

This question paper contains 2 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 4683

Unique Paper Code : 2176000001

Name of the Paper : SEC : Essentials of Food Nutrients

Name of the Course : All Undergraduate Courses

Semester : II/IV/VI

Duration : 1 Hour

Maximum Marks : 30

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

Attempt only two questions out of four.

All parts of a question should be attempted together.

Each question carries 15 marks.

1. (a) Fill in the blanks :

(i) is a micronutrient.

(ii) The disorder caused due to vitamin 'A' deficiency known as

(iii) and are the products of hydrolysis of maltose.

(iv) is a disorder caused by vitamin D deficiency.

(v) is an essential amino acid.

P.T.O.

- (b) Explain the role of disulfide bonds in protein folding.
- (c) Draw the cyclic structure of glucose and fructose. 5,5,5
2. (a) Define carbohydrates and classify them based on structure.
- (b) What are glycosidic linkages? Explain with suitable examples.
- (c) Give *two* tests to distinguish reducing and non-reducing sugars. 5,5,5
3. (a) Explain the primary structure of proteins.
- (b) Describe the importance of minerals in human health.
- (c) Discuss the significance of amino acid sequence in proteins. 5,5,5
4. Differentiate the following :
- (i) Essential and non-essential fatty acids
- (ii) Glycolipids and Phospholipids
- (iii) Peptide bond and glycoside bond. 5,5,5