

Code No. 6115

FACULTY

Pharm D (6 – YDC) I – Year (Main / Backlog) Examination, August 2016

Subject: Pharmaceutical Organic Chemistry

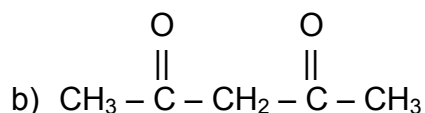
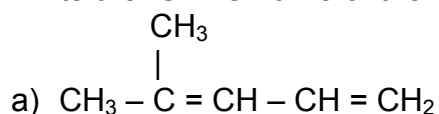
Time: 3 Hours

Max.Marks: 70

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

- 1 Write the IUPAC name of the following:



- 2 Give the step involved in the conversion of aniline into para-nitro aniline.
- 3 Give the structure formula of
 - a) Methyl-1-penten-4-yne
 - b) 5-Hydroxy-3-hexenal
- 4 Comment on ethanol and dimethyl ether are isomer, but differ in the boiling point.
- 5 Briefly explain Bayer's strain theory.
- 6 Write the different between SN_1 and SN_2 .
- 7 Explain Saytzeff rule.
- 8 Classify each of the following nucleophil or electrophil
 - 1) NH_2 2) H_3O^+ 3) CN^- 4) Cl_2
- 9 Predict the product
 - i) $\text{CH}_3 - \text{CH} = \text{CH}_2 + \text{HBr} \xrightarrow{\text{Peroxide}} ?$
 - ii) $\text{CH}_3 - \text{CH} = \text{CH}_2 + \text{HBr} \xrightarrow{\text{No-Peroxide}} ?$
- 10 Explain Cannizzaro reaction.

PART – B (5x10 = 50 Marks)

- 11 Explain the nucleophilic substitution reaction with Mechanism. 10
- 12 Explain with mechanism: 10
 - i) Aldol-condensation
 - ii) Sdmeyer's reaction

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- 13 Define rearrangement reaction. Explain mechanism of following reaction. 10
i) Fries rearrangement reaction
ii) Hoffman rearrangement reaction.
- 14 Explain the mechanism of electrophilic substitution reaction taking a suitable example. 10
- 15 Write the short notes on: 10
i) Resonance concept
ii) Acid-Base theory.
- 16 Explain mechanism involved in following reaction: 10
i) Kolbe reaction
ii) Michael addition
- 17 a) Explain Friedel-Craft Alkylation reaction and write its drawback.
b) Write a note on activating and deactivating O, P and M directing group.
- 18 a) Explain diazo-coupling reaction with mechanism.
b) Write a note on elimination reaction.
