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Total No. of Pages : 02

Total No. of Questions : 24

B.Pharmacy (2012 to 2016) (Sem.-3)

PHARMACEUTICAL CHEMISTRY-IV (ORGANIC CHEMISTRY-II)

Subject Code : BPHM-306

M.Code : 46226

Time : 3 Hrs.

Max. Marks : 80

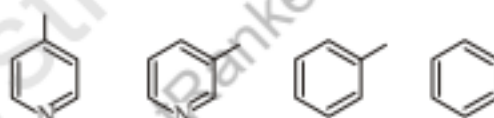
INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

SECTION-A

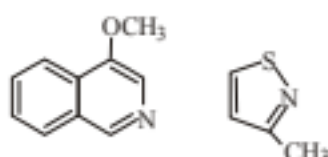
Answer the following :

1. Draw the structures of 1,3-thiazole and phenothiazine.
2. Draw five resonance forms of pyridine.
3. Among the following, which is the most acidic compound? Give reasons.

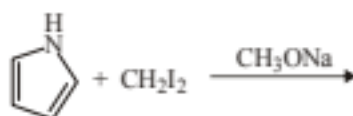


4. How can you convert D(+)-glucose into D(+)-mannose?
5. Define and give example of epimerization.
6. What do you understand by Ruff's method?
7. Describe the preparation of thiazole.
8. What do you understand by protein denaturation? Is there any change in the 1° structure when a protein is denatured?
9. Write the structures of two nitrogenous bases of DNA.
10. Define the term acid value.
11. What are the coumarins? Give one example with structure.

12. Why nucleophilic substitution occurs more readily on the pyridine ring rather than benzene?
13. Give an account of electrophilic substitution of quinoline.
14. Give the IUPAC name for the following structures



15. Complete the chemical reaction given below and name the product



SECTION-B

16. Explain elucidation of cyclic structure of glucose.
17. What are xanthine derivatives? Give chemical structures of three xanthine derivatives.
18. Describe N-terminal analysis of peptides.
19. Discuss electrophilic addition of α, β unsaturated carbonyl compounds.
20. What are glycolipids? How you will analyze fat and oils for their stability?

SECTION-C

21. Give structures, reactions and synthesis of quinoline.
22. Discuss the relative reactivity of pyrrole, furan and thiophene and also mention their synthesis.
23. Define and classify carbohydrates with examples. How will you determine the structure of maltose?
24. Write a note on the following :
 - a. Killani Fischer synthesis
 - b. Diels-Alder reaction

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.