[Time: $2\frac{1}{2}$ Hours] [Marks: 60]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

2. Figures to the right indicate maximum marks.

Q. 1 Attempt **Any Two** of the following: (08)

A) i) Explain the importance of Intellectual Property Rights and Give its types.

ii) What are Trade Marks? How can Trade Marks be obtained?

iii) Write a note on Industrial Design and its registration process.

iv) What is meant by the term Copyright? Discuss various materials that can be copyrighted.

B) Differentiate between Copyrights and Patents. (04)

OR

B) What is WIPO? Explain its role in intellectual properties. (04)

Q. 2 Attempt **Any Two** of the following: (08)

A) i) Give the importance of Trade Secrets along with suitable example.

ii) Write a note on Paris Convention.

iii) What is TRIPS? Give its importance.

iv) Explain the Berne Convention.

B) Write a note on WTO. (04)

OR

B) Explain Infringement issues related to Intellectual property rights. (04)

Q. 3 Attempt **Any Two** of the following: (08)

A) i) Explain graphical isomorphism in chemoinformatics.

ii) Give the history and evolution of chemoinformatics.

iii) Explain molecular modeling.

iv) Discuss the full structure search.

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B) Draw SMILES for the following: **(04)**

    a) Ethanol b) Benzene c) 1-Propene d) Cyclohexane

<div align="center">**OR**</div>

B) Explain the Matrix Representations. **(04)**

Q. 4   Attempt Any Two of the following : **(08)**

A)   i) Define drug and state Lipinski rule of five.

   ii) Give the applications of chemoinformatics.

  iii) Write an informative note on Toxicity.

  iv) Explain Linear Free Energy Relations.

B) Discuss ligand based drug design. **(04)**

<div align="center">**OR**</div>

B) Give the name of software commonly used in chemoinformatics. **(04)**

Q. 5   Attempt **Any Four** of the following: **(12)**

   i) Explain Geographical Indications giving suitable example.

  ii) Discuss the importance of Software patents.

 iii) Write a note on Madrid Protocol.

 iv) Give brief idea of Intangible assets and their valuations.

  v) What are the names of file formats commonly used in representing the molecules?

 vi) Outline the rules of SMILES.

 vii) What is virtual screening in drug designing?

viii) Give the analysis of HTS Data.

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