

AQ - 1002

**Third Semester M. Sc. (CBCS Pattern) Chemistry
Examination**

ORGANIC CHEMISTRY

**Paper - XII
(Natural Product - I)**

P. Pages : 3

Time : Three Hours]

[Max. Marks : 80

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

1. (a) Discuss :—

(i) Deoxy sugars (ii) Amino sugars. 8

(b) Give structure determination of sucrose. 8

OR

(p) Define with suitable examples.

(i) Disaccharides.

(ii) Glycosides.

(iii) Poly saccharides. 6

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- (q) Draw the structure of
 (i) Starch (ii) Lactose. 4
 (r) Give structure determination of cellulose. 6

2. (a) Define :—
 (i) Proteins.
 (ii) Isoelectric point. 4
 (b) Discuss C-Terminal end group analysis. 4
 (c) Explain Sanger's method in detail. 8

OR

- (p) Explain structure determination of DNA. 8
 (q) Discuss physiological effects of PGs. 8

3. (a) Give structure determination of Morphine. 8
 (b) Discuss synthetic steps involved in the synthesis of Nicotine. 8

OR

- (p) Explain structure of Camphor. 8
 (q) Discuss structure determination of abetic acid. 8

4. (a) What are Hormones ? Give the applications. 4
 (b) Give synthesis of Teststerone. 8
 (c) Draw structure of
 (i) Cortison (ii) Cholesterol. 4

OR

- (p) Discuss structure determination of progesterone. 8
 (q) Give synthesis of Cortisone. 8

5. (a) Explain :—
 (i) Dyes,
 (ii) Chromophore, with examples. 4
 (b) Discuss classification of dyes on the basis of methods of application on fibres. 6
 (c) Give synthesis of Alizazrin and Indigo. 6

OR

- (p) Give synthesis of ethyl Red, with its uses. 6
 (q) Draw structure of Eosin with its properties and uses and synthesis. 6
 (r) What are the minimum requirements for a compound to be a dye ? Explain in brief. 4

