

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C. U. SHAH UNIVERSITY

## Winter Examination-2021

Subject Name : Nutrition & Biochemistry

Subject Code : 4NS01NUB1

Branch: B.Sc. (Nursing)

Year : 1

Date : 07/12/2021

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.
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### SECTION-A (NUTRITION)

- Q-1 Attempt the following questions: (05)**
- a) Which of the following is the first sign of dehydration 1
    - a. Tachycardia
    - b. Restlessness
    - c. Thirst
    - d. Poor skin turgor
  - b) One of the fat – soluble vitamins involved in coagulation is 1
    - a. Vitamin A
    - b. Vitamin D
    - c. Vitamin E
    - d. Vitamin K
  - c) Murasmus occure due to deficiency of 1
    - a. Calorie
    - b. Protein
    - c. a and b both
    - d. None
  - d) Storege from of Iron is 1
    - a. Ferritine
    - b. Transferrin
    - c. Apoferrin
    - d. None of above
  - e) What is Chyme 1
    - a. Food enters the Mouth
    - b. Food reaching the Stomach
    - c. Food entering the Duodenum
    - d. Food reaching the Rectum



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

<b>Q-2</b>	<b>Attempt all questions</b>	<b>(15)</b>
<b>a.</b>	Explain the digestion and absorption of carbohydrates.	<b>10</b>
<b>b.</b>	List the functions and characteristics of carbohydrates.	<b>05</b>
<b>Q-3</b>	Discuss about Protein Energy Malnutrition in detail.	<b>(15)</b>
<b>Q-4</b>	<b>Write notes on any five from A to G:</b>	<b>(25)</b>
<b>A</b>	Vitamin – A deficiency	<b>5</b>
<b>B</b>	Principles of menu planning	<b>5</b>
<b>C</b>	Factors affecting food and nutrition intake.	<b>5</b>
<b>D</b>	Enzymes of clinical importance	<b>5</b>
<b>E</b>	Types of preservatives.	<b>5</b>
<b>F</b>	Define BMR. What are the factors affecting BMR?	<b>5</b>
<b>G</b>	Discuss the role of nutrition in maintaining health.	<b>5</b>

**SECTION-B (BIOCHEMISTRY)**

<b>Q-5</b>	<b>Attempt the following questions:</b>	<b>(05)</b>
<b>a)</b>	<b>Which of the following is a keto triose</b>	<b>1</b>
	e. Dihydroxyacetone	
	f. Glyceraldehyde	
	g. Ribulose	
	h. Erythrose	
<b>b)</b>	<b>The general chemical formula of carbohydrate is</b>	<b>1</b>
	a. $(CH_2O)_n$	
	b. $(CH_2O)_2n$	
	c. $(CHO)_n$	
	d. $C_nH_{2n}O$	
<b>c)</b>	<b>Which of the following is an alpha lactone</b>	<b>1</b>
	a. Vit A	
	b. Vit. C	
	c. Vit. D	
	d. Vit.K	
<b>d)</b>	<b>Water is</b>	<b>1</b>
	a. Polar solvent	
	b. Non polar solvent	
	c. An amphipathic solvent	
	d. Nonpolar uncharged solvent	
<b>e)</b>	<b>The H-O-H bond angle in water molecule is</b>	<b>1</b>
	e. $104.0^\circ$	
	f. $104.5^\circ$	
	g. $105.0^\circ$	
	h. $105.5^\circ$	



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

<b>Q-6</b>	<b>Attempt all questions</b>	<b>(10)</b>
<b>a</b>	Describe the process of glycolysis.	<b>5</b>
<b>b</b>	Explain How many ATP molecules are formed in anaerobic and aerobic glycolysis	<b>5</b>
<b>Q-7</b>	What is Diabetes mellitus? Explain the hormonal regulation of glucose	<b>(10)</b>
<b>Q-8</b>	<b>Attempt any three questions from A to E:</b>	<b>(15)</b>
<b>A</b>	Lipoproteins and their functions.	<b>5</b>
<b>B</b>	Metabolic Acidosis.	<b>5</b>
<b>C</b>	Urea cycle	<b>5</b>
<b>D</b>	Gout disease	<b>5</b>
<b>E</b>	t-RNA structure	<b>5</b>

