

SEMESTER	II	QP CODE	2913	REG NO.							
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P.R. GOVERNMENT COLLEGE (AUTONOMOUS), KAKINADA
PG SECOND SEMESTER END EXAMINATIONS-DECEMBER -2022
M. Sc., : ANALYTICAL & ORGANIC CHEMISTRY: PAPER 3
ORGANIC CHEMISTRY-II

DATE	07.12.2022	SESSION	FN	MAX. MARKS	75	TIME	3 HRS
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Section-A

Answer all the questions

4 x15=60m

- A. Explain steric orientation in SN^1 and SN^2 substitution?
(Or)

B. Write a note on E_1 , E_2 and E_1C_B mechanism?
- A.(i). Write a note on Markownikoff's and anti-Markownikoff's rule with suitable examples?
(ii). What is hydroboration of alkenes. Explain the mechanism with suitable examples?
(Or)

B. Explain the mechanism of following reaction?

 - Aldol condensation
 - Reformatsky reaction
 - Witting reaction
- Explain following rearrangement with mechanism.

 - Pinacol-pinacolone
 - Dienone-phenol
 - Arndt-Eistert

(Or)

 - (i). Benzil-benzilic acid

(ii). Favorskii

(iii). Baeyer-villiger

4. A. Explain the protection of carbonyl, Amine and Hydroxyl groups with suitable examples?

(Or)

B. (i). Discuss the various types of electronic excitation.

(ii). What is finger-print region, Explain importance with suitable examples?

(iii). Write an account on nitrogen rule ?

Section-B

Answer any five questions

5x3=15m

1. Write a note on NGP?
2. Discuss saytzeff rule?
3. Write the mechanism of perkin reaction?
4. Write mechanism of knoevanagel reaction?
5. Write the mechanism of Dakin rearrangement?
6. Write the mechanism of Neber rearrangement?
7. What is auxochrome and chromophore?
8. Explain McLafferty rearrangement?