

Enrollment No: _____ Exam Seat No: _____

C. U. SHAH UNIVERSITY

Summer Examination-2023

Subject Name : Applied Biochemistry and Applied Nutrition and Dietetics

Subject Code : BIOC 135 & NUTR 140

Branch: B.Sc. (Nursing)

Semester : 2

Date : 13/03/2023

Time : 02:00 To 05:00

Marks : 75

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
 - (5) Use two separate answer books for sections A & B.
-

SECTION-A (NUTRITION)

- Q-1** **Attempt the following questions:** **(05)**
- a) What is the daily calorie requirement of an adult with average body weight? 1
- (A) 1500 Calories (B) 2000 Calories
(C) 2500 Calories (D) 3000 Calories
- b) Which one of the nutrients should include in maximum quantity of dietary intake of small children? 1
- (A) Protein (B) Carbohydrate (C) Minerals (D) Vitamins
- c) Which enzyme helps for the digestion of fat after emulsification? 1
- (A) Renin (B) Amylase (C) Lipase (D) Trypsin
- d) What is the function of phosphorus? 1
- (A) Development of Bone and Teeth
(B) Regulation of PH in body fluids
(C) Regulation of Muscle contraction
(D) Role in transmission of nerve impulses
- e) Select from the following a group of eatables each members of which is rich in iron? 1
- (A) Amla, Cabbage , Tomato
(B) Amla, Spinach, Jaggery
(C) Amla , Cabbage, Spinach
(D) Amla, Jaggrey, Tomato

Attempt any one questions from Q-2 to Q-3:

- Q-2** **Attempt all questions** **(15)**
- a) Explain the digestion and absorption of carbohydrates.
- b) List the functions and characteristics of carbohydrates



Q-3	Attempt all questions	(15)
a	Define BMR.	
b	How will you determine the BMR?	
c	List the factors affecting the BMR of a person.	
Q-4	Write short notes on any five questions from A to G:	(25)
A	Sources of Iron	5
B	Ascorbic acid	5
C	Plan a menu for pregnant women	5
D	Nutritional problems in India.	5
E	Iodine deficiency disorder(IDD)	5
F	Protein energy malnutrition	5
G	Explain about Fat soluble – Vitamins A, D, E, and K	5

SECTION-B (BIOCHEMISTRY)

Q-5	Attempt the following questions:	(05)
a)	Cane sugar is_____?	1
	(A)Glucose (B).Sucrose (C).Fructose (D). Maltose	
b)	Glucose can be synthesized from all except_____?	1
	(A) Amino Acid (B) Glycerol (C) Acetoacetate (D) Lactic acid	
c)	Glycogen breakdown leads to formation of_____?	1
	(A)Glucose (B) Lactic acid (C) Glucose & Lactic acid (D) Glycoprotine	
d)	One molecule of acetyl Co-A gives rise to _____ ATP molecules?	1
	(A) 2 (B) 6 (C) 8 (D) 12	
e)	Dietary fiber is rich in_____?	1
	(A) Starch (B) Cellulose (C) Collagen (D) Insulin	

Attempt any one questions from Q-6 to Q-7:

Q-6	Attempt all questions	(10)
a	Classify the Lipids	
b	Write in detail about the function of Lipids	
Q-7	Attempt all questions	(10)
a	What is plasma proteins	
b	Write in detail types, functions and normal value of plasma proteins	



Q-8	Write short notes on any three questions from A to E:	(15)
A	Biochemical function of Vitamin C	5
B	Factors affecting Enzyme functions	5
C	Regulation of blood glucose	5
D	Structure of RNA	5
E	Gout	5

