

FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-2022

COURSE : Post Graduate Diploma in Dietetics & Hospital Food Service

SUBJECT : Human Physiology

Semester: 1st Semester End Term

TIME ALLOWED : 2 Hours

MAX. MARKS: 50

(Marks allotted to each question are given in brackets)

Q.1. Write a short note any two of the following. 10 MARKS

- a. Respiratory Disorders.
- b. Types of Blood vessels
- c. Digestion and absorption of proteins.

Q.2. Describe Chloride Shift with the help of diagram. 10 MARKS

OR

Explain the control of Respiratory mechanism.

Q.3. Explain why Pituitary Gland is called as 'the master gland' of the body. 10 MARKS

OR

Explain Erythropoiesis and its regulation.

Q.4. What is an immune system? List the components of Immune system. 10 MARKS

OR

Explain Kidney transplant and Hemodialysis.

Q.5. Match the following. 5 MARKS

- a. Contraction of uterus
- b. Pineal Gland
- c. Placenta
- d. Chloride Shift
- e. Eukaryotic Cell

- i. HCO₃
- ii. Nourishes the foetus
- iv. Oxytocin
- v. True Nucleus
- vi. Melatonin

Q. 6. Fill in the Blanks. 5 MARKS

1. Cardiac Output is the product of -----
2. A person with a blood group ----- is called as universal recipient.
3. ----- is called as Anti-Diuretic hormone.
4. ----- helps in the digestion of fat produced by liver.
5. Lungs are located in ----- cavity.

-----x-----x-----

FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22

COURSE: Post Graduate Diploma in Dietetics & Hospital Food Service
SUBJECT: Applied Biochemistry
TIME ALLOWED: 2 Hours

Semester: 1st Semester End Term
MAX. MARKS: 50

(Marks allotted to each question are given in brackets)

Q.1. Describe the process of synthesis of long chain fatty acids in cells. Also give energetics for the synthesis of palmitic acid. (10 MARKS)

OR

Describe the sequence of events in EMP pathway (glycolysis). Which steps of this pathway are oxidative? How much energy is obtained at various stages of this pathway?

Q.2. Differentiate between any two of the following:

(2x5= 10 MARKS)

- a. Saturated and unsaturated fatty acids
- b. Glucogenic and ketogenic amino acids
- c. Amylose and amylopectin

Q.3. Draw the structures of any five of the following:

(5x2= 10 MARKS)

- | | |
|-------------------|------------------|
| a. Ribulose | b. Starch |
| c. Galactose | d. Tryptophan |
| e. Palmitic Acid | f. Linoleic acid |
| g. Glyceraldehyde | |

Q.4. How does an enzyme work? Describe the two main theories of enzyme action. (10 MARKS)

(10 MARKS)

OR

Explain the classification of hormones.

Q.5. Write short notes on any 4 of the following.

(4x2.5=10 MARKS)

- a. Danger of ketosis
- b. Prostaglandins
- c. Diagnostic values of plasma enzymes
- d. Regulation of cholesterol biosynthesis
- e. Types of lipoproteins
- f. Classification of carbohydrates

Q.6. Fill in the blanks.

(10 MARKS)

1. _____ is an optically active amino acid
2. Glucagon is secreted by _____ cells of islets of Langerhans of pancreas.
3. The protein part of enzyme is called _____.
4. _____ is also called as "good cholesterol".
5. Glycolysis is the pathway by which glucose is broken down into _____.
6. _____ hormone regulates calcium and phosphorus metabolism.
7. Glucose and mannose are _____ of each other at second carbon atom.
8. Co-enzyme form of vitamin B-5 is _____.
9. The urea cycle converts excess ammonia into urea and occurs in _____ of liver cells.
10. There are _____ peptide bonds in a tetrapeptide.

-----X-----X-----

(Marks allotted to each question are given in brackets)

Q.1- Discuss in detail about the role of the dietician in Nutrition and healthcare. What are the principles of therapeutic diet? (10)

Or

Discuss various steps involved in the nutrition care process in detail.

Q.2- Define fever? What are the causes of fever? (10)

Or

Define infection? Explain metabolic changes during infection?

Q.3- Define obesity? Describe in detail about the health hazards of obesity? (10)

Or

Define underweight? What are the basic causes of underweight?

Q.4- Discuss in detail about the routine hospital diet? State with suitable example? (10)

Or

Write a short note on tube feeding. Discuss the different type of tube feeds used?

Q.5- Define Typhoid. State the principles involved in the dietary management for typhoid? (10)

Or

Define Tuberculosis? State the principles involved in the dietary management for tuberculosis?

Q.6- What is HIV infection? Explain dietary recommendation for a patient suffering from HIV? (10)

Or

What are the various methods of nutritional assessment? Discuss in detail.

Q.7- Define therapeutic diet? How therapeutic diet is different from normal diet? (10)

Q.8- Write a short note on any two :- (5x2=10)

- Stages of NCP
- Soft diet
- Body Mass Index
- Surgical management to weight loss.

Q.9- Differentiate between (any two)- (5x2=10)

- Acute fever & Chronic fever
- TPN & PPN
- Overweight & Obesity
- Enteral feed & Parenteral feed

Q.10-Fill in the blanks:-

- a) The two broad categories of fever are..... &
- b) A person is classified as underweight when the BMI is less than
- c) Full form of AIDS is
- d)is the first step in the Nutrition Care Process.
- e) Surgery for obese patient is advised in patients with BMI more than
- f) There is percent increase in BMR with every with every 1 degree Fahrenheit increase in
body temperature.
- g) Typhoid fever is caused by bacteria
- h) Tuberculosis affects most often but may also be localized in other organs.
- i) If body weight is less by or more than ideal body weight, the individual is grossly underweight.
- j) The term overweight refers to a person with body weight percent excess of ideal body weight.

(10x1=10)

-----x-----x-----

10x1=10

CODE: DHFS-14

ROLL No.....

FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22

COURSE: Post Graduate Diploma in Dietetics & Hospital Food Service

SUBJECT: Nutritional Perspective in Community-I

Semester: 1st Semester End Term

TIME ALLOWED: 3 Hours

MAX. MARKS: 100

(Marks allotted to each question are given in brackets)

- Q.1. Fill in the blanks. (10)
- I. One exchange of pulse contains about _____ gm of fat.
 - II. There are _____ food groups in a food exchange list.
 - III. The basic unit of carbohydrate is _____.
 - IV. The requirement of essential fatty acid is _____ percent of the daily energy requirement.
 - V. The amino acids that cannot be synthesized by the body are _____.
 - VI. _____ is a precursor of vitamin A.
 - VII. Carbohydrate in a plant is stored in the form of _____.
 - VIII. The actual requirement of folic acid is _____ mg/day for a normal healthy adult.
 - IX. Fatty acids in food are classified as _____ and _____.
 - X. _____ in an extracellular fluid is necessary for maintaining acid-base balance.
- Q.2. What are the five important stages of life cycle? Explain the nutrient needs of a low birth weight babies. (10)
- OR
- Write a short note on importance and role of sodium and potassium in our body.
- Q.3. Describe the physiological changes that occur in aging and explain the nutritional changes required to maintain healthy aging. (10)
- OR
- What are the components of dietary fibre? Discuss the health benefits of dietary fibre.
- Q.4. Briefly explain any two: (10)
- a) Role of Community Nutritionist
 - b) One serving portion of food
 - c) Glycaemic index
- Q.5. Write short notes on any two: (10)
- a) Dietary fibre
 - b) Biological value
 - c) Demography
- Q.6. Briefly explain the complications that can be faced by a pregnant lady. (10)
- OR
- Write a short note on health system in India.
- Q.7. Enumerate the functions, deficiency and sources of vitamin A and D. (10)
- Q.8. How does the protein affect the process of growth and development during childhood? Write an RDA for protein, calcium and fat during childhood. (10)
- OR
- Differentiate between fat soluble and water soluble vitamins with example.

CODE: DH

COURSE : Post Gradu
SUBJECT : Nutrition I
TIME ALLOWED : 2 Ho
(Mar

Q.1 Discuss the Principles of

Q.9. What do you understand by primary health care? Why maintaining a good primary health care system is important. (10)

OR

Define adolescence. Discuss the factors that influence the feeding pattern during adolescence.

Q.10. Briefly explain the classification of fat and its requirement at various stages of life cycle. (10)

OR

Describe following in one or two lines.

- a) Vitamin K
- b) Scurvy
- c) Rickets
- d) NPU

-----X-----X-----

**FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22**

COURSE : Post Graduate Diploma in Dietetics & Hospital Food Service

SUBJECT : Nutrition Industry Management-I

TIME ALLOWED : 2 Hours

Semester: Ist Semester End Term

MAX. MARKS: 50

(Marks allotted to each question are given in brackets)

Q.1 Discuss the Principles of Scientific Management given by Taylor? 10
OR

Discuss The Functions of Management in detail?

Q.2 Write short notes on (2x5=10)
a) Staff b) TQM

OR

Discuss The Atherosclerosis in detail? (10)

Q3. Discuss the following :- (2x5=10)
a) Dyslipidaemia b) Glycaemic Index (GI)

OR

a) Financial Accounting b) Management of Accounting

Q.4 Discuss the Management of Diabetes Mellitus by MNT (10)
OR

Discuss the Complication of Diabetes Mellitus in detail?

Q.5 Fill in the blanks: - (1x1=10)

- 1) Full form of PCOD
- 2) Theof food is how long it may be stored before the quality deteriorates.
- 3) Name any two important principles of managementand
- 4) Classical sign of Diabetes Mellitus are,, and
- 5) Father of Scientific Management is
- 6) Full form of HBA1C is
- 7) Managing Director is the position of Level of management in a large company.
- 8) Space, Material and staff are management of
- 9) The condition of High Blood pressure is known as
- 10) Full Form of GDM is

FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22

COURSE : Post Graduate Diploma in Dietetics & Hospital Food Service
SUBJECT : Food Safety in Food Service Establishment
TIME ALLOWED : 2 Hours

Semester: 1st Semester End Term
MAX. MARKS: 50

(Marks allotted to each question are given in brackets)

1. Define fermentation and explain step by step process of fermentation? [10]
 OR
 Explain how microorganisms are important in food and agriculture industries?
2. Describe various factors which influence the growth of bacteria. Explain bacterial growth curve with diagram. [10]
 OR
 How does microbial activity affect food preservation? Discuss various methods of food preservation.
3. (a) Discuss the objectives of food packaging. [05]
 (b) Write basic principles of food safety risk management. [05]
 OR
 What do you understand by food adulteration? Discuss any three methods used for detection of adulterants. [10]
4. Write short notes on any four [4X 2.5]
 - (i) Bar coding
 - (ii) Structure of fungi
 - (iii) HACCP plan
 - (iv) Genetically modified tomatoes
 - (v) Antibiotics
 - (vi) Wine
5. Fill in the blanks [1X10]
 - (i) enzyme acts as an oxygen scavenging system.
 - (ii) Fermented soyabean is
 - (iii) Presence of starch in milk can be detected with the help of.....
 - (iv) GMP refers to.....
 - (v) causes botulism.
 - (vi) is known of Father of Microbiology.
 - (vii) Viral genome is surrounded by protein shell known as
 - (viii) Study of fungi is called.....
 - (ix) are those substances which are used for making the products unsafe for human health consumption.
 - (x) resist decolorization with acid alcohol due to complex cell wall.

Q-8 Write a short note on any Two of the following: -

- 1) Lactose Intolerance.
- 2) Composition of WHO oral rehydration Salt solution
- 3) Cause of Diarrhoea
- 4) Types of Constipation
- 5) Celiac disease

Q-9 Explain any five of the following in 2-3 sentences:-

- 1) Cholecystitis
- 2) Mal absorption syndrome
- 3) Two functions of the liver
- 4) List two foods to be avoided in Peptic Ulcer Patient's diet and give the reason for it.
- 5) Gastritis
- 6) Nutritional management in hiatus hernia.
- 7) Crohn's disease

Q-10 Fill in the blanks:-

1. is a condition in which there is the destruction of the liver cell due to necrosis.
2. The is the largest internal organ of the human body that constitutes about 2.5-3% of the body weight.
3. can be defined as the uncontrolled growth of abnormal cells anywhere in the body.
4. Damage to liver cells leads to an increase in bilirubin resulting in
5. are the functional unit of the kidney.
6. Two basic kinds of dialysis are &
7. The full form of GERD is
8. may be defined as less than three motions or as painful or difficult defecation.
9. is performed when a person experiences kidney failure usually more than 90 %
10. often called Gluten-sensitive enteropathy.

-----x-----x-----

Post Graduate
CT : Nutritional Pe
ALLOWED : 3 Hours
(Marks al)
Describe iron deficiency
Control Programme
Write a

(5x2=10)

(10x1= 10)

**FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22**

E : Post Graduate Diploma in Dietetics & Hospital Food Service

SUBJECT : Nutritional Perspective in Community-II

Semester/Term: IIInd Semester/End Term

TIME ALLOWED : 3 Hours

MAX. MARKS: 100

(Marks allotted to each question are given in brackets)

1. Describe iron deficiency anaemia and its treatment . Briefly explain about National Nutritional Anaemia Control Programme. [10]

2. Write short notes on (any two) [2X5]
 - a) Vitamin D deficiency
 - b) Malnutrition
 - c) Iodine deficiency

3. Discuss various strategies for combating public nutrition problems. [10]

OR

What are different types of nutrition communication methods? Explain briefly. [10]

4. Explain any two of the following [2X5]
 - a) Food fortification
 - b) Nutritional education
 - c) Immunization

5. Differentiate between food allergy and food intolerance. Discuss various procedure to detect food allergies. [10]

OR

Explain different types of allergies. Briefly describe the symptoms and risk factors associated with allergies. [10]

6. Define inborn errors of metabolism. Discuss one disorder each of carbohydrate and protein metabolism. [10]

7. Explain how biochemical assessments are used to assess nutritional status? Discuss with its advantages and disadvantages. [10]

OR

What are the different strategies, guidelines, plan and assessment of training programme? [10]

8. Explain the difference between nutritional screening and nutritional assessment. [10]

9. What do you understand by protein energy malnutrition? Discuss the biochemical changes and clinical symptoms associated with PEM. [10]

523

AMUC
Graduate Diploma in Diet
Nutrition Industry Manage
-OWED: 2 HOURS
Define merchandising skills.

(Marks allotted)
Q2. Explain following:
(a) Table d hote
(d) buffe

10. Fill in the blanks

- i. Maple syrup urine disease is a.....disorder.
- ii.is a medical equipment used for measuring human height.
- iii. RDA of iodine recommended for an adult women is
- iv. Person allergic tohave elevated serum IgE levels.
- v. Oral allergy syndrome is caused by.....
- vi.Interfere with activity of thyroxine to produce goiter inspite of normal intake of iodine.
- vii.a form of a contact allergic reaction that occurs upon contact of the mouth and throat with raw fruits or vegetables.
- viii.is a disorder in which red blood cells are destroyed faster than they can be made.
- ix. The physiological response to the body's need for food is.....
- x. ICDS stands for.....

-----X-----X-----

**FOOD CRAFT INSTITUTE, AMU CAMPUS ALIGARH
ACADEMIC YEAR 2021-22**

Post Graduate Diploma in Dietetics & Hospital Food Service

Subject: Sports Nutrition

Semester/Term: IInd Semester/End Term

Time Allowed: 3 Hours

MAX. MARKS: 100

(Marks allotted to each question are given in brackets)

- Q.1. Define sports science. Explain the role and involvement of different disciplines in sports science? (10)
- OR**
- What are acute responses and chronic Adaptation to exercise?
- Q.2. Describe the effect of exercise on the respiratory system OR cardiovascular system? (10)
- OR**
- Give a brief account of the skill-related components of physical fitness? (10)
- Q.3. Discuss the physiological measurement during training? (10)
- OR**
- Describe various types of exercises with examples? (10)
- Q.4. Explain the importance of nutrition during exercise. (10)
- OR**
- Discuss the most common causes of sports injuries and discuss any Five most common sports injuries?
- Q.5. Explain how dehydration affects sports performance during sports events? (10)
- Q.6. Differentiate between functional food and nutraceuticals? (10)
- Q.7. Explain the following terms. (5x2=10)
- | | | |
|----------------------|---------------------|--------------------------|
| a) Food Pyramid | b) R.I.C.E Protocol | c) Ball and socket joint |
| d) Sweat composition | e) M.E.A.T Protocol | |
- Q.8. Write a short note on any two of the following (2x5=10)
- | | | |
|------------------------|---------------------|------------------|
| a) Ligaments Vs Tendon | b) Colle's Fracture | c) First Aid Box |
|------------------------|---------------------|------------------|
- Q.9 Explain in brief any two of the following: (2x5=10)
- 3 R' S of Recovery
 - Principles of Training
 - Composition of WHO recommended ORS.

DHFS-23
FOOD CRAFTING ACADEMY
Post Graduate Diploma in Dietetics
Nutrition Industry Management-II
ALLOWED : 2 Hours
(Marks allotted to each question)
Q.1. Define Entrepreneur. Discuss the role of an Entrepreneur.
Q.2. Write short notes on:
a) Construction of a business plan.

Q.10 Fill in the blanks.

- 1) Hamstring injuries occur in part of the human body
- 2) is a fibrous connective tissue that connects bone to bone.
- 3) Total types of joints are present in the human body
- 4) The national sports Day in India is celebrated on
- 5) The World Health Day is celebrated on
- 6) The presence of sodium in the blood is called
- 7) The father of sports Medicine is
- 8) Cardiac output = stroke volume x
- 9) Patellar Tendinitis is also known as
- 10) Ankles, knees, and are most vulnerable to sprains.

-----x-----x-----