

**GUJARAT NATIONAL LAW UNIVERSITY
GANDHINAGAR**

Course: **Bio-chemistry and Bio-informatics**
Semester- III (Batch: 2021-26)

End Semester Examination: November 2022

Date: 11th Nov, 2022

Duration: 2 hours

Max. Marks: 40

Instructions:

- Read the questions properly and write the answers in the given answer book.
- Do not write anything on the question paper.
- 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.
- Draw diagrams (if any) only with a pencil.
- Word limit: for 3 marks- 100 words, for 5 marks 250-300 words.

Q.1 Identify the following symbols and write short notes on the same

Marks
(3x2=6)



- Q.2 Write a short note on Gout. (3)
- Q.3 What is PHYLIP? What is it used for? (3)
- Q.4 Differentiate between pairwise sequence alignment and multiple sequence alignment. (3)
- Q.5 What are rare diseases? Discuss the National Policy for Rare Disease, 2021. Discuss focussing on its objectives, categorization of rare diseases and rare diseases groups with most prevalent cases reported in India. (5)
- Q.6 Discuss the Urea Cycle with the help of a diagram. (5)
- Q.7 Discuss the agricultural field where artificial intelligence could positively impact. Add a note on recently developed AI-based algorithms used in the agricultural sector. (5)
- Q.8 Briefly discuss the biological role of enzymes. (5)
- Q.9 What is radiation processing of food? Briefly discuss the purpose of food irradiation? (5)
