

F.Y.B.PHARM. SEMESTER-II (2011 COURSE) : WINTER -
2017

SUBJECT: PHARMACEUTICAL CHEMISTRY-IV (ORGANIC)

Day: Saturday
Date: 11/11/2017

W-2017-3813

Time: 10.00 AM TO 01.00 PM
Max. Marks: 80

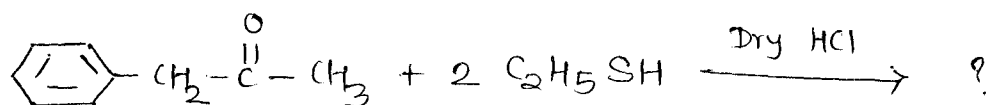
N.B.:

- 1) Q. No. 1 and Q. No.5 are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

Q.1 Answer any **FIVE** of the following: (10)

- a) How hemiacetals are formed?
- b) What is Formalin?
- c) What is Reformatski reaction?
- d) Predict the product.



- e) What product is obtained when water is added to alkenes?
- f) What is Wolf-Kishner reduction?
- g) Give the reaction for Knoevenagel condensation.

Q.2 What is Markovnikov and Antimarkovnikov addition of HBr to alkenes? (15)
Explain with mechanism.

Q.3 a) What is Aldol condensation reaction? Give its mechanism. (08)

b) What happens when alkene is treated with ozone? (07)

Q.4 Write short notes on any **THREE** of the following: (15)

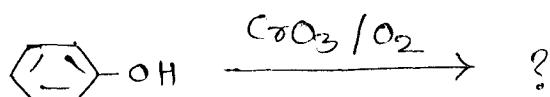
- a) Hydrogenation
- b) Dieckmann condensation
- c) Hydroxylation
- d) Epoxidation

P. T. O.

SECTION-II

Q.5 Answer any **FIVE** of the following: **(10)**

- a) What is Schotten-Baumann reaction?
- b) What happens when phenol is distilled with zinc dust?
- c) What product is obtained when phenol is treated with bromine in carbon disulphide?
- d) How salicylic acid is obtained from phenol?
- e) Predict the product.



- f) What is Reimer-Tiemann reaction?
- g) What is thermosetting plastic Bakelite? How it is obtained?

Q.6 a) Differentiate between Elimination and Substitution reaction. **(10)**

b) What is Hofmann Rearrangement reaction? **(05)**

Q.7 a) Give reactions of carboxylic acids. **(08)**

b) Give methods of preparation of phenols. **(07)**

Q.8 Write short notes on any **THREE** of the following: **(15)**

- a) Saytzeff orientation
- b) Hoffman orientation
- c) Separation of mixture of amines
- d) Mechanism of Elimination

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