

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 2

1. Answer **any five** questions : 2×5
- (a) Write the full form of SDA. What is its significance?
 - (b) What is BMR?
 - (c) Define SFA.
 - (d) Define NPV.
 - (e) What is Kwashiorkor?
 - (f) What are lipotropic factors?
 - (g) What is the sign of Chromium toxicity?
 - (h) What is the role of Vit-A?
 - (i) What is the role of iron in human?
 - (j) What is ROS?
2. Answer **any two** questions : 2+3
- (a) What is BMI? How is it determined? 2+3
 - (b) What are the coenzymes that are derived from Vit B-6? What are the roles of Vit B-12? 2+3
 - (c) What are omega fatty acids? What are their functions? 2+3
 - (d) What is meant by biological value? How is Nitrogen balance determined? 2+3
3. Answer **any three** questions :
- (a) (i) Write a short account on the hormonal regulation of blood glucose.
 - (ii) Role of Vit-E in visual cycle— describe briefly. 5+5
 - (b) (i) What is Z score? How is it measured?
 - (ii) What is the role of Zn in human body? Give a brief account. (2+3)+(2+3)

Please Turn Over

- (c) (i) What is the role of folate in human? What is hypervitaminosis? Give two examples.
- (ii) What is the role of iodine? Briefly describe iodine cycle. [2+(2+1)]+(2+3)
- (d) (i) Briefly describe absorption of fat in human body.
- (ii) Write a brief account on the digestion of carbohydrate in human body. 5+5
- (e) (i) Draw structure of a phospholipid. Briefly describe the role of cholesterol in human.
- (ii) What is gamma-carboxylation? What is its significance? (2+3)+(2+3)
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