



BRAINWARE UNIVERSITY

Term End Examination 2023-2024 (Oct, 2024)

Programme – B.Sc. Nursing-2023

Course Name – Applied Biochemistry and Applied Nutrition & Dietetics

Course Code - BIOC 135 & NUTR 140

(Semester II)

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable. Write answer of Section – A and Section –B in separate Answer booklet.]

Section : A

Marks : 25

(Applied Biochemistry)

Group-A

(Multiple Choice Type Question)

4 x 1=4

1. Choose the correct alternative from the following :

(i) Identify Which of the Following is not a Polymer of Glucose:

- | | |
|-------------|--------------|
| a) Glycogen | b) Cellulose |
| c) Amylase | d) Insulin |

(ii) Gluconeogenesis Occurs in the Liver and Which Organ:

- | | |
|-----------|-----------|
| a) Kidney | b) Muscle |
| c) Heart | d) Fat |

(iii) Name the energy source of the brain during starvation:

- | | |
|------------|------------------|
| a) Fat | b) Ketone bodies |
| c) Protein | d) Lipids |

(iv) Name of the diseases is caused by protein deficiency:

- | | |
|-------------------|---------------------|
| a) Anaemia | b) Kwashiorkor |
| c) Hypothyroidism | d) All of the above |

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Write a Short note Glucose tolerance test (5)
3. Write a short note on LDL (5)
4. Discuss about IgM (5)

OR

Write a short note on Elisa (5)

Group-C
(Very Short Answer Type Questions)

3 x 2=6

5. Write very short notes on T3 and T4 Test (2)
6. Write very short notes on BUN (2)

OR

Write very short notes on creatinine (2)

Section : B
(Applied Nutrition and Dietetics)

Marks : 50

Group-A
(Multiple Choice Type Question)

8 x 1=8

7.

- (i) Select which food is a good sources of soluble fiber -
 - a) Oatmeal
 - b) Fruits
 - c) Barely
 - d) Vegetables
- (ii) Identify which food is rich in essential amino acids -
 - a) Legumens
 - b) Nuts and seeds
 - c) Whole grains
 - d) Lean meats
- (iii) Select which condition is caused by vitamin A deficiency-
 - a) Scurvey
 - b) Rickets
 - c) Bitot's spot
 - d) Beriberi
- (iv) Select the mineral which is essential for immune system-
 - a) Selenium
 - b) Copper
 - c) Zinc
 - d) Iron
- (v) Mention the mineral which helps to transmit nerve signals and control muscle contraction -
 - a) Potassium
 - b) Iron
 - c) Iodine
 - d) Magnesium

- (vi) Mention the primary goal of weaning -
- a) Reducing dependence on breastfeeding
 - b) Transitioning to cow's milk
 - c) Increasing milk production
 - d) Introducing solid foods
- (vii) Identify which type of food adulteration involves adding harmful substances-
- a) Intentional adulteration
 - b) Economic adulteration
 - c) Unintentional adulteration
 - d) Physical adulteration
- (viii) Identify which laboratory test is used to assess iron status -
- a) Serum ferritin
 - b) Hematocrit
 - c) Hemoglobin
 - d) All of these

Group-B

(Short Answer Type Questions)

4 x 5=20

- 8. Discuss the difference between macro and micro nutrients, (5)
- 9. Discuss Methods of Nutritional Assessment. (5)
- 10. Write a short note on SAM (5)
- 11. Discuss in detail about childhood obesity. (5)

OR

Explain Diet as a Therapeutic Agent (5)

Group-C

(Very Short Answer Type Questions)

6 x 2=12

- 12. Classification of Food (2)
- 13. Define RDA(Recommended dietary allowance) (2)
- 14. Define colostrum (2)
- 15. Define Nutrition survey (2)
- 16. State food poisoning . (2)
- 17. Define Beri Beri (2)

OR

Define Dehydration (2)

Group-D

(Long Answer Type Questions)

1 x 10=10

18. Write down the absorption and excretion site of calcium. Explain the functions of calcium (10)
Describe the deficiencies of calcium. (2+5+3)

OR