

# Vivekanand College, Kolhapur

(Empowered Autonomous)

PG Department of Chemistry

M.Sc. II (Sem IV) Organic Chemistry

Internal Examination 2023-24

## Notice

The students of M.Sc. II (Organic Chemistry) are notified that their Internal Examination for Semester IV will be conducted from 12/04/24 to 16/04/24 at 11.30 am to 12.30 pm.

The details are as follows:

Sr. No.	Paper Name	Date	Time
1.	Theoretical Organic Chemistry	12/04/24	11.30-12.30
2.	Stereochemistry	13/04/24	11.30-12.30
3.	Chemistry of Natural Products	15/04/24	11.30-12.30
4.	Applied Organic Chemistry	16/04/24	11.30-12.30



PG Coordinator

(Prof. Dr. A. S. Kumbhar)

CO-ORDINATOR  
M.Sc. (ORGANIC & INORGANIC CHEMISTRY)  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)

Head

(Dr. S. D. Shirke)

HEAD  
DEPARTMENT OF CHEMISTRY  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)

# Vivekanand College, Kolhapur

(Empowered Autonomous)

PG Department of Chemistry

M.Sc. II (Sem IV) Organic Chemistry

Internal Examination 2023-24

Paper Name: Theoretical Organic Chemistry

**Day and Date: Friday 12/04/2024**

**Marks: 20**

**Time: 11.30am to 12.30 pm**

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**Instructions:** 1. Write any two questions.

2. Figures to draw necessary diagram wherever necessary.

3. Each question carries 10 Marks.

**Q. 1** Explain the following reactions giving suitable mechanism:

i) Acyloin condensation

ii) Auto oxidation

**Q. 2** Define free radicals? Explain the mechanism of Hunsdicker reaction and coupling of alkynes.

**Q. 3** Using PMO theory calculate the reactivity index when naphthalene undergoes SE reactions at position 1 and 2.

**Q. 4** a) Calculate the delocalisation energy in benzene and cyclo-octatetraene.

b) Write a note on alternant and non-alternant hydrocarbon.

# Vivekanand College, Kolhapur

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PG Department of Chemistry

M.Sc. II (Sem IV) Organic Chemistry

Internal Examination 2023-24

Paper Name: Stereochemistry

**Day and Date: Saturday 13/04/2024**

**Marks: 20**

**Time: 11.30am to 12.30 pm**

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**Instructions:** 1. Write any two questions.

2. Figures to draw necessary diagram wherever necessary.

3. Each question carries 10 Marks.

**Q. 1** Explain the phenomenon of conformational isomerism in acyclic compounds. Illustrate the factors affecting on conformational stability with examples.

a) Van der Waals Interaction

b) Hydrogen bonding

**Q. 2** Illustrate the Concept of 'I' Strain.

**Q. 3** Discuss the concept of

a) Axial chirality in allenes. How does the arrangement of substituents on the allene backbone lead to the formation of atropisomers?

b) Explore the concept of atropisomerism in biphenyl derivatives.

**Q. 4** Explain the following

a) Curtin-Hammett principle

b) Stereochemistry of spiranes

# **Vivekanand College, Kolhapur**

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**PG Department of Chemistry**

**M.Sc. II (Sem IV) Organic Chemistry**

**Internal Examination 2023-24**

**Paper Name: Chemistry of Natural Products**

**Day and Date: Monday 15/04/2024**

**Marks: 20**

**Time: 11.30am to 12.30 pm**

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**Instructions:** 1. Write any two questions.

2. Figures to draw necessary diagram wherever necessary.

3. Each question carries 10 Marks.

**Q. 1** How will you convert sarrett ketone to aldosterone.

**Q. 2** What are hormones? Explain the synthesis of Progesterone from Cholesterone.

**Q. 3** Discuss the structure of riboflavin on the basis of analytical evidence.

**Q. 4** Give the chemical constituents for structure determination of biotin vitamin.

# **Vivekanand College, Kolhapur**

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**PG Department of Chemistry**

**M.Sc. II (Sem IV) Organic Chemistry**

**Internal Examination 2023-24**

**Paper Name: Applied Organic Chemistry**

**Day and Date: Tuesday 16/04/2024**

**Marks: 20**

**Time: 11.30am to 12.30 pm**

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**Instructions:** 1. Write any two questions.

2. Figures to draw necessary diagram wherever necessary.

3. Each question carries 10 Marks.

- Q.1** What is chain growth polymerisation? Explain the different mechanism of chain growth polymerisation.
- Q.2** What is step growth polymerisation? Explain the different mechanism of step growth polymerisation.
- Q.3** What is perfume? Discuss the synthesis of beta-inone from citral.
- Q.4** What is essential oil? Discuss any essential oils in details.



Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Chemistry

M.Sc. II Sem IV Internal Examination 2023-2024

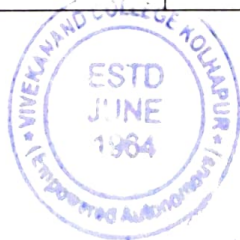
Subject: Organic Chemistry Date: 12/04/24 to

16/04/24

Sr. No.	Roll No.	OCH-XIII 12/04/24	OCH-XIV 13/04/24	OCH-XV 15/04/24	OCH-XVI 16/04/24
1	340	Fertil.	Fertil.	Fertil.	Fertil.
2	380	zeatigee	zeatigee	zeatigee	zeatigee
3	381	shani 11/11.	shani 11/11.	shani 11/11.	shani 11/11.
4	382	spigade	spigade	spigade	spigade
5	383	jabak	jabak	jabak	jabak
6	384	Reai	Reai	Reai	Reai
7	385	Rauk	Rauk	Rauk	Rauk
8	386	shutaga	shutaga	shutaga	shutaga
9	387	Alkapat.	Alkapat.	Alkapat.	Alkapat.
10	388	Deuf.	Deuf.	Deuf.	Deuf.
11	389	Kadam	Kadam	Kadam	Kadam
12	392	gromble	gromble	gromble	gromble
13	393	Hom	Hom	Hom	Hom
14	395	Perit	Perit	Perit	Perit
15	396	KHAMRAO	KHAMRAO	KHAMRAO	KHAMRAO
16	397	BKokate	BKokate	BKokate	BKokate
17	398	<del>amshy</del>	<del>amshy</del>	<del>amshy</del>	<del>amshy</del>
18	399	Bambhar.	Bambhar.	Bambhar	Bambhar.
19	400	Jis	Jis	Jis	Jis
20	401	Amaskar	Amaskar	Amaskar	Amaskar
21	402	Radhika	Radhika	Radhika	Radhika
22	403	Mujawar	Mujawar	Mujawar	Mujawar

23	404	<u>Gashtk</u>	<u>Gashtk</u>	<u>Gashtk</u>	<u>Gashtk</u>
24	405	<del>gashk</del>	<del>gashk</del>	<del>gashk</del>	<del>gashk</del>
25	406	<u>Pakete</u>	<u>Pakete</u>	<u>Pakete</u>	<u>Pakete</u>
26	407	<u>Abkil</u>	<u>Abkil</u>	<u>Abkil</u>	<u>Abkil</u>
27	408	<u>faat</u>	<u>faat</u>	<u>faat</u>	<u>faat</u>
28	409	<u>Apatil</u>	<u>Apatil</u>	<u>Apatil</u>	<u>Apatil</u>
29	410	<u>OPatil</u>	<u>OPatil</u>	<u>OPatil</u>	<u>OPatil</u>
30	411	<u>Mpatil</u>	<u>Mpatil</u>	<u>Mpatil</u>	<u>Mpatil</u>
31	412	<u>OMPatil</u>	<u>OMPatil</u>	<u>OMPatil</u>	<u>OMPatil</u>
32	413	<u>PSPatil</u>	<u>PSPatil</u>	<u>PSPatil</u>	<u>PSPatil</u>
33	414	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>
34	415	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>
35	416	<u>Aakel</u>	<u>Aakel</u>	<u>Aakel</u>	<u>Aakel</u>
36	417	<u>Tanekar</u>	<u>Tanekar</u>	<u>Tanekar</u>	<u>Tanekar</u>
37	418	<u>Reule</u>	<u>Reule</u>	<u>Reule</u>	<u>Reule</u>
38	419	<u>Falunkar</u>	<u>Falunkar</u>	<u>Falunkar</u>	<u>Falunkar</u>
39	420	<u>Hrike</u>	<u>Hrike</u>	<u>Hrike</u>	<u>Hrike</u>
40	434	<u>@Patil</u>	<u>@Patil</u>	<u>@Patil</u>	<u>@Patil</u>
41	421	<u>RB</u>	<u>RB</u>	<u>RB</u>	<u>RB</u>
42	422	<u>@ramboli</u>	<u>@ramboli</u>	<u>@ramboli</u>	<u>@ramboli</u>
43	423	<u>Jur</u>	<u>Jur</u>	<u>Jur</u>	<u>Jur</u>
44	435	<u>@Patil</u>	<u>@Patil</u>	<u>@Patil</u>	<u>@Patil</u>
45					

CO-ORDINATOR  
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SP/ice  
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