Instructions

- This test should be attempted only after thorough study of the module.
- All the best!

Assignment No. 1

Section A

For every question, 4 options are given out of which only one option is correct. Choose the correct option

 What is meant by the term "Ventral" in the sentence "The aorta is ventral to the spinal cord"? A) Towards the back B) Towards the front C) Closer to the body surface D) Farther to the body surface 				
The first organelle to be affected by drugs and poisons is A) Golgi-apparatus B) Centrosomes C) Microsomes D) Lysosomes				
Blood Group is Universal Donor and Blood Group is Universal Recepient A) AB, A B) O, AB C) B, O D) AB, O				
Significance of T- wave is A) Atrial depolarization B) Ventricular depolarization C) Ventricular repolarization D) Conduction of impulses from SA Node				
Gland present on the top of kidney is A) Adrenal Gland A) Pituary Gland B) Pancreas C) Parathyroid Gland				
Section B				

Answer the following questions briefly (not more than 200 words)

- 1. What is the difference between Anatomy and Physiology? What are the different anatomical positions?
- 2. Explain in brief about Autonomic Nervous System.
- 3. What are neurotransmitters? Classify them.
- 4. Explain the anatomy and physiology of teeth.
- 5. What are the different parts of male reproductive system?
- 6. What are the different Respiratory Volumes? Explain them in brief.
- 7. Define the following terms:
 - A) Blood Pressure
 - B) Cardiac Output
 - C) ECG
- 8. Explain the mechanism of Blood Coagulation.
- 9. Classify and explain the different Muscular Tissue.
- 10. What is the difference between a Cell and a Tissue? Give a brief overview of various transport mechanism of membrane.
- 11. What is the difference between mitosis and meioisis. Explain Anaphase and Metaphase of cell cycle in detail.
- 12. Explain the various functions performed by Spleen.
- 13. Explain the anatomy of heart.
- 14. What are the different mechanisms involved in Respiration? Give a brief detail of Control system of Respiration.
- 15. What do you mean by hormone? Explain in detail about Pituitary Glands.

Section C

Answer the following questions in detail (800 words)

- 1. How the heart works? Explain cardiac cycle in detail.
- 2. Explain the physiology of Male and Female Reproductive system.
- 3. Explain the functioning of Stomach and Small Intestine.
- 4. Explain nerve in detail. What are the different steps involved in Electrical transmission in the nerve.
- 5. Explain the following terms:
 - A) Reflex action and Reflex arc
 - B) The Brain

Assignment No. 02

Section A

For every question 4 options are given out of which only one option is correct. Choose the correct option.

- 1) Nutrients recommended in fairly large and quality amount:
 - a. Carbohydrates

c. Macronutrients

b. Amino acids

d. Fibres

b.	Essential nutrients	d.	No	ne of the above
3)	Protective foods are rich in: a. Protein b. Carbohydrates		c. d.	Fibres None of the above
4)	Disease in which body fails to regulate body glucos	se:		
	a. Kwashiorkor		c.	Diabetes
	b. Gout		d.	Marasmus
5)	Table sugar is:			

c. Micronutrients

2) Minerals and Vitamins fall in category of :

a. Nutrients

- a. Sucrose
- b. Glucose
- c. Fructose
- d. All of them

Answer the following questions briefly (not more than 200 words).

- 1) Give a brief description about unavailable carbohydrates?
- 2) What is the role of fibre in nutrition for our body?
- 3) Classify carbohydrate with a suitable flow chart?
- 4) Define protein and importance for body?
- 5) Prepare a chart for vitamins, their significance in body and effect of deficiency?
- 6) Define fats and oils and list their suitable examples?
- 7) What is transfats, mentioned suitable food sources?
- 8) What are trace elements? List water soluble vitamins with suitable examples?
- 9) Differentiate minerals and trace elements with their names?
- 10) What is nutrition deficiency?
- 11) What is nutrient toxicity? Mention toxicity caused by Vitamin K, Vitamin D, Vitamin B complex?
- 12) Describe Iron health benefits, deficiencies and claims?
- 13) Define hormones and list all the hormonal glands?
- 14) Give a brief description about anterior pituitary gland?
- 15) What do you understand by hormonal effects?
- 16) Describe importance of Molybdenum and its toxicity?

Section C

Answer the following questions in detail (800 words).

- 1) What is the connection between nutrients and genetics describe and conclude?
- 2) Draw a table describing all the vitamins their deficiencies and toxicity?
- 3) Describe all the hormonal glands with their functions and significance in human body?
- 4) Give a detailed classification of nutrients with their suitable food sources?
- 5) Describe Fats and oils, list out good sources and bad sources for fats and oils?

Assignment No. 3&4

Section A

For every question 4 options are given out of which only one option is correct. Choose the correct option.

- 1. Which of the following is NOT an eating disorder?
- A. Binge eating
- B. Dengu
- C. Anorexia nervosa
- D. Bulimia

- 2. Energy Balance is
- A. The process of weight loss due to physical activities.
- B. Treatment process for eating disorders.
- C. A state where weight remains steady.
- D. To limit sedentary activities such as surfing the Internet, playing video games, or watching TV.
- 3. NHANES, reporting the growing weight management issues of the world, refers to:
- A. National Health And Nutrition Examination Survey
- B. Survey for National Health And Nutrition Examination
- C. National Examination of Nutrition And Health Survey
- D. National Survey for Nutrition And Health Examination
- 4. A healthy diet incorporated with a variety of will help you maintain your weight, fight disease, and live.
- A. Potato chips
- B. Superfoods
- C. Calories
- D. Fried snacks
- 5. Which one of the following Nutrition Fact label you should AVOID while looking for healthy foods?
- A. Low sodium
- B. Reduced sodium
- C. No added salt
- D. Salt laden

Answer the following questions briefly (not more than 200 words).

- 1. Mention a few points about how you can balance your daily calories.
- 2. What is a Basal Metabolic Rate (BMR)?
- 3. Differentiate between positive & negative energy balance.
- 4. Suggest a few diet options for the aging populations.
- 5. What is a therapeutic diet?
- 6. Name the types of modifications to be made in a therapeutic diet.
- 7. What is the significance of high-potassium foods?
- 8. How do you plan a diet for patients with Nephrotic syndrome?
- 9. Name a few protective foods for Nephrotic syndrome patients.
- 10. Recommend a few regular physical activities for weight management.
- 11. How would you relate sugar intake of a person with his/her risk of stones?
- 12. Why is sodium considered as a 'problem food'?
- 13. Explain the condition 'Hyperlipidemia'.
- 14. How does mishandling affect the quality of food?
- 15. What is the importance of nutrients in human body?

Section C

Answer the following questions in detail (800 words).

1.	What is the importance of the following herbs and spices in a healthy diet? Mention their
healthy	properties:
a)	Parsley

- b) Ginger
- c) Oregano
- d) Cinnamon
- e) Turmeric
- 2. Recommend appropriate quantity of the following ingredients for a well-planned diet of a Nephrotic Syndrome patient:
- a) Sodium and Fluid
- b) Energy
- c) Lipids
- d) Protein
- e) Supplements
- 3. Why cranberry juice is recommended to folks with urinary infections?
- 4. Name and explain the modifications in diet and the changes in food consistencies to make the food therapeutic.
- 5. How do the eating habits and nutritional requirements vary in different age groups?

Assignment No. 05

Section A

For every question 4 options are given out of which only one option is correct. Choose the correct option.

- 1) Riboflavin is a:
- A) Fat soluble vitamin
- Water soluble vitamin B)
- C) Mineral
- D) All of them
- 2) Which of the following is the common source of Goitrogen?
- A) Egg white
- B) **Beans**
- C) Sweet potatoes
- Both b and c D)
- 3) Which of the following contains anti-vitamin E?

- A) Soyabeans
- B) Raw kidney beans
- C) Both of them
- D) None of them
- 4) Avidin is regarded as:
- A) An anti-nutritional factor
- B) Phytochemical
- C) Mineral
- D) None of them
- 5) A- amylase is present in:
- A) Vegetables
- B) Nuts
- C) Cereals
- D) Milk
- 6) Which one of the following is a polyphenol?
- A) Catechin
- B) CLA
- C) Lutein
- D) Lycopene

Answer the following questions briefly (not more than 200 words).

- 1) Define the term nutraceuticals. What are the types?
- 2) What are non-traditional Nutraceuticals?
- 3) Write the names and health benefits of fat soluble and water-soluble vitamins.
- 4) What do you mean by the term phytochemical? Write its health benefits.
- 5) Name some anti-nutritional factors present in food and their negative effects on health.
- 6) How can the anti-nutritional factors be removed from food?
- 7) What is the co-relation between Nutraceuticals and future of medical science?
- 8) What are phytates?
- 9) Is there any positive impact of anti-nutritional factors in human body? If so, then mention one.
- 10) Name some phytochemicals which are extremely beneficial for human health?
- 11) What is the function of glucosamine in our body?
- 12) Differentiate between nutraceuticals and nutragenomics.

Section C

Answer the following questions in detail (800 words).

- 1) Explain about the major challenges faced by nutraceuticals in food and pharma companies. Write about some of the regulatory acts.
- 2) Explain the following:
- Probiotics and prebiotics
- Lathyrism
- Haemagglutinins and saponins

- 3) Explain in detail about:
- Functional foods
- Medical foods
- Aspects of legume protein as nutraceticals
- 4) Explain about the properties and functions of various neutraceuticals.
- 5) List the major functional components present in nutraceticals and their potential health benefits?

Assignment No. 6

Section A

For every question, 4 options are given out of which only one option is correct. Choose the correct option.

- 1. It is a broad term for the practical application of nutrition as a preventative or corrective treatment of disease.
- a. Diet Therapy
- b. Nutrition
- c. High fibre diet
- d. None of Above
- 2. Functional foods are similar in appearance to
- a. Healthy Foods
- b. Conventional Foods
- c. Body Building Foods
- d. All of Above
- 3. The term nutraceutical was coined from
- a. Nutrition and Health
- b. Nutrition and Pharmaceutical
- c. Nutrition and Cosmetical
- d. None of above
- 4.ls considered a liberalized diet for diabetics when their weight and blood sugar levels are under control.
- a. No Concentrated Sweets (NCS) diet
- b. No Added Salt (NAS) diet
- c. Low Sodium (LS) diet
- d. None of the above.
- 5.ls prescribed in the prevention or treatment of a number of gastrointestinal, cardiovascular, and metabolic diseases
- a. Low fat/low cholesterol diet
- b. High fiber diet
- c. Pureed diet
- d. None of above

Answer the following questions briefly (not more than 200 words)

- 1. What do you mean by Diet Therapy?
- 2. What are different types of therapeutic diets?
- 3. Write a short note on neutraceuticals.
- 4. Write a short note on food supplements.
- 5. What do you mean by food intolerance modification?
- 6. Write a short note on High Fibre Diet?
- 7. What do you mean by Nutrition Therapy for Cancer?
- 8. Write a short note on Nutrition Therapy for Cholesterol?
- 9. What do you mean by Functional Foods?
- 10. What do you mean by Probiotics, Prebiotics and Symbiotics?
- 11. What do you mean by Food Supplements?
- 12. Write a short note on Healthy Eating Pattern.
- 13. What do you mean by DASH?
- 14. What is clear liquid diet?
- 15. Write a short note on problem of obesity?

Section C

Answer the following questions in detail (800 words)

- 1. Briefly Explain the Importance of Calorie balance within healthy eating patterns.
- 2. What are seven essential nutrition actions?
- 3. What are Key Findings of WHO Technical report (Diet, nutrition and the prevention of chronic diseases Report of the joint WHO/FAO expert consultation).
- 4. What is China-Cornell-Oxford Project and its findings.
- 5. Write a short note on "Intervening throughout life".

Assignment No. 07

Section A

For every question, 4 options are given out of which only one option is correct. Choose the correct option.

- 1. "Father of Nutrition and Chemistry" was-
- (a) Lavoisier
- (b) Antoine
- (c) George Einstein
- (d) John Charles Polanyi
- 2. Recommended Daily Alloances (RDAs) were established by the-
- (a) National Research Council
- (b) FSSAI
- (c) FAO
- (d) FDA
- 3. Pectins are polymers of-

- (a) 1-4 h-D-galacturonic
- (b) 1-4 h- Gluocse
- (c) 1-4 h-Lactose
- (d) 1-4 h-D Lactose
- 4. Laetrile and Pangamic acid are-
- (a) Non-vitamins
- (b) Vitamins

Answer the following questions briefly (not more than 200 words)

- 1. Write down about History of Clinical Nutrition.
- 2. Difference between Nutrition & Clinical Nutrition.
- 3. Enlist some dietary fibre rich foods.
- 4. What are Nutrient types and their names? Enlist them.
- 6. Describe the metabolism of Fiber in Human Body.
- 7. What are triglycerides?
- 8. Difference between saturated and unsaturated fats.
- 9. What are different between Essential and Non-essential Dietary Fibers?
- 10. How nutrition helps in preventing Colon Cancer? Explain.
- 11. Define recommendation in dietary fibre.
- 12. What do you understand by Toxicants?
- 13. Write down about toxicants produced during Cooking.
- 14. What is Vegetarianism?
- 15. What is Kosher Diet and Zen Macrobiotic Diet?

Section C

Answer the following questions in detail (800 words)

- 1. How Megadoses of Vitamins and Non-Vitamins effect Human Body?
- 2. What are Fiber and Dietary Fibers? Explain about Components of Dietary Fiber.
- 3. What is Food Contamination? What are toxic and non-toxic Food Contaminats?