



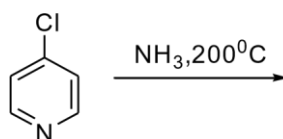
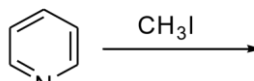
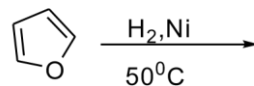
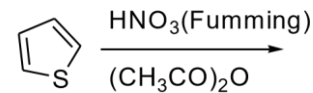
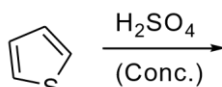
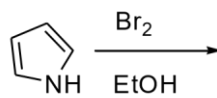
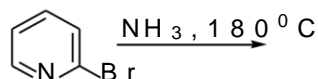
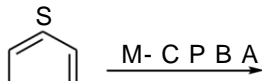
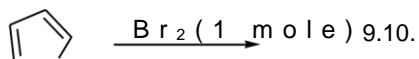
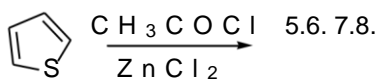
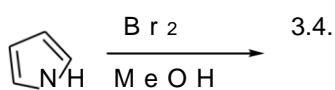
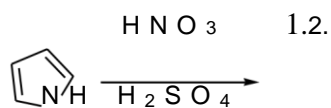
Karanjia Auto College, Karanjia, Mayurbhanj

CORE PAPER IX-----Organic Chemistry-III-----Question Bank

1. Just write the answer in one line. (Each Q. carry 1 mark)

- What are the reagents used in mannich reaction?
- What is Hinsberg reagent? iii. What are the factors that affects the basicity of ammine? iv. Draw the structure of 1,5Dinitronaphthalene.
- Draw the structure of β -naphthol.
- Write the structure of 6-amino-2-naphthalene sulfonic acid? vii. Draw the structure of Hygrinic acid. viii. Draw the structure of Nicotine.

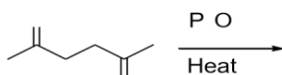
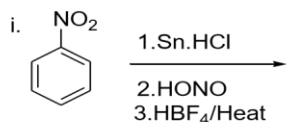
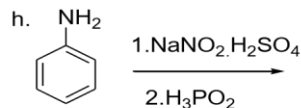
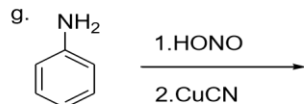
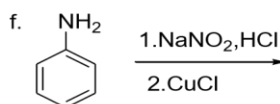
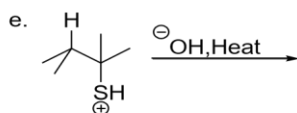
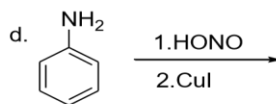
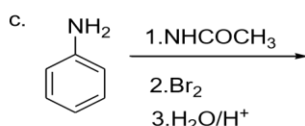
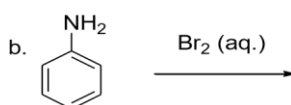
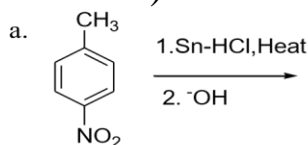
2. Write the Products of the following reactions. (Each Q. carry 1 mark)



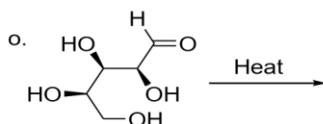
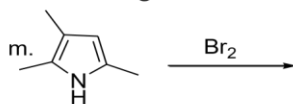
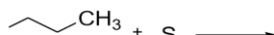
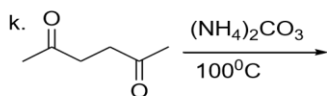
3. Answer the Questions. (Each Q. carry 1.5 marks)

- i. Write the examples of natural occurring alkaloids? ii. What happens when nicotine is oxidised under drastic condition?
- iii. What is Hoffmann's exhaustive methylation?
- iv. Write the no. of carbon atoms and Isoprene units in mono-terpene? v. What is Isoprene Rule?

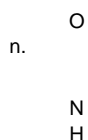
4. Write the Products of the Following Reactions. (Each Q. Carry 1.5 marks).



j.5 O 2



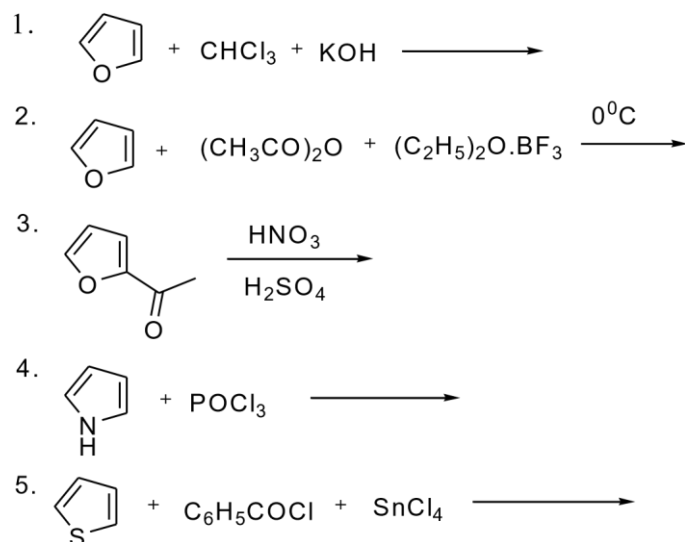
O I.



5. Explain the following Briefly. (Each Q. Carry 2 Marks).

- a. What is Carbylamine Test?
- b. How do you distinguish between 1^o, 2^o and 3^o amines by Hinsberg reagent?
- c. How do you distinguish between 1^o, 2^o and 3^o amines by Nitrous Acid?
- d. Among 1^o, 2^o and 3^o amines which is more basic in aqueous solution and why?
- e. Write the order of basicity of 1^o, 2^o and 3^o amines in gaseous phase.
- f. What are the factors that affect the basicity of amine.
- g. Write the order of basicity of ortho, meta and para methyl aniline.
- h. Draw the structures of Naphthalene, Anthracene and Phenanthrene.
- i. Calculate the no. of π -bonds in Naphthalene, Anthracene and Phenanthrene. State whether they are aromatic or not?
- j. What is Hantzsch reaction to synthesize pyrrole?
- k. What is Fischer Indole synthesis?
- l. Between Pyrrole and pyridine which is more aromatic and why?
- m. Among pyrrole, pyridine and pyrimidine which is more basic and why?
- n. What are the general methods employed for the determination of the structure of Alkaloid?
- o. Write the medicinal importance of Morphine and Cocaine?

6. Write the Products of the Following reactions? (Each Q. carry 2 Marks).



7. Explain the Following Questions. (Each Q. Carry 7 Marks).

- What is Gabriel Pthalamide Synthesis? Explain it through mechanism.
- What is Mannich reaction? Explain through Mechanism?
- What is paal-knorr synthesis of Pyrrole? Explain with mechanism? iv. Explain the mechanism of Fischer Indole Synthesis?
- Write and Explain the decreasing order of aromaticity among Pyrrole, Furan, Thiopene and Benzene?
- Elucidate the structure and synthesis of Nicotine?
- What is Citral and Write the structural synthesis of Citral?

8. Write the Products A, B, C in each reaction? (Each Q. Carry 7 Marks).

