

DEPARTMENT OF CHEMISTRY

GOVERNMENT DEGREE COLLEGE, RAZOLE

Syllabus for “ChemSketch” Certificate course

1. Basics of ACD ChemSketch: -
Objectives, Starting ChemSketch, setting file associations, changing default directories, installing add-ons.
2. Drawing Simple molecules:-
Objectives, Drawing atoms, bonds and labels, cleaning the screen, flipping structures, Output.
3. Drawing more complex structures:-
Using the table of Radicals, ring structures, deleting atoms and fragments, replacing atoms, setting double, triple bonds, setting charges, defining anions, captions, Markush bonds, Generating stereo descriptors, drawing coordination bonds, delocalized charges and curves, changing atom properties.
4. Advanced structures, SMILES, InChi notations, reaction schemes:
2D-optimization, SMILES Notations, InChi notations, 3D-Optimization, Drawing, labeling and mapping reactions.
5. Advanced Drawing: Templates
Table of radicals, instant template tool, template window, drawing complex structures of biomolecules, defining a user template
6. Calculating macroscopic properties:
Menu command, automatic display on status bar, calculating monoisotopic mass for a fragment (Mass spec scissors)
7. Special function keys:
Tautomers, ACD dictionary
8. Creating Graphical Objects:
Drawing the energy of a graphical diagram, drawing different kinds of Orbitals, drawing vacuum distillation apparatus, drawing two chains DNA strand, drawing lipids, miscelles, creating tables.
9. Managing documents:
Converting to adobe PDF, creating a poster, inserting headers and footers
10. Working with structures in style mode:
Changing the style of a structure, creating your own style
11. Working with structures in drawing mode:
Changing the style of an object, saving a style, applying an existing style, setting a default style

Md. Sadeq Ali
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GOVERNMENT DEGREE COLLEGE, RAZOLE

Department of Chemistry

AY: 2019-2020

2	3	4	5	6	7	8	9	10	11	12	13
18/11/2019	19/11/2019	20/11/2019	21/11/2019	22/11/2019	23/11/2019	25/11/2019	26/11/2019	27/11/2019	28/11/2019	29/11/2019	30/11/2019
P	P	P	P	P	P	P	P	P	P	P	P
P	P	P	P	A	P	P	A	A	P	P	P
A	A	A	P	P	A	P	A	P	P	A	P
A	P	P	P	A	P	P	P	A	P	P	P
A	P	P	P	P	P	P	P	P	A	P	P
P	A	A	P	P	P	A	P	A	P	A	P

17	18	19	20	21	22	23	24	25	26	27	28
19/12/2019	20/12/2019	21/12/2019	23/12/2019	27/12/2019	28/12/2019	29/12/2019	30/12/2019	31/12/2019	1/1/2020	2/1/2020	3/1/2020
A	P	P	A	P	P	A	P	P	A	P	P
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P	P	A	P	P	P	P	A	P	P	A	P
P	A	P	P	P	A	P	A	P	P	A	P
P	P	A	P	P	A	P	P	P	A	P	A
P	P	P	A	A	A	P	P	P	P	P	P

14	15
2/12/2019	3/12/2019
P	P
P	P
P	A
A	P
A	A
P	P

29	30
4/1/2020	6/1/2020
P	A
A	P
P	P
P	A
P	P
P	P

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Exam for “ChemSketch” Certificate course

Answer all Questions

5 X 4 =20 M

1. What are the functions of Structure & Draw mode in ChemSketch software?

2. What are SMILES, InCHI Notations?

3. Draw the following molecule

2-Methyl Hexanol

4. Draw the following molecule

Phenanthracene

5. Draw the following molecule

Reimer-Tiemann reaction

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Time Table

Department of Chemistry

Government Degree College, Razole

Certificate Course on "ChemSketch"

Day	Period (9.00 AM – 10.00 PM)
Monday	Chemistry Certificate Course
Tuesday	Chemistry Certificate Course
Wednesday	Chemistry Certificate Course
Thursday	Chemistry Certificate Course
Friday	Chemistry Certificate Course
Saturday	Chemistry Certificate Course

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GOVERNMENT DEGREE COLLEGE

Razole, East Godavari District, A.P.

www.gdcrazole.ac.in

Reaccredited by NAAC with grade "B"

**Certificate Course on
"ChemSketch"**

November-2019 to January 2020



CERTIFICATE

This is to certify that Prof./Dr./Sri./Smt./Kum _____

Professor/Reader/Lecturer/Student in _____ of _____

Has successfully completed Certificate Course on **"ChemSketch"** software organized by Dept. of Chemistry, Government Degree College, Razole held from November - 2019 to January -2020.

Md. Sadeer Ali
Incharge of the Chemistry Dept.
Govt. Degree College
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IQAC Co-ordinator

**In-charge
Dept of Chemistry**

Principal