

[This question paper contains 3 printed pages.]

4724

Your Roll No.

B.Sc. (G) / III

AS

CHEMISTRY – Paper VIII

(Organic Chemistry)

Time : 2 Hours

Maximum Marks : 25

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Attempt any FOUR questions.

Question No. 1 carry 7 marks.

1. (a) How are Carbohydrates classified? Discuss with suitable examples. (3)
- (b) Glucose and Fructose give identical Osazones. Explain. (1½)
- (c) How will you convert Glucose into Fructose? (1½)
- (d) Draw the structure of α -D(+)-Glucose. (1)
2. (a) What are essential amino acids? Give the name and structure of any TWO such acids. (2)
- (b) Using N-protecting agent, synthesize the dipeptide
(i) Ala – gly (2)

P.T.O.

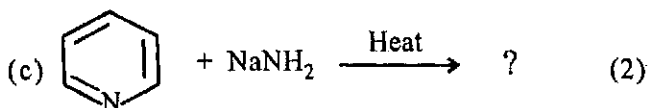
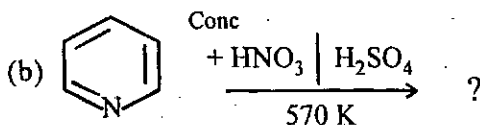
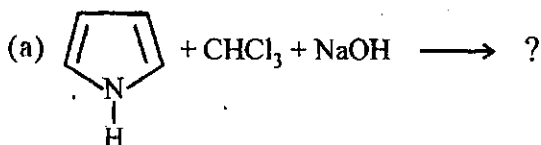
(c) Explain :

(i) Zwitterion

(ii) Isoelectric point (2)

3. (a) Why pyridine is more basic than pyrrole ?
Explain. (2)

(b) Complete the following reactions :



(c) How will you show that naphthalene consists of two benzene rings fused together ? (2)

4. Give the *uses* and *one* method of preparation of :

(a) Paracetamol

(b) Gammaxane (BHC)

(c) DDT

(d) Sulphaguanidine (1½×4=6)

5. (a) Explain the theory of colour and constitution. (3)
- (b) Give a method for the preparation of the following dyes :
- (i) Malachite green (1½)
- (ii) Indigo (1½)
6. How will you prepare :
- (i) Nylon-6,6 (2)
- (ii) Polyester from terephthalate (2)
- (iii) Polyvinyl Chloride (2)