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:

a) $CH_3 - \underset{\displaystyle CH_3}{\underset{|}{C}} = CH - CH = CH_2$

b) $CH_3 - \overset{\displaystyle O}{\overset{||}{C}} - CH_2 - \overset{\displaystyle O}{\overset{||}{C}} - CH_3$

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^+_{30} 3) CN^- 4) Cl_2

9 Predict the product

i) $CH_3 - CH = CH_2 + HBr \xrightarrow{\text{Peroxide}} ?$

ii) $CH_3 - CH = CH_2 + HBr \xrightarrow{\text{No-Peroxide}}$

10 Explain Cannizzaro reaction.

PART – B (5x10 = 50 Marks)

11 Explain the nucleophillic substitution reaction with Mechanism. 10

12 Explain with mechanism: 10
i) Aldol-condensation
ii) Sadmeyer'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 electrophillic 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.

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