Subject : Food and Nutrition Course Title : Applied Physiology Subject Code : MFN -101 **Course Code : MFN -101**

			Maximum Marks: 30	
	Section – A		Maximum Marks: 18	
No		ong Answer type Questions. Answer should be given in 800 Answer all questions. All questions are compulsory) to 1000 words.	
1-	Illus	strate and label the four chambers of hearts. Briefly describe	the blood flow in the heart. 6	3
2-	a- D	ifferentiate between the bronchi and bronchioles.		6
	b- E	xplain the following terms and its significance-		
		Dxygen dissociation curve. Pulmonary volumes.		
3-	Wri	te down the functions and hormones secreted by the followin	g glands-	6
	b. A	Fhyroid gland Adrenal gland Pituitary gland		
		Section – B		
			Maximum Marks: 12	

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory

4- Briefly explain the physiology of lactation.	2
5- What type hormones are Secreted by the placenta and mention their role also.	2
6- What is mitosis? Explain its phases.	2
7- Explain the significance of thalamus and Hypothalamus in our brain.	2
8- List the functions of bile.	2
9- What is cardiac output? How is it calculated?	2

Master of Science Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition **Course Title :** Advanced Nutritional Biochemistry

Subject Code : MFN -102 **Course Code : MFN -102**

		Maximum Marks: 30	
	Section – A	Maximum Marks: 18	_
Not	Note: Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory		
1-	What are monosaccharide's, Polysaccharides and oligosaccharid	des ? Give	
	examples with their chemical structure.		6
2-	What are the chemical active forms of Thiamine, Riboflavin and N	Niacin? Mention their	
	role in metabolisms.		6
3-	Write down the significance of citric acid cycle. Describe the read	tions involved in ATP	
	generation in the cycle.		6

Section – B

Maximum Marks: 12

Note: Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory

4- Discuss briefly the chemistry and functions of phospholipids.	2
5- Present the structure and classification of nucleic acid.	2
6- How is biosynthesis of cholesterol regulated by the amount of cholesterol in diet	2
7- Define glycolysis and gluconeogenesis.	2
8- Write down the functions of plasma proteins.	2
9- Define proteoglycans.	2

Master of Science Food and Nutrition (M.Sc. FN)

Subject: Food and Nutrition Course Title: Advances in Food Microbiology Subject Code : MFN-103 Course Code : MFN -103

Maximum Marks: 30

6

Section – A

Maximum Marks: 18

Note: Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory

- Name a few diseases which are caused due to parasitic infection. Discuss any two in detail. 6
 Elaborate the factors affecting the growth of micro organisms.
- 3- Explain the term and their significance in the context of food preservation.
 - 1. Pasteurization
 - 2. Fermentation
 - 3. Irradiation

Section – B

Maximum Marks: 12

Note: Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory

4- What are the common hazards of food safety?	2
5- What do you understand by the positive aspects of microbial growth?	2
6- Enumerate the role of bacteria in spoilage of fruits and vegetables.	2
7- Suggest measures to reduce exposure to chemical contamination from the environment.	2
8- Define food contamination.	2
9- Enlist a few general requirements that are specific to the storage of foods.	2

Subject : Food and Nutrition Course Title :Practical Work Subject Code :MFN -104 Course Code : MFN -104

Practical Work- Based on Paper no. MFN-101,102,103

Utter Pradesh Rajarshi Tandon Open University, Prayagraj

Assignment-2020-2021

Master of Science Food and Nutrition (M.Sc. FN)

 Subject : Food and Nutrition
 Subject Code : MFN-105

 Course Title : FOOD SCIENCE AND EXPERIMENTAL COOKERY
 Course Code : MFN-105

Maximum Marks: 30

Section –A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question .1 - Describe the structure and composition of eggs and changes during storage

Question .1 Explain food and nutritional security. Describe the determinants of food security.

Question . – Explain the classification, composition proteins in cereals.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question .4-Leavened products

Question .5-Tenderization

Question .6-Nature of enzymes stability and action

Question .7-Fat deterioration and antioxidants

Question .8- Non enzymatic Browning.

Question .9-Gelatinization

Subject : Food and Nutrition Course Title :_Advanced Clinical and Therapeutic Nutrition Subject Code : MFN-106 Course Code : MFN-106

Maximum Marks: 30

Section – A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question 1. Briefly explain the dietary management of coronary heart disease with special emphasis on dietary fats and carbohydrate intake in the diet.

Question 2.elaborate on the role of sodium restrictions in the management of hypertension.

Question 3. Enumerate the common diets that are prescribed in the hospital situations. Discuss the role of dietitian in patient care.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question 1.discuss the medical nutrition therapy for typhoid and tuberculosis.

Question 2. enlist the classification metabolic and clinical manifestations of obesity.

Question 3. Enlist the dietary recommendations for the ulcerative colitis condition.

Question 4. Write down the management goals and nutritional recommendation for chronic renal failure.

Question 5. Suggest practical eating suggestions for symptoms management of of HIV and AIDS infected patients.

Question 6. Give the dietary and lifestyle management goals for constipation in adults.

Utter Pradesh Rajarshi Tandon Open University, Prayagraj

Assignment-2020--2021

Master of Science in Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition

Course Title : Research Methodology and Statistics Course Code : MFN- 107

Maximum Marks: 30

Subject Code : MFN -107

Section –A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question .1- Differentiate between the following research designs, giving appropriate examples.

I) Analytic study

2) Descriptive study

Question .2-_What is meant by sampling? With the help of an example, explain the concept of

random sampling, stratified sampling, cluster sampling and purposive sampling.

Question .3- How will you perform the following using MS Word : (i) Formatting Text (ii) Headers and Footers (iii) Use Format Painter

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question .4-_Frequency polygon

Question .5-_Mean and Median

Question .6-_concept of normal probability distribution.

Question .7- Briefly describe the Random Sampling.

Question .8- What is secondary data?

Question .9 Write down the importance of statistics in population studies.

Utter Pradesh Rajarshi Tandon Open University, Prayagraj

Assignment-2020-2021

Master of Science in Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition Subject Code : M.Sc. FN -2.5

Course Title : Food processing and technology Course Code : M.Sc. FN-2.5

Maximum Marks: 30

Section –A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question .1-Explain the various method food processing and its advantages in daily life.

Question .2-Explain the milk processing. Give some examples.

Question .3-Describe the Fruit and Vegetable Structure, composition, physiological and its biochemical changes during ripening.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question .4- Definition of food additives with example.

Question .5-Define the chelating agents.

Question .6- Write about Enrichment and fortification technology.

Question .7-Write about pasteurisation and homogenisation.

Question .8- Write about stabilizers and thickeners.

Question .9 Explain the Ageing and tenderising of Meat.

Subject : Food and Nutrition Course Title :Practical Work Subject Code :MFN -108 Course Code : MFN -108

Practical Work- Based on Paper no. MFN-105,106,107

Subject : Food and Nutrition Course Title : Advanced Community Nutrition Subject Code : MFN-109 Course Code : MFN-109

Maximum Marks: 30

Section – A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory

Question 1. Explain the term community nutrition. What are the main factors affect the community nutrition ?

Question 2.Explain any two nutritional programmes for the community health.

Question 3. Why is community participation important in the implementation of any nutrition program? Briefly describe the theories of nutrition education.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question 1. Differentiate between marasmus and kwashiorkor.

Question 2. Discuss some strategies to improve urban sanitization.

Question 3. Write the importance of dietary survey in community.

Question 4. Write the food based strategies to combat malnutrition.

Question 5.Discuss the role of mass media as a channel for nutrition communication.

Question 6. How can we find out the maternal and infant mortality rate in community.

Subject : Food and Nutrition Course Title : Advance Nutrition Subject Code : MFN -110 Course Code : MFN -110

Maximum Marks: 30

Section – A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory .

Question 1-Describe in detail the Composition, classification and functions of fats.

Question 2-Write in detail about the functions, dietary sources and effect of deficiency of Iron on Human body.

Question 3-Explain the nutritional need during old age. What are the factors that affects the food intake during old age.

Section – B

Maximum Marks: 12

Note : Short Answer Question. Answer should be written in 200 to 300 words. All questions are compulsory

Question 4- Write short comment on techniques for quality determination of protein .

Question 5-Explain the difference between contagious and non contagious diseases.

Question 6- Write a short note on food product order (FPO).

Question 7-What do you understand by supplementary food?

Question 8-What is NPU?

Question 9-Write the advantages of brain storming.

Master of Science Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition Course Title : Internship Subject Code : MFN -111 Course Code : MFN -111

Internship: Based on Overall Syllabus.

Note: Kindlly Contact to Your Study Centre Or Academic Main Campus.

Master of Science Food and Nutrition (M.Sc. FN)

Subject: Food and Nutrition Course Title: Food Processing and **Preservation Technology** Subject Code : MFN-112/115 Course Code : MFN-112/115

Maximum Marks: 30

Section – A

Maximum Marks: 18

Note: Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory

Note: Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory		
Section – B Maximum Marks: 12		
3- Describe Indigenous and modern methodology of food preservation techniques.	6	
2- Describe various types of food preservation methods.	6	
1- Describe the need and importance of food preservation. Explain with examples.	6	

4- Explain pasteurization.	2
5- Explain meat and meat products preservation and processing.	2
6- Explain about fermentation with examples.	2
7- Explain about fortification with examples.	2
8- Explain Indigenous methods of grain storage.	2
9- Briefly explain the principle of food preservation.	2

Master of Science Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition Course Title: Nutritional Management in Health and Diseases Subject Code : MFN-113 Course Code : MFN-113

Maximum Marks: 30

Section – A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question .1 -Give the nutritional guidelines you would advocate to develop good eating habits and good health among older school children and adolescents. The nutrient requirement for adults are influenced by age, sex and activity level. Justify the statement by giving appropriate examples.

Question.2-Give the nutritional management goals and dietary recommendation for a patient suffering from hepatic coma. What is gluten free diet? For which disease condition would you advocate this diet.

Question 3-Give the classification and etiology of diabetes. Discuss the relevance of the food exchange system in the dietary management of diabetes.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question .4-Enlist the foods you would include and restrict in the diet of patients suffering from Maple Syrup Urine Disease.

Question .5-List the foods you would include and restrict in the diet of patient suffering from chronic kidney disease.

Question .6-Give the dietary management of a patient suffering from typhoid.

Question .7-Write down the diary management of of a patient suffering from high blood pressure.

Question .8- What is ulcerative colitis? Enlist the dietary recommendations for this condition.

Question .9-Write down the role of antioxidants in Cancer prevention.

Subject : Food and Nutrition Course Title: Nutrition Policies and Intervention Subject Code : MFN-114/117 Course Code : MFN-114/117 Maximum Marks: 30

Section – A

Maximum Marks: 18

Note : Long Answer type Questions. Answer should be given in 800 to 1000 words. Answer all questions. All questions are compulsory.

Question 1. Discuss about the main purpose of the nutrition programs? What is nutrition education program and how can it implement in the community.

Question 2. Discuss about any two nutritional programmes run by government for the well being of community.

Question .3- Describe the role of women in National and community development. -Explain the role of education and various national schemes and policies for the empowerment of Women.

Section – B

Maximum Marks: 12

Note : Short Answer type Questions. Answer should be given in 200 to 300 words. All questions are compulsory.

Question 1- Write about the Situation of women in global, national and in local context.

Question 2. Explain the nutritional management for healthy lifestyle.

Question 3-Enlist 5 government programs run for the welfare of children.

Question 4-Write about the aim of ICDS programme.

Question 4-Describe the intervention program.

Question 4-Breifly explain the immunization chart.

Master of Science Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition Course Title : Dissertation

Subject Code : MFN -118 Course Code : MFN -118

Dissertation : Based on Overall Syllabus.

Note: Kindlly Contact to Your Study Centre Or Academic Main Campus.