



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150217

Roll No.

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B.Pharm.

(SEM II) THEORY EXAMINATION, 2014-15
PHARMACEUTICAL CHEMISTRY-II
(ORGANIC CHEMISTRY-I)

Time : 3 Hours]

[Total Marks : 80

SECTION - A

Note: Attempt all question, each question carry equal 1×16 marks.

- (1) Trans isomer are more stable than cis isomer because of _____.
- (2) Give the IUPAC name of $\text{CH}_3\text{-CH=CH-CH}_2\text{-COOH}$
- (3) What is the condition for optical isomerism in organic compounds?
- (4) Give the structure of 2-ethoxy-5methyl-hexane.
- (5) Give the hybridization & bond angle of ammonia molecule.
- (6) Phenols are acidic in nature due to the formation of _____.
- (7) What are the arenes.

- (8) How will you prepare picric acid?
- (9) The reaction of acetone with Grignard reagent followed by hydrolysis yields _____.
- (10) Complete the following reaction.
- $$\text{CH}_3\text{CH}_2\text{OH} \xrightarrow{?} \text{CH}_3\text{CHO} \xrightarrow{[\text{O}]} ?$$
- (11) Two molecule of iodo benzene react with copper form biphenyl. The name of this reaction is _____.
- (12) Tollen's reagent are...
- (13) What is the Clammensen reduction?
- (14) In Reformatsky reaction acetone react with _____ & form _____.
- (15) Lucas test is used for the identification of _____.
- (16) Give any two names & structure of dicarboxylic acid.

SECTION - B

Note: Attempt any six question, each question carry 4×6
equal marks.

- (1) Discuss geometrical isomerism in organic compounds..
- (2) Why carboxylic acid are more acidic than alcohols.
- (3) Discuss the Markovnikov addition in alkenes.
- (4) Give aldol condensation with mechanism.

- (5) Explain the Inductive effect in organic compounds.
- (6) Write about the conformational isomerism in alkane.
- (7) Write the free radical mechanism in alkane.
- (8) Why Toluene are ortho para directing groups.
- (9) Give the electrophilic substitution reaction in toluene.
- (10) Give Hofmann's degradation reaction.

SECTION - C

Note: Attempt **any four** question, each question carry **10×4** equal marks. (10×4)

- (1) Compare and contrast covalent, electrovalent and coordinate bonds and discuss them with suitable example.
- (2) Discuss geometrical isomerism. What is relative and absolute configuration?
- (3) Discuss the mechanism of nucleophilic substitution and elimination reaction in alkyl halide and also give its reaction.
- (4) Write a note on organometallic compounds.
- (5) Discuss the different hypothesis on structure of benzene.
- (6) Give the chemical reaction of aliphatic amine & aldehyde.