Date: 29.7.2024

ASSIGNMENT SEMESTER III (MANDATORY PAPER) CHEMOINFORMATICS (UNIT 4)

ASSIGNMENT No 1

Answer the following in brief:

- 1. Explain: Chemoinformatics and its history
- 2. Why is it required to study Chemoinformatics? Describe
- 3. Write a note on the history of Chemoinformatics.
- 4. Comment on Chemoinformatics **Vs** Cheminformatics
- 5. Describe application of Chemoinformatics in details (Any 6)
- 6. Elaborate on types of learning approach used in Chemoinformatics.

ASSIGNMENT No 2 (ALREADY COMPLETED)

Pick up **any research paper** in field of bioinformatics where **"Chemoinformatics"** is used as an application to solve the problem. Write a summary of research paper which includes:

- a. Title
- b. Introduction
- c. Material and Methods
- d. Results
- e. Conclusion and Discussion
- f. References

ASSIGNMENT No 3

- 1. What does Chemical Structure Representation describes in Chemoinformatics study?
- 2. Explain Structure Searching methods in detail.
- 3. Discuss Chemometrics in detail.
- 4. Comment: i. Quantitative Structure Activity Relationship (QSAR)
 - ii. Quantitative Structure Property Relationship (QSPR)
 - iii. Computer Assisted Structure Elucidation (CASE)
 - iv. Computer Assisted Synthesis Design (CASD)