

Post Graduate Diploma in Chemo-informatics
Annual Examination – 2010
Chemical Information Sources
PGDC – 105

Time: Two and Half Hours

Max. Marks: 70

Note: Paper is divided into Three Sections. Attempt all questions from Section-A, Any SIX questions from Section-B and Any THREE questions from Section-C.

SECTION- A

Attempt all objective type questions. Each question carries one (1) mark.

1 X 10=10

1. The first World-Wide Web conference was held in ----- in 1994?
2. CSML stands for -----
3. What is Chiron?
4. The CA file covers chemical literature from ----- to present.
5. What is SDI?
6. Which are the types of structure searches possible on STN

7. What does CASREACT file on STN cover?
8. ----- is the largest printed compilation of numerical data in existence today.
9. Which are the two Data Mining models?
10. The ----- database is the largest collection of crystal structure data in the world.

SECTION –B

Attempt any SIX questions. All questions carry equal marks.

6 X 5=30

1. Write a brief note on Neural Networks.
2. Write a brief note on Ring System Handbook and indexing of Ring System Data.
3. Explain about STN proximity operators with examples.
4. Write a note on sources/databases which provide general safety and toxicology information.
5. Explain about Enabling Technologies. Write a note on four classes of data mining functions (Associations, Sequential patterns, Classifiers and Clustering).
6. Write a brief note on Current Awareness Services.
7. Explain about Cluster Analysis which is a data mining technique.
8. Write a brief note on reaction databases.

SECTION –C

Attempt any THREE questions. All questions carry equal marks.

10 X 3=30

1. Explain about On-line Analytical Processing (OLAP). What are the differences between On-line Analytical Processing (OLAP) and On-line Transaction Processing (OLTP)?
2. Write a note on sources/databases which provide physical property information.
3. What is Chemical Abstracts Service (CAS)? Write a brief note on other CAS services.
4. Write a note on Chem-Informatics Softwares.
5. Write a note on Molecular Visualization tools and sites.