CLASS: BPHARM   SEMESTER: III
BRANCH: PHARMACY   SESSION: MO 2024

SUBJECT: BP301T PHARMACEUTICAL ORGANIC CHEMISTRY II
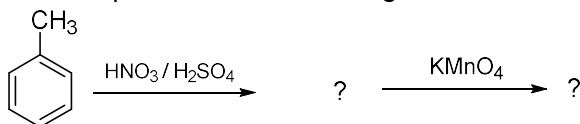
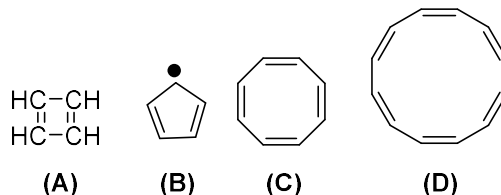TIME:2.00 Hour   FULL MARK: 30
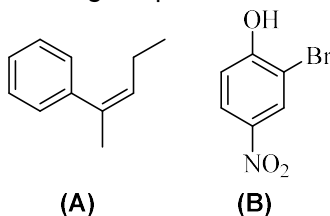
PART I

A.   Objective type questions(Answer all questions)   (5 x02=10 marks)

1.   Fill in the Blanks
   a)   The molecular formula of Benzene C_6H_6 was determined by _____evidence.
   b)   _____ is an effective inactivator of biofilm bacteria.
2.   Write the structure and uses of DDT (Dichlorodiphenyltrichloroethane).
3.   Draw the products of the following reactions.

4.   Which of the following annulenes are aromatic in nature based on Huckel's Rule?

5.   Write the IUPAC nomenclature of the following compounds.

PART II

B.   Long Answers (Answer any one out of two)   (01x10=10 marks)
C.
1.   Explain the effect of substituents on the orientation of aromatic electrophilic substitution reactions in monosubstituted benzene. Your answer should include the canonical structures of benzene.
2.   Explain and draw the mechanism of Friedel Crafts alkylation of benzene. Write the limitations of Friedel Crafts reactions.

PART III

D.   Short Answers (Answer any two out of three)   (02x05=10 marks)
E.
1.   Explain and draw the mechanism of halogenation of benzene.
2.   Explain the factors supporting the resonance structure of benzene.
3.   Explain why the Chlorine (Cl) atom is a ring-deactivating group but *ortho* and *para*-directing in nature.

For subjects having University examination

I. Objective Type Questions (5 x 2) = 05 x 2 = 10
(Answer all the questions)
II. Long Answers (Answer 1 out of 2) = 1 x 10 = 10
III. Short Answers (Answer 2 out of 3) = 2 x 5 = 10

                                    Total = 30 marks

For subjects having Non-University Examination(BP106RBTRemedial Biology, BP106RMTRemedial Mathematics and BP105TCommunication Skill)

I. Long Answers (Answer 1 out of 2) = 1 x 10 = 10
II. Short Answers (Answer 4 out of 6) = 4 x 5 = 20

                                    Total = 30 marks

::::::18/09/2024:::::E