

- b. List down classification of carbohydrate.
 c. Enlist four types of lipoprotein.
 d. why is vitamin D known as 'sunshine vitamin' ?
 e. Name the minerals which are essential for human body.



SCHOOL OF NURSING

2nd SEMESTER SESSIONAL EXAMINATION

COURSE - 2ND SEMESTER (B.Sc. Nursing)

TIME – 2 HOURS

SUBJECT – APPLIED BIOCHEMISTRY & APPLIED NUTRITION & DIETETICS

TOTAL MARKS -50

Instructions to the Candidates:

- Read the question paper very carefully.
- Start writing from 2nd page onwards; **don't write on the 1st Page Backside.**
- Do not write anything except your Roll No. on the question paper. Possession of **Mobile Phones** or any kind of **Written Material, Arguments with the Invigilator or Discussing with Co-Student** will come under **Unfair Means** and will **Result** in the **Cancellation of the Papers.**

ALL THE QUESTIONS ARE TO BE ANSWERED:

(APPLIED BIOCHEMISTRY)

(SECTION-A)

4. Multiple choice Questions.

(05x1=05)

A. calcium sources are:-

- | | |
|--------------------------|----------------------|
| i. milk and beans | ii. Cabbage and nuts |
| iii. Cheese and egg yolk | iv. All of the above |

B. which vitamins help in blood clotting?

- | | |
|----------------|---------------|
| i. vitamin D | ii. Vitamin K |
| iii. vitamin A | iv. Vitamin C |

C .Megaloblastic anemia is caused by the deficiency of

- | | |
|----------------|----------------|
| i) Lactic acid | ii) folic acid |
| iii) Cobalamin | iv) pyridoxine |

D .Simplest amino acids is:

- | | |
|-----------------|-------------|
| i) Glycin | ii) Serine |
| iii) Methionine | iv) Proline |

E .One gram proteins contains:

- | | |
|---------------------------------|--------------------------------|
| i) 4.2 kilocalories of energy | ii) 5.2kilocalories of energy |
| iii) 5.4 kilocalories of energy | iv) 4.8 kilocalories of energy |

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1. Long questions.

5 marks

- a) What is amino acid? Write the classification of amino acid with example

Or

Describe the digestion and absorption of carbohydrate.

2. Short Answer Questions

2.5X2=5

- a) Describe Diabetes Mellitus–type1 and type2 symptoms, complications & management.
b) Describe any one aromatic amino acid inborn metabolism error.
c) What is ketone body? Write the types and significance of ketone bodies.

3. Multiple Choice Question

1X5=5 (1x5=5)

- 1) The general formula of monosaccharide is
a) $C_nH_{2n}O_n$ b) $C_{2n}H_nO_n$ c) $C_{2n}H_{2n}O_n$ d) $C_nH_nO_{2n}$
- 2) Two sugar which differ from one another only in configuration around a single carbon atom are called
a) Anomers b) Epimers c) stereoisomer d) Optical isomers
- 3) Serum LDL has been found to be increased in
a) Obstructive jaundice b) Hepatic jaundice
c) Hemolytic jaundice d) Malabsorption syndrome
- 4) All the following statements about phenyl ketonuria are correct except
a) Phenylalanine cannot be converted into tyrosine

- b) Urinary excretion of phenyl pyruvate and phenyl lactate is increased
c) It can be controlled by giving a low-phenylalanine diet
d) It leads to decreased synthesis of thyroid hormones, catecholamine and melanin

5) Essential fatty acids are

- a) Linoleic acid b) Arachidonic acid c) Linolenic acid d) All of these

(APPLIED NUTRITION & DIETITICS)
(SECTION-B)

1. Long Answer Question (2+5+3=10)

- (a) What do you mean by nutrition and health?
(b) Explain the factors affecting food and nutrition?
(c) List down the classification of food?

2. Short Answer Question

(2x5=10)

- a) What do you mean by energy? Write down factors affecting energy requirement.
b) What are amino acids & list down the essential & non-essential amino acids?
c) Functions of vitamins and list down the water soluble vitamins with scientific name.
d) Functions of minerals and enlist micro and macro minerals.

3. Very short answer all. (5x2=10)

- a. what are the functions of Vitamin A?

