

2020

BIOCHEMISTRY — GENERAL

Paper : DSE-A-1

(Nutritional Biochemistry)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Day 1

1. Answer **any five** questions :

2×5

- (a) What is the full form of RDA and what is its significance?
- (b) What is the full form of PEM and what do you mean by PEM?
- (c) Which form of Vit-A has hormonal activity?
- (d) Write down the two causes of anaemia.
- (e) Name one PUFA which has more than three unsaturation with its importance.
- (f) What are Lipotropic factors?
- (g) Name one enzymatic action which needs pyridoxal phosphate.
- (h) What are the signs of selenium toxicity?
- (i) Write down the two roles of fibre in Lipid metabolism.

2. Answer **any two** questions :

- (a) (i) What is NPU and what is its importance?
(ii) Classify the dietary fatty acids. (1+2)+2
- (b) (i) What is Biological value?
(ii) What is nutraceuticals? 2+3
- (c) Discuss the Vit-B6 deficiency. 5
- (d) (i) What is full form of ADME?
(ii) How it is related to Nutritional Biochemistry? 2+3

Please Turn Over

3. Answer *any three* questions :

- (a) (i) What are the healthiest sources of amino acids (Protein)?
(ii) Briefly discuss the role of Vit-D in absorption of Ca and P. 5+5
- (b) (i) Define balanced diet. How to plan a balanced diet?
(ii) Discuss the role of phospholipids related to membrane structure and functions. 1+4+5
- (c) (i) Differentiate the Marasmus disease from Kwashiorkor disease.
(ii) Discuss the role of carbohydrates in diet. 5+5
- (d) Write short notes on :
1. Role of Vit-K in blood clotting.
2. Fluoride toxicity in human being. 5+5
- (e) (i) Discuss the role of Vit-A in Visual Cycle.
(ii) Briefly discuss the role of iron in prevention of anemia. 5+5
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