

S.Y.B.PHARM. SEMESTER-III (2011 Course) : SUMMER - 2019

SUBJECT: PHARMACEUTICAL CHEMISTRY -V (ORGANIC)

Day: Monday
Date: 22/04/2019

S-2019-4430

Time: 02.00 PM TO 05.00 PM
Max. Marks: 80

N.B.:

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of the remaining solve 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.

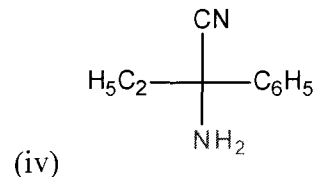
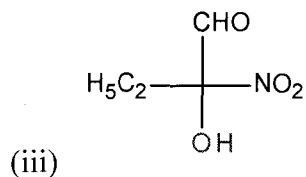
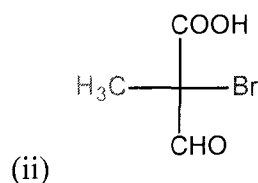
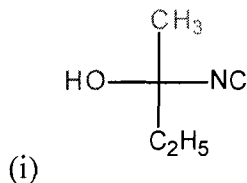
SECTION-I

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

- a) What is geometric isomerism?
- b) Enlist the conditions of optical activity.
- c) Draw schematic diagram of polarimeter.
- d) Draw Sawhorse projection for 2,3-dichlorobutane.
- e) Draw Newmann projection 2-bromo-1-chlorobutane.
- f) Explain meso compounds with example.

Q.2 Explain in detail various methods of resolution of racemic mixtures. (15)

Q.3 a) Assign R and S configuration to following and explain with reasons. (08)



b) Chair conformation of cyclohexane is stable than other conformations. Explain. (07)

Q.4 Write a notes on: (Any **THREE**) (15)

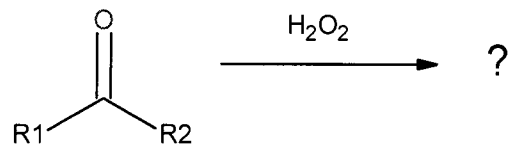
- a) Diastereomerism
- b) Role of symmetry in optical activity
- c) Walden inversion
- d) Rules to assign R and S configuration

P. T. O.

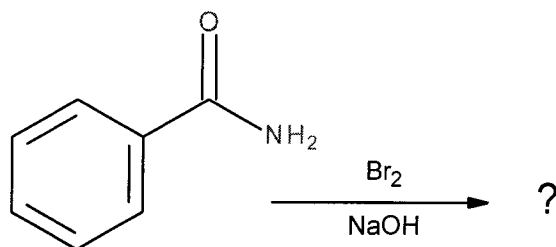
SECTION-II

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

- a) How α - hydroxyl carboxylic acid prepared from 1,2-diketones?
- b) Define synthone and syntetic equivalent.
- c) How phthalamide converted to anthranilic acid.
- d) Lossen rearrangement follows through isocyanate intermediate. Explain.
- e) Complete the reaction.



f)



Q.6 Define and classify molecular rearrangement reactions. Explain the Hoffmann and related rearrangement reactions. (15)

Q.7 a) Explain two group disconnection in detail. (08)

b) Write a note on FGI. (07)

Q.8 Write a notes on: (Any THREE) (15)

- a) Explain the importance of order of disconnection with example
- b) Benzilic acid rearrangement
- c) Pinacol- Pinacolone rearrangement
- d) Fries rearrangement

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