



**NAVRACHANA
UNIVERSITY**

a UGC recognized University

School: School of Science
Program/s: M.Sc Life Science
Year: 2nd **Semester:** 3rd
Examination: End Semester Examination
Examination year: December-2021

Course Code: LS-227 **Course Name:** Nutritional Biochemistry - II

Date: 07/12/2021

Time: 08:30 am to 10:30 am

Total Marks: 40

Total Pages: 02

Instructions:

- There are total 6 questions in the paper. Necessary options are given in the paper.
- Read the questions carefully before answering
- Draw diagrams wherever necessary

Q. No.	Details	Marks	COs*	BTL#
Q.1	<p>Choose the correct option.</p> <p>1. Describe body composition</p> <ol style="list-style-type: none"> 1. The relative proportions of protein, fat, water, and mineral components in the body that make up total body weight 2. The relative proportions of protein, fat, water (excluding skin and bone) in the body that make up total body weight 3. The relative proportions of protein, fat (excluding skin and bone and water) in the body that make up total body weight 4. The relative proportions of water, and mineral components in the body that make up total body weight <p>2. What is fat-free mass and what does it consist of?</p> <ol style="list-style-type: none"> 1. Body mass that only takes fat mass into consideration 2. Body mass that consists of free fatty acids 3. Body mass that does not take fat mass into consideration (contains water, protein, bone minerals) 4. Body mass only considering the fat surrounding the abdominal region <p>3. What stable isotope is commonly given for the measurement of total body water?</p> <ol style="list-style-type: none"> 1. Deuterium 2. Carbon 13 3. Nitrogen 15 4. Oxygen 18 	3	CO1	BTL1, BTL2, BTL3
Q.2	<p>Fill in the blanks</p> <ol style="list-style-type: none"> 1. RDA for adults are based on sex, body weight and _____; Also In India, the RDA's are provided by _____. 2. The RDA for energy is expressed as _____. 	2	CO1	BTL1, BTL2, BTL3

Q.3	True or False with justification 1. Dietetics and clinical dietetics are synonyms of each other. 2. The food exchange system limits the variety of food in a group. 3. Food borne-diseases cannot happen through chemical or toxins in food.	3	CO1, CO2	BT1, BT2
Q.4	Answer the question in brief 1. State factors leading to acidosis in an organism. 2. Emphasis the significance of Nitrogen Balance.	4	CO1	BT1, BT2, BT3
Q.5	Answer the question in detail 1. Write a note on anthropometric methods for body composition. 2. Outline a dietary guideline as per ICMR-RDA for an adolescent girl suffering from anemia and state reasons for selecting a particular food component in her diet.	8	CO1	BT1, BT2, BT3
Q.6	Long answer type questions 1. What is malnutrition. Explain: - Symptoms - Causes - Risk Factors <p style="text-align: center;">OR</p> Mention 5 mitigating steps taken by Indian government to curb the effect of malnutrition. 2. Explain how the food can get spoiled with few examples. <p style="text-align: center;">OR</p> Mention some of the food preservation methods. 3. Explain with example: - Diet - Diet therapy - Clinical diet - Therapeutic diet 4. What is food exchange list and list down its some advantages. <p style="text-align: center;">OR</p> Explain with an example, how modification in "Quantity" and "Nutrient" can help patients as therapy.	20	CO1, CO2	BT1, BT2

*****End of Question Paper*****