

GIET UNIVERSITY, GUNUPUR – 765022

B. Sc. (Nursing) (Second Semester) Examinations, March-2024 BIOC-135 & NUTR 140 -Applied Biochemistry & Applied Nutrition & Dietetics

Maximum: 75 Marks

The figures in the right hand margin indicate marks.

Section - A: APPLIED BIOCHEMISTRY (25 Marks)

PART – A: (Multiple Choice Questions) $(4 \times 1=4 \text{ Marks})$ Q. 1 Answer ALL questions In diabetes mellitus, glucagon levels are (i) elevated due to high insulin (ii) elevated and not suppressed by carbohydrate loading (iv) lowered due to low insulin (iii) lowered due to high conversion to glucose Which of the following is characterized by the presence of red blood cells in the urine, highurinary urobilinogen, but no urine bilirubin? (i)Gallstones (ii) Gilbert's syndrome (iii)Hepatitis (iv)Sickle cell disease c. An important renal response to acidemia is (i) increased potassium excretion (ii) increased production of HPO₂⁻ (iii) decreased excretion of H₂PO₄⁻ (iv) increased production of ammonia d. The principal immunoglobulin that crosses the placental barrier is (i) IgA (ii) IgE (iii) IgG (iv) IgM **PART – B: (Very Short Answer Questions)** $(3 \times 2=6 \text{ Marks})$

Q.2. Answer **ANY THREE** questions

- a. Name the enzyme markers for diagnosis of liver disorder and write their normal values.
- b. Explain metabolic acidosis.
- c. What are zymogens? Give example.
- d. What is ELISA.

PART – C: (Short Answer Questions)

 $(3 \times 5 = 15 \text{ Marks})$

Q.3. Answer **ANY THREE** questions

- a. Write down the reaction and steps of Kreb's cycle.
- b. Discuss about different liver function test.
- c. Give an account on Diabetes.
- d. Write a note on antigen antibody reaction.

Section - B: APPLIED NUTRITION (50 Marks)

PART – D: (Multiple Choice Questions)

 $(8 \times 1 = 8 \text{ Marks})$

Q. 5 Answer ALL questions

- a. The nutritional status indicators include:
- (i) Anthropometric parameters

(ii) Drug abuse

(iii) Vital signs

(iv) Weight

b. Neurotoxicity can be caused due by amount of (i) Vitamin B₂ (ii)Vitamin B₆ (iii) Vitamin C (iv) Vitamin D c. Fruits, Vegetables and cereals are potent sources of (i) Antioxidants (ii) Unsaturated fats (iii) Saturated fats (iv) Free radicals d. Calorie intake of 1 year old child (i) 1000 Kcal/day (ii) 800Kcal/day (iii) 1200 Kcal/day (iv) 1500 Kcal/day e. Consuming fewer than 130 grams of carbohydrate per day may lead to (i) Hypoglycaemia (ii) Kwashiorkor (iii) Marasmus (iv) Ketosis f. The full form of abbreviation ICDS is (i) Indian Child Development Scheme Internal Committee Development (ii) Scheme (iii) International Children's development Scheme (iv) Integrated Child Development Scheme g. Iron rich diet used to a patient suffering with iron deficiency anemia (i) Spinach (ii) Banana (iii) Carrot (iv) Papaya Which vitamin is called Alpha- tocopherol (i) Vitamin B (ii) Vitamin E (iii) Vitamin A (iv) Vitamin K **PART – E: (Very Short Answer Questions)** $(6 \times 2 = 12 \text{ Marks})$ Q.6. Answer **ANY SIX** questions a. Give two functions of carbohydrate. b. Write the sources of Iron. c. What is preservation? d. Define Basal metabolism. e. What is canning? f. Explain clinical examination. g. Define balance diet. $(4 \times 5 = 20 \text{ Marks})$ **PART – F: (Short Answer Questions)** Q.7. Answer **ANY FOUR** questions a. Write the importance of nutrition in nursing. b. What are the functions of proteins c. Discuss about bomb calorimeter. d. Write a note on Vitamin B₂.

PART – G: (Long Answer Questions)

e. Write about PFA act.

 $(10 \times 1 = 10 \text{ Marks})$

Answer *ALL* questions

8.a Classification, clinical manifestation, and dietary management of PEM. 10

(OR)

b. Define BMR. How will you determine the BMR? List down the factors affecting the BMR. 2+4+4

--- End of Paper ---