

Seat No.	
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Total No. of Pages: 2

SHIVAJI UNIVERSITY, KOLHAPUR
DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE COLLEGE,
ICHALKARANJI
B.Sc. (Part – I) (Semester – I) (New) (CBCS) (NEP)
Examination March/April 2023
DSC-4A- Chemistry Paper II (Organic Chemistry)
Sub. Code: 88180

Day and Date: Tuesday, 06-06-2023

Total Marks: 40

Time: 02.30 p.m. to 04.30 p.m.

Instructions: 1) All questions are compulsory.

2) Figures to the right indicate full marks.

Q.1 A: Choose the correct alternative for each of the following and rewrite the sentence: [08]

- Negatively charged trivalent carbon species is.....
a) carbanion
b) carbocation
c) free radical
d) carbene
- An alkene and carbene react to form.....
a) allene
b) cycloalkane
c) cycloalkene
d) diene
- All aromatic compounds are.....
a) planar
b) cyclic, conjugated
c) having $(4n + 2)\pi$ - electrons
d) all of these
- Non-superimposable mirror image are called.....
a) diastereomers
b) enantiomers
c) conformers
d) geometrical isomerism

B: Answer in one sentence

- What is Huckel rule of aromaticity?
- What are different types of organic reagents?
- Write different resonating structures of benzene.
- Give general formula of cycloalkanes.

Q.2: Attempt any TWO of the following:

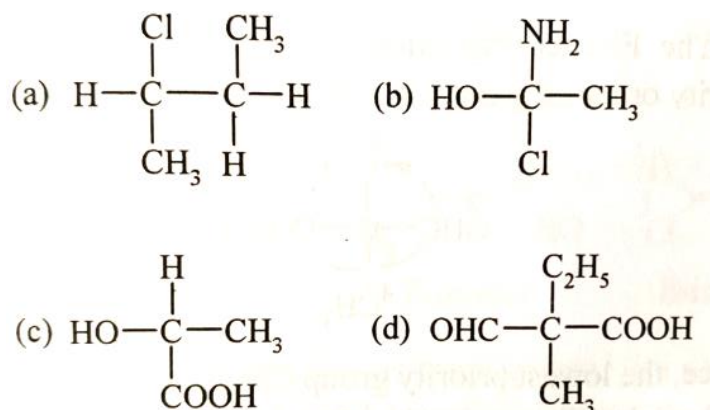
[16]

- Define free radicals. Give methods of generation, stability and reactivity of free radicals.
- Explain optical isomerism in tartaric acid.
- Explain the general mechanism involved in electrophilic substitution of benzene.

Q.3: Attempt any FOUR of the following:

[16]

- What is action of following reagents on cyclopropane?
i) H_2/Ni ii) Br_2 iii) HX iv) $\text{Pt}/\text{high temperature}$
- Discuss Friedel Crafts reaction with suitable example.
- Give inductive effect with suitable example.
- Give various elements of symmetry with example.
- Give any two methods of preparation and chemical properties of cycloalkenes
- Write R and S nomenclature of following



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