 2+3+5