

Total Pages : 7

UN(2)-Bio.Nut & Diet. Nur(I)
(Gr-A&B)

2024

Full Marks : 75

Time : 3 hours

Answer from **both** the Sections as directed.

The figures in the right-hand margin indicate marks.

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

SECTION-A
(Applied Biochemistry)

1. MCQs.

1 × 4

(a) The normal PH of human blood is

- (i) 7.0 - 7.1**
- (ii) 7.25 - 7.3**
- (iii) 7.35 - 7.45**
- (iv) 7.5 - 7.55**

(Turn Over)

(b) Which substance would increase in plasma if Jaundice is diagnosed

- (i) Bile acids
- (ii) Bilirubin
- (iii) Stercobilin
- (iv) Urobilin

(c) BMR is affected by

- (i) Body temperature
- (ii) Body size
- (iii) Gender
- (iv) All of the above

(d) Cholesterol is required for

- (i) Formation of bile
- (ii) Precursor for all steroid hormones
- (iii) Formation of Vitamin D
- (iv) All of the above

2. Short notes: 5 × 3

- (a) Classification of lipids with example
- (b) Hypoglycemia and diabetes mellitus
- (c) Factors influencing the digestion and absorption of protein

3. Very short notes: 2 × 3

- (a) Sources of water loss
- (b) Malabsorption syndrome
- (c) Glucose tolerance test (GTT)

SECTION-B

(Applied Nutri and Dietetics)

1. MCQs. 1 × 8

- (a) The functions of phosphorus is
 - (i) Regulation of PH of body fluids
 - (ii) Developments of bone and teeth

- (iii) Regulation of muscle contraction
 - (iv) Role in transmission of nerve impulses
- (b) Pernicious anemia is caused by the deficiency of
- (i) Cyanocobalamin
 - (ii) Pantothenic Acid
 - (iii) Biotin
 - (iv) Pyridoxine
- (c) During the pandemic doctors are advising to consume vitamin C rich food. Select the group rich in Vit-C
- (i) Broccoli, soyabeans, peppers
 - (ii) Strawberries, orange, soyabeans
 - (iii) Milk, strawberries, lemon
 - (iv) Broccoli, strawberries, potatoes
- (d) Folate trap is due to the deficiency of
- (i) Folic Acid

- (ii) Vitamin B₁₂
 - (iii) Pantothenic Acid
 - (iv) B₁
- (e) Fat digestion occurs in which part of body
- (i) Duodenum
 - (ii) Small intestine
 - (iii) Stomach
 - (iv) Mouth
- (f) Hypokalemia can lead to
- (i) Muscle cramps
 - (ii) Feeling tired
 - (iii) Arrhythmia
 - (iv) All of the above
- (g) Which mineral helps in regulation of blood pressure and blood volume
- (i) Phosphorus
 - (ii) Iron

(iii) Iodine

(iv) Sodium

(h) One gram of glucose produces energy

(i) 4.8 Kilocalories

(ii) 3.8 Kilocalories

(iii) 5.2 Kilocalories

(iv) 4.2 Kilocalories

2. Essat type questions: 10

List out the common nutritional deficiency disorders, write down in detail about the Kwashiorkor.

3. Short notes. 5 × 4

(a) Food preservation

(b) Food additives and food adulteration

(c) Diet plan for pregnant woman

(d) Classification and function of minerals

4. Very short.

2 × 6

(a) Food exchange system

(b) List out the healthiest type of fat

(c) Elements that are mainly responsible for growth and development

(d) Childhood obesity

(e) PFA (Prevention of Food adulteration act)

(f) Therapeutic diet for diabetes mellitus