



JAZ-003-1103007

Seat No. _____

M. Sc. (Sem. III) (CBCS) Examination

December - 2019

C-OP-303 : Organo-Pharmaceutical Chemistry

(Heterocyclic Chemistry)

(New Course)

Faculty Code : 003

Subject Code : 1103007

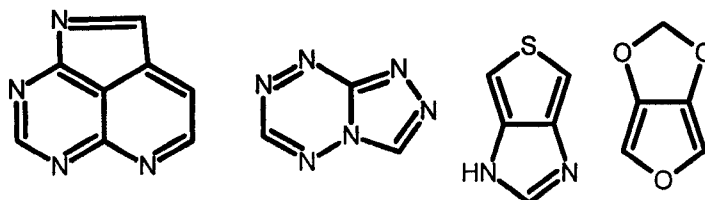
Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) All questions carry equal marks.

1 Answer the following : (any seven) 14

- (a) Write any two methods for the synthesis of Indolizine.
(b) Discuss any two synthesis of oxazole.
(c) Give the name of followings :



- (d) Give any two synthesis of benzopyrans.
(e) Write any two methods for the preparation of Diazirine.
(f) Discuss the properties of Azetidine.
(g) Discuss any one synthesis of Thiopine.
(h) Give any one synthesis of Phenanthridine.
(i) Write the structure of followings :
(i) Octahydropyrrolo[3,4-c]pyrrole
(ii) 4H-Pyrrolo[3,2,1-ij]quinoline
(iii) 2H-Pyrano[2,3-d]pyridazine
(iv) Furo[3,4-c]pyridine
(j) Give at least two methods for the synthesis of 4-pyrones.

- 2** Answer any **two** of the followings : **14**
- (a) Give any three methods of synthesis for Pyrimidine.
 - (b) Explain Synthesis (any two) and chemical properties of Triazole.
 - (c) Discuss synthesis (any two) and chemical properties of Benzofuran.
- 3** Answer the followings : **14**
- (a) Draw the resonating structure and discuss the properties of Pyrazole.
 - (b) Explain synthesis (any two) and chemical properties of Cinnoline.
- OR**
- 3** (a) Explain the properties of Quinazoline. **14**
- (b) Draw the resonating structure of Imidazole and explain its chemical properties.
- 4** Answer the followings : **14**
- (a) Discuss the preparation and properties of oxazole.
 - (b) Describe any three synthesis of Quinoline.
- 5** Answer any **two** of the followings : **14**
- (a) Give resonating structure of Pyridazine and explain its chemical properties.
 - (b) Discuss the synthesis and chemical properties of Oxetane.
 - (c) Discuss (any two) methods for the synthesis of 1,4-Dithicine and Azepine.
 - (d) Discuss the synthesis (any two) and chemical properties of Thionaphthene.
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