

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END-SEMESTER EXAMINATION)

CLASS: BPHARM
BRANCH: PHARMACY

SEMESTER: IV
SESSION: SP/2019

SUBJECT: BP401T PHARMACEUTICAL ORGANIC CHEMISTRY III

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. The missing data, if any, may be assumed suitably.
 2. Before attempting the question paper, be sure that you have got the correct question paper.
 3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
 4. This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.
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PART-I

Objective types questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20 Marks)

- A. Write structure and use of a Pyrrazole containing compound.
- B. Write structure and use of IAA.
- C. Write structure and use of isoquinoline.
- D. Write the uses of Benzopyrans nucleus.
- E. Write medicinal use of pyrimidine nucleus.
- F. Give structure and numbering of acridine.
- G. Nicotinic acid has formula..... and is used as
- H. is an intermediate in Schmidt rearrangement of carboxylic acid.
- I. is the starting material in Beckmann rearrangement.
- J. What is xanthine?

PART-II

Short Answers

(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

- Q2. What is the importance of study of stereoisomers in the field of pharmacy?
- Q3. Distinguish between conformational and configurational isomers with examples.
- Q4. How you assign R & S configuration in compounds? Describe and explain sequence rule.
- Q5. What are geometrical isomers? Distinguish between Z & E isomers.
- Q6. Write short notes on asymmetric synthesis & its importance in pharmaceutical chemistry.
- Q7. What is Saytzeff rule? Explain.
- Q8. Give synthesis of purine containing nucleus.
- Q9. Give a short account of reactivity of furan.
- Q10. Discuss the basicity of pyrrole vs. pyridine and that of imidazole vs. Pyrrazole.

PART-III
Long Answers
(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

- Q11. Write down the preparation of indole and benzopyrans compounds.
- Q12. Detailed out the reactions of pyridine.
- Q13. What are wolf - Kishner and Clemenson's reduction.

:22/04/2019 E: