

GUJARAT NATIONAL LAW UNIVERSITY
GANDHINAGAR

Course: Bio-chemistry and Bio-informatics
Semester-III (Batch: 2019-24)

End Semester Online Examination: December2020

Date: 26th December, 2020

Duration: 8 hours

Max. Marks: 40

Instructions:

- The respective marks for each question are indicated in-line.
- Indicate correct question numbers in front of the answer.
- No questions or clarification can be sought during the exam period, answer as it is, giving reason, if any.

Marks

- Q.1 Pasteurization and irradiation controls spoilage and eliminate food borne pathogen, there by extending shelf life. Yet there is a fundamental difference. Describe the same. Add a note on food irradiation facilities available in India and the regulatory guidelines. How can the radiation processed foods be identified in the market? (8)
- Q.2 Describe the metabolism of phenylalanine in the body. Why is Phenylketonuria resulting from dihydropteridine reductase deficiency a more serious disorder than PKU resulting from Phenylalanine hydroxylase deficiency? (8)
- Q.3 Explain nomenclature and IUBMB classification of enzymes with suitable examples. Add a note on enzymes used in food industry. (8)
- Q.4 What is proteomics? How is it different from metabolomics and genomics? Discuss the regulatory issues in proteomic research. (8)
- Q.5 Using OMIM data base, discuss the clinical features, biochemical features, cytogenetic location and inheritance pattern of Lesch-Nyhan syndrome and Gout. (8)
