

F.Y.B.PHARM. SEMESTER-II (CBCS - 2015 COURSE) :
SUMMER - 2018

SUBJECT: PHARMACEUTICAL CHEMISTRY – IV (Organic)

Day: Tuesday
Date: 24/04/2018

S-2018-3910

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

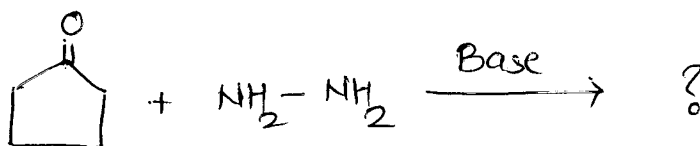
N.B.:

- 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 books.

SECTION-I

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

- a) How ketones are reduced to alcohols?
- b) Predict the product:



- c) What happens when alcohol is treated with pyridinium chlorochromate? Give one example.
- d) What is Gatterman-Koch reaction?
- e) What product is obtained when alkenes are treated with Osmium tetroxide?
- f) What is epoxidation reaction?
- g) What is Tollens test?

Q.2 What is Aldol condensation? Give its mechanism. (10)

Q.3 a) Give addition of HBr to asymmetric alkenes with mechanism. (05)
b) Give addition of derivatives of ammonia to aldehydes. (05)

Q.4 Write short notes on any **TWO** of the following: (10)

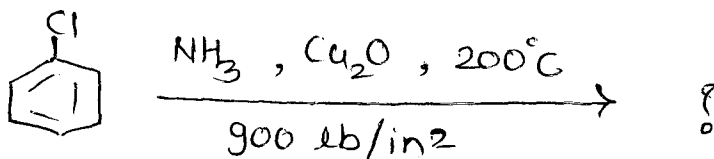
- a) Ozonolysis
- b) Claisen condensation
- c) Hydroboration
- d) Dieckman condensation

P. T. O.

SECTION-II

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

- a) What is Koch reaction?
- b) Give structure of Caproic and Myristic acid.
- c) What happens when carboxylic acid is treated with thionyl chloride?
- d) Predict the product:



- e) What happens when alcohols are treated with ammonia?
- f) What is Gabriel phthalimide synthesis of amines?
- g) What is diazotization reaction?

Q.6 Differentiate between Elimination and Substitution reaction with suitable examples. **(10)**

Q.7 a) What happens when alcohol is treated with carboxylic acid? Explain with mechanism. **(05)**

b) What is Kolbe reaction? **(05)**

Q.8 Write short notes on any **TWO** of the following: **(10)**

- a) E1(cb) mechanism
- b) Saytzeff orientation
- c) Separation of amines by Hofmann method
- d) Malonic ester synthesis

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