| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|---------------------------------|
| Program Name: MFN | |
| Course Code: MFN 101 | Course Name: Applied Physiology |

| | 2*6=12 marks | | | | |
|--------|---|-------|---------|---------------|--|
| Q. No. | Q. No. UNIT 8 Short answer type question Marks Mapped | | | | |
| | (approx. 200-300 words) | | CO | | |
| 1. | | 2 | 1, 3, 5 | Remembering & | |
| | Explain urine formation. | | | understanding | |
| | UNIT 5 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 2. | Explain role of liver in the body. | 2 | 1, 5 | Remembering & | |
| | | | | understanding | |
| | UNIT 2 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 3. | What is CSF? | 2 | 5 | Remembering & | |
| | | | | understanding | |
| | UNIT 1 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 4. | Briefly describe regulation of cell multiplication. | 2 | 1, 5 | Remembering & | |
| | | | | understanding | |
| | UNIT 11 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 5. | What is spermatogenesis? | 2 | 5 | Remembering & | |
| | | | | understanding | |
| | UNIT 10 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 6. | Define antigen and antibody | 2 | 1,5 | Remembering & | |
| | | | | understanding | |
| | SECTION- B | | | 6*3=18 marks | |
| | UNIT 3 Long answer type question | Marks | Mapped | Category | |
| | (approx. 500-800 words) | | CO | | |
| 7. | Discuss the major endocrine glands and the | 6 | 1, 5 | Analyzing & | |
| | hormones they secrete. Describe the functions of | | | understanding | |
| | these hormones and their effects on target organs and body processes. | | | | |
| | UNIT 4 Long answer type question | | | | |
| | (approx. 500-800 words) | | | | |
| 8. | Describe the structure and function of the major | 6 | 1, 5 | Analyzing & | |
| | sense organs in the human body. | - | , - | understanding | |

| | UNIT 7 Long answer type question (approx. 500-800 words) | | | |
|----|--|---|------------|---------------------------|
| 9. | Describe role of kidney in maintaining pH of blood. | 6 | 1, 3, 4, 5 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|-----------------------------------|
| Program Name: MFN | |
| Course Code: MFN 102 | Course Name: Advanced Nutritional |
| | Biochemistry |

| | SECTION- A | | | 2*6=12 marks |
|--------|--|-------|--------------|-----------------------------|
| Q. No. | UNIT 3 Short answer type question (approx. 200-300 words) | Marks | Mapped CO | Category |
| 1. | Explain glycolysis and gluconeogenesis | 2 | 2 | Remembering & understanding |
| | UNIT 4 Short answer type question (approx. 200-300 words) | | | |
| 2. | What is purine? | 2 | 1, 2, 5 | Remembering & understanding |
| | UNIT 9 Short answer type question (approx. 200-300 words) | | | |
| 3. | Describe the relationship between carbohydrate metabolism and cardiovascular diseases, particularly atherosclerosis? | 2 | 1 | Remembering & understanding |
| | UNIT 5 Short answer type question (approx. 200-300 words) | | | |
| 4. | What is the primary purpose of DNA repair systems in cells? | 2 | 1, 3, 5 | Remembering & understanding |
| | UNIT 1 Short answer type question (approx. 200-300 words) | | | |
| 5. | What role do enzymes play in breaking down foreign compounds during metabolism? | 2 | 1, 3 | Remembering & understanding |
| | UNIT 3 Short answer type question (approx. 200-300 words) | | | |
| 6. | Define cholesterol. | 2 | 1 | Remembering & understanding |
| | SECTION- B | • | • | 6*3=18 marks |
| | UNIT 2 Long answer type question (approx. 500-800 words) | Marks | Mapped CO | Category |
| 7. | What are plasma proteins, and how do they contribute to the structure and function of blood plasma? | 6 | 1, 2 | Analyzing & understanding |
| | UNIT 7 Long answer type question (approx. 500-800 words) | | | |

| 8. | Explain the role of iron, manganese, and | 6 | 1, 3 | Analyzing & |
|----|--|---|------|---------------|
| | copper in facilitating redox reactions and | | | understanding |
| | electron transfer within cells. | | | |
| | UNIT 6 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 9. | Describe the process of negative feedback | 6 | 1, 2 | Analyzing & |
| | in hormone regulation. How does it help | | | understanding |
| | maintain homeostasis and prevent | | | |
| | overstimulation of target cells? | | | |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|--|
| Program Name: MFN | |
| Course Code: MFN 103 | Course Name: Advances in Food Microbiology |

| | SECTION- A | | | 2*6=12 marks |
|--------|---|-------|---------|---------------|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | Name five food items in which spoilage occur due | 2 | 1, 2 | Remembering & |
| | to salmonella group. | | | understanding |
| | UNIT 8 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | Define FSSAI. | 2 | 1 | Remembering & |
| | | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | Define bacteria and their types. | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | Define ELISA and ATP measurement. | 2 | 3 | Remembering & |
| | | | | understanding |
| | UNIT 7 Short answer type question | | | |
| | (approx. 200-300 words) | _ | | |
| 5. | Name three viral food borne diseases and briefly explain them. | 2 | 1, 2 | Remembering & |
| | _ | | | understanding |
| | UNIT 6 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | What is high pressure processing? | 2 | 3, 4 | Remembering & |
| | GD GWYGAY D | | | understanding |
| | SECTION- B | 36.5 | 7.6 | 6*3=18 marks |
| | UNIT 3 Long answer type question | Marks | Mapped | Category |
| _ | (approx. 500-800 words) | | CO | |
| 7. | Define intrinsic and extrinsic parameters that affect microbial growth. | 6 | 2, 3 | Analyzing & |
| | - | | 1 | understanding |
| | UNIT 6 Long answer type question | | | |
| 0 | (approx. 500-800 words) | | 1.0.0 | |
| 8. | Why is food preservation crucial? Discuss the significance of food preservation in terms of | 6 | 1, 2, 3 | Analyzing & |
| | preventing food borne illnesses. | | | understanding |
| | 1 | 1 | 1 | 1 |

| | UNIT 9 Long answer type question (approx. 500-800 words) | | | | |
|----|--|---|---|-------------------------|---|
| 9. | Describe HACCP system. | 6 | 3 | Analyzing understanding | & |

| Session: 2023-2024 | Max. Marks: 30 |
|-----------------------|--|
| Program Name: MFN | |
| Course Code: MFNBR 01 | Course Name: Basics in Research Course |

| | 2*6=12 marks | | | |
|--------|--|-------|---------|---------------|
| Q. No. | Topic 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | What is primary, secondary and tertiary sources? | 2 | 1, 3 | Remembering & |
| | | | | understanding |
| | Topic 1 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | Define E- Journals and E- Books. | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | Topic 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | Define GI and trademark. | 2 | 5 | Remembering & |
| | | | | understanding |
| | Topic 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | What is copyright? | 2 | 5 | Remembering & |
| | | | | understanding |
| | Topic 2 5 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | Name some regulatory bodies of research ethics | 2 | 5 | Remembering & |
| | | | | understanding |
| | Topic 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Define the process of filing patent. | 2 | 5 | Remembering & |
| | | | | understanding |
| | SECTION- B | | _ | 6*3=18 marks |
| | Topic 1 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | Why is it essential for researchers to conduct a | 6 | 1, 2, 3 | Analyzing & |
| | thorough review of existing literature before embarking on their own research projects | | | understanding |
| | Topic 2 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 8. | What are the fundamental principles of research | 6 | 5 | Analyzing & |
| | ethics, and why are they essential for maintaining | | | understanding |

| | the integrity and credibility of scientific investigations? | | | |
|----|---|---|---------|---------------------------|
| | Topic 1 Long answer type question (approx. 500-800 words) | | | |
| 9. | Define some search engines. | 6 | 1, 3, 5 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|--|
| Program Name: MFN | |
| Course Code: MFN 105 | Course Name: Food Science and Experimental |
| | Cookery |

| | SECTION- A | | | 2*6=12 marks |
|--------|---|-------|---------|---------------------------|
| Q. No. | UNIT 12 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | Explain the importance of nitrogen-fixing ability | 2 | 1 | Remembering & |
| | in legumes. | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | What is Millard reaction? | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | Water activity. | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 8 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | What is nature of enzymes? | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 10 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | Name some properties of eggs. | 2 | 1, 2, 3 | Remembering & |
| | | | | understanding |
| | UNIT 14 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Explain the purpose of food preservation methods | 2 | 1, 2, 3 | Remembering & |
| | canning and drying. | | | understanding |
| | SECTION- B | 1 | | 6*3=18 marks |
| | UNIT 2 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | Explain physical, chemical and functional properties of food. | 6 | 1, 2 | Analyzing & |
| | | | | understanding |
| | UNIT 5 Long answer type question | | | |
| | (approx. 500-800 words) | _ | | |
| 8. | Describe wheat structure and composition. | 6 | 1, 2, 3 | Analyzing & understanding |
| | UNIT 9 Long answer type question | | | |

| | (approx. 500-800 words) | | | |
|----|--|---|---------|---------------|
| 9. | Explain milk's physical and functional properties. | 6 | 1, 2, 3 | Analyzing & |
| | | | | understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|-----------------------------------|
| Program Name: MFN | |
| Course Code: MFN 106 | Course Name: Advance Clinical and |
| | Therapeutic Nutrition |

| | SECTION- A | | | 2*6=12 marks |
|--------|---|-------|--------------|-----------------------------|
| Q. No. | UNIT 5 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | How we can manage sarcopenia? | 2 | 1, 2 | Remembering & understanding |
| | UNIT 4 Short answer type question (approx. 200-300 words) | | | |
| 2. | What is the difference between enteral and parenteral nutrition methods? | 2 | 2, 3 | Remembering & understanding |
| | UNIT 2 Short answer type question (approx. 200-300 words) | | | |
| 3. | Explain the concept of personalized nutrition and its role in tailoring dietary advice to individual needs. | 2 | 2, 3 | Remembering & understanding |
| | UNIT 5 Short answer type question (approx. 200-300 words) | | | |
| 4. | What are the clinical consequences of weight imbalances? | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 6 Short answer type question (approx. 200-300 words) | | | |
| 5. | What role does medical nutritional management play in immune deficiency and genetic disorders? | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 1 Short answer type question (approx. 200-300 words) | | | |
| 6. | Define BMI and BMR | 2 | 1, 3 | Remembering & understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 1 Long answer type question (approx. 500-800 words) | Marks | Mapped CO | Category |
| 7. | Explain how anthropometric measurements play a role in assessing nutritional status. | 6 | 1, 2, 3 | Analyzing & understanding |
| | UNIT 6 Long answer type question (approx. 500-800 words) | | | |
| 8. | Discuss the importance of a specialized diet in the management of specific inborn errors of metabolism. Provide examples of dietary | 6 | 1, 2, 3 | Analyzing & understanding |

| | approaches for disorders like phenylketonuria | | | |
|----|---|---|---------|---------------|
| | (PKU), maple syrup urine disease (MSUD), and | | | |
| | galactosemia | | | |
| | UNIT 5 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 9. | Explain nutritional management of diabetes | 6 | 1, 2, 3 | Analyzing & |
| | mellitus. | | | understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|-----------------------------|
| Program Name: MFN | |
| Course Code: MFN 107 | Course Name: Bio Statistics |

| | 2*6=12 marks | | | |
|--------|--|-------|---------|---------------|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | Name three measures of central tendency | 2 | 1, 5 | Remembering & |
| | | | | understanding |
| | UNIT 3 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | What is the probability density function (PDF)? | 2 | 1, 2, 5 | Remembering & |
| | | | | understanding |
| | UNIT 5 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | What is the null hypothesis, and why is it | 2 | 1, 3 | Remembering & |
| | important in hypothesis testing? | | | understanding |
| | UNIT 5 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | Explain the concept of Type I and Type II errors. | 2 | 1, 3 | Remembering & |
| | | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | What is randomization, and why is it important in | 2 | 1, 3 | Remembering & |
| | experimental design? | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Define the term "big data" in the context of | 2 | 1 | Remembering & |
| | biostatistics. | | | understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 2 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | How does regression analysis help in | 6 | 1, 4, 5 | Analyzing & |
| | understanding the relationships between variables | | | understanding |
| | in biological datasets, and what are the different types of regression models used in biostatistics? | | | |
| | UNIT 1 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 8. | Explain the key measures of central tendency and | 6 | 1, 4, 5 | Analyzing & |
| 0. | variability, and provide examples of their use in | | 1, 7, 3 | understanding |
| | biostatistics? | | | anacistanding |

| | UNIT 3 Long answer type question (approx. 500-800 words) | | | |
|----|---|---|---------|---------------------------|
| 9. | How does probability theory play a role in understanding uncertainty in biological data, and what are the common probability distributions used in biostatistical analysis? | 6 | 1, 4, 5 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|---|
| Program Name: MFN | |
| Course Code: MFN 109 | Course Name: Advance Community Nutrition |

| | SECTION- A | | | |
|--------|--|-------|--------|---------------|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | Explain the concept of a food desert | 2 | 1 | Remembering & |
| | | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | What are the key objectives of community | 2 | 1, 3 | Remembering & |
| | nutrition programs? | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | Describe post-harvest handling.2 | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 3 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | Define some micronutrient deficiency. | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 8 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | What is respiratory fitness? | 2 | 1,2 | Remembering & |
| | | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Briefly describe five plans run by ICDS. | 2 | 1, 3 | Remembering & |
| | | | | understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 7 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | Outline the step-by-step process of conducting a | 6 | 1, 2 | Analyzing & |
| | thorough nutritional assessment. | | | understanding |
| | UNIT 4 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 8. | Discuss the role of community-based nutrition | 6 | 1, 2 | Analyzing & |
| | programs in promoting healthy eating habits. | | | understanding |
| | UNIT 9 Long answer type question | | | |

| | (approx. 500-800 words) | | | |
|----|--|---|---------|---------------|
| 9. | Explore the relationship between community | 6 | 1, 2, 3 | Analyzing & |
| | nutrition and chronic disease prevention. | | | understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|--------------------------|
| Program Name: MFN | |
| Course Code: MFN 110 | Course Advance Nutrition |

| | SECTION- A | | | 2*6=12 marks |
|--------|--|-------|--------|---------------|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | Explain metabolism. | 2 | 1 | Remembering & |
| | | | | understanding |
| | UNIT 5 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 2. | Define osmolality | 2 | 1, 3 | Remembering & |
| | | | | understanding |
| | UNIT 1 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | Define BMI and BMR. Also write their formula. | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 8 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | What is lecithin and saponins? | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 7 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | Name some diseases caused by the deficiency of | 2 | 1,2 | Remembering & |
| | fat-soluble vitamins. | | | understanding |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Differentiate between n-3 and n-6 fatty acids. | 2 | 1, 3 | Remembering & |
| | | | | understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 2 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | Define digestion and classification of | 6 | 1, 2 | Analyzing & |
| | carbohydrate. | | | understanding |
| | UNIT 3 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 8. | Define essential and non-essential amino acids | 6 | 1, 2 | Analyzing & |
| | | | | understanding |
| | UNIT 7 Long answer type question | | | |

| | (approx. 500-800 words) | | | |
|----|----------------------------------|---|---------|---------------|
| 9. | Describe water soluble vitamins. | 6 | 1, 2, 3 | Analyzing & |
| | | | | understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|------------------------|---|
| Program Name: MFN | |
| Course Code: MFNRT 03N | Course Name: Research Tools and Practices |

| | SECTION- A | | | | |
|--------|--|-------|--------------|-----------------------------|--|
| Q. No. | TOPIC 1 Short answer type question | Marks | Mapped | Category | |
| | (approx. 200-300 words) | | CO | | |
| 1. | Define different uses of MS office. | 2 | 1, 2 | Remembering & understanding | |
| | TOPIC 1 Short answer type question (approx. 200-300 words) | | | - | |
| 2. | How can you import data from external sources, such as databases or websites, into Excel? | 2 | 1, 2 | Remembering & understanding | |
| | TOPIC 1 Short answer type question (approx. 200-300 words) | | | | |
| 3. | What is powerpoint? | 2 | 1, 2 | Remembering & understanding | |
| | TOPIC 3 Short answer type question (approx. 200-300 words) | | | | |
| 4. | Describe EndNote. | 2 | 1, 4, 5 | Remembering & understanding | |
| | TOPIC 2 Short answer type question (approx. 200-300 words) | | | | |
| 5. | What is SPSS? | 2 | 1, 3 | Remembering & understanding | |
| | TOPIC 1 Short answer type question (approx. 200-300 words) | | | | |
| 6. | How do you create a new worksheet in Excel? | 2 | 1, 2 | Remembering & understanding | |
| | SECTION- B | | | 6*3=18 marks | |
| | TOPIC 2 Long answer type question (approx. 500-800 words) | Marks | Mapped CO | Category | |
| 7. | What are the various forms of plagiarism, ranging from verbatim copying to paraphrasing, and how do they differ in terms of ethical and academic implications? | 6 | 1, 3 | Analyzing & understanding | |
| | TOPIC 2 Long answer type question (approx. 500-800 words) | | | | |
| 8. | Can you elaborate on the consequences of plagiarism? | 6 | 1, 3 | Analyzing & understanding | |

| | TOPIC 3 Long answer type question (approx. 500-800 words) | | | |
|----|---|---|---------|---------------------------|
| 9. | How does Mendeley software streamline the process of academic research, from organizing references and citations to facilitating collaboration among researchers? | 6 | 1, 4, 5 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|---------------------------------|----------------------------------|
| Program Name: MFN | |
| Course Code: MFN 113 7080924537 | Course Name: Food Processing and |
| | Preservation Technology |

| | SECTION- A | | | 2*6=12 marks |
|--------|--|-------|---------|---------------|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | What are the best practices for storing | 2 | 1 | Remembering & |
| | perishable and non-perishable food items to | | | understanding |
| | maximize their longevity? | | | |
| | UNIT 4 Short answer type question | | | |
| | (approx. 200-300 words) | _ | | |
| 2. | Explain the concept of 3D food printing? | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 10 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 3. | What is nanotechnology? | 2 | 1, 2 | Remembering & |
| | | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 4. | What are the primary methods used in food | 2 | 1, 2 | Remembering & |
| | processing? | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 5. | What is freeze-drying, and what are its advantages | 2 | 1, 2, 3 | Remembering & |
| | in preserving food? | | | understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | What is the importance of temperature control and | 2 | 1, 2 | Remembering & |
| | monitoring in food processing equipment? | | , | understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 4 Long answer type question | Marks | Mapped | Category |
| | (approx. 500-800 words) | | CO | |
| 7. | What are the intricate steps and key stages | 6 | 1, 2, 3 | Analyzing & |
| | involved in the wheat milling process, including | | | understanding |
| | the initial cleaning and conditioning of wheat | | | 8 |
| | grains? | | | |
| | UNIT 8 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 8. | Describe salting, sugaring, curing and smoking | 6 | 1, 2, 3 | Analyzing & |

| | methods of preservation. | | | understanding |
|----|--|---|---------|---------------------------|
| | UNIT 5 Long answer type question (approx. 500-800 words) | | | |
| 9. | What role does dehydration play in food processing, and how does it affect the nutritional value of foods? | 6 | 1, 2, 3 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 | | |
|----------------------|---|--|--|
| Program Name: MFN | | | |
| Course Code: MFN 114 | Course Nutritional Management in Health and | | |
| | Diseases | | |

| | SECTION- A | | | 2*6=12 marks |
|--------|---|-------|--------------|-----------------------------|
| Q. No. | UNIT 4 Short answer type question (approx. 200-300 words) | Marks | Mapped CO | Category |
| 1. | Discuss the role of antioxidants and omega-3 fatty acids in promoting cognitive health in older adults | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 4 Short answer type question (approx. 200-300 words) | | | |
| 2. | What dietary recommendations are important for the elderly? | 2 | 1, 2 | Remembering & understanding |
| | UNIT 5 Short answer type question (approx. 200-300 words) | | | |
| 3. | What are the challenges associated with fad diets, and why are they often ineffective in the long term? | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 7 Short answer type question (approx. 200-300 words) | | | |
| 4. | How does malnutrition affect health, and what are the signs of malnutrition? | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 9 Short answer type question (approx. 200-300 words) | | | |
| 5. | Describe the nutritional considerations for individuals with food allergies or intolerances. | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 6 Short answer type question (approx. 200-300 words) | | | |
| 6. | What dietary recommendations for Constipation? | 2 | 1, 2,3 | Remembering & understanding |
| | SECTION- B | | - I | 6*3=18 marks |
| | UNIT 2 Long answer type question (approx. 500-800 words) | Marks | Mapped CO | Category |
| 7. | How does the body use carbohydrates, fats, and proteins for energy and growth? | 6 | 2, 3 | Analyzing & understanding |
| | UNIT 9 Long answer type question | | | |

| | (approx. 500-800 words) | | | |
|----|--|---|------|---------------------------|
| 8. | What role does vitamin D play in bone health, and how can deficiencies be prevented through diet | 6 | 2, 3 | Analyzing & understanding |
| | UNIT 3 Long answer type question (approx. 500-800 words) | | | |
| 9. | What are the Factors affecting meal planning? | 6 | 1 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 | |
|----------------------|-------------------------------------|--|
| Program Name: MFN | | |
| Course Code: MFN 115 | Course Name: Nutrition Policies and | |
| | Intervention of Programs | |

| | SECTION- A | | | 2*6=12 marks |
|--------|--|-------|--------------|-----------------------------|
| Q. No. | UNIT 6 Short answer type question | Marks | Mapped | Category |
| | (approx. 200-300 words) | | CO | |
| 1. | How do food labelling and regulation policies influence consumer food choices and health? | 2 | 1, 2 | Remembering & understanding |
| | UNIT 4 Short answer type question (approx. 200-300 words) | | | |
| 2. | Explain the importance of monitoring and evaluation in nutrition policy implementation? | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 3 Short answer type question (approx. 200-300 words) | | | |
| 3. | Name some state plan of action on nutrition. | 2 | 1, 2, 3 | Remembering & understanding |
| | UNIT 4 Short answer type question (approx. 200-300 words) | | | |
| 4. | Explain significance of poverty line. | 2 | 1, 2 | Remembering & understanding |
| | UNIT 1 Short answer type question (approx. 200-300 words) | | | |
| 5. | Describe pilot and prototype studies. | 2 | 1, 2 | Remembering & understanding |
| | UNIT 2 Short answer type question | | | |
| | (approx. 200-300 words) | | | |
| 6. | Discuss Sussman's four-step model. | 2 | 1, 2, 3 | Remembering & understanding |
| | SECTION- B | | | 6*3=18 marks |
| | UNIT 11 Long answer type question (approx. 500-800 words) | Marks | Mapped CO | Category |
| 7. | What is the role of government in shaping and implementing nutrition policies? | 6 | 1, 2, 3, 4 | Analyzing & understanding |
| | UNIT 13 Long answer type question (approx. 500-800 words) | | | |
| 8. | How do nutrition programs combat malnutrition and food insecurity in developing countries? | 6 | 1, 2, 3 | Analyzing & understanding |
| | UNIT 6 Long answer type question | | | |

| | (approx. 500-800 words) | | | |
|----|---|---|------------|---------------|
| 9. | What are some examples of successful national | 6 | 1, 2, 3, 4 | Analyzing & |
| | nutrition initiatives? | | | understanding |

| Session: 2023-2024 | Max. Marks: 30 | |
|----------------------|---|--|
| Program Name: MFN | | |
| Course Code: MFN 117 | Course Name: Food Safety and Quality Control | |

| | SECTION- A | | | | |
|--------|---|----------|---------|---------------|--|
| Q. No. | UNIT 1 Short answer type question | Marks | Mapped | Category | |
| | (approx. 200-300 words) | | CO | | |
| 1. | What role do consumers play in food safety? | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 2 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 2. | What are some key principles of microbiological | 2 | 1, 2 | Remembering & | |
| | testing in food quality control? | | | understanding | |
| | UNIT 3 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 3. | How can food manufacturers prevent | 2 | 1, 2, 3 | Remembering & | |
| | contamination by pathogenic bacteria like | | | understanding | |
| | Salmonella and E. coli? | | | | |
| | UNIT 4 Short answer type question | | | | |
| 4 | (approx. 200-300 words) | 2 | 1.0 | D 1 1 0 | |
| 4. | What are some examples of critical control points in food processing? | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 2 Short answer type question | | | | |
| | (approx. 200-300 words) | | 1.0 | | |
| 5. | Explain FEFO model. | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 6 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 6. | Provide examples of product recalls and their | 2 | 1, 2, 3 | Remembering & | |
| | impact on consumer protection? | | | understanding | |
| | SECTION- B | T | | 6*3=18 marks | |
| | UNIT 1 Long answer type question | Marks | Mapped | Category | |
| | (approx. 500-800 words) | | CO | | |
| 7. | How does proper hand hygiene contribute to food | 6 | 1, 2 | Analyzing & | |
| | safety in food handling and preparation? | | | understanding | |
| | UNIT 2 Long answer type question | | | | |
| | (approx. 500-800 words) | | | | |
| 8. | What methods can be employed to extend the shelf | 6 | 1, 2 | Analyzing & | |
| | life of perishable foods? | | | understanding | |

| | UNIT 5 Long answer type question (approx. 500-800 words) | | | |
|----|---|---|---------|---------------------------|
| 9. | What is the purpose of food safety audits, and who conducts them? | 6 | 1, 2, 3 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|---------------------------------|
| Program Name: MFN | |
| Course Code: MFN 118 | Course Name: Institutional Food |
| | Administration |

| | SECTION- A | | | | |
|--------|--|-------|------------|---------------|--|
| Q. No. | UNIT 4 Short answer type question | Marks | Mapped | Category | |
| | (approx. 200-300 words) | | CO | | |
| 1. | Explain budgeting and control cost. | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 1 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 2. | Give examples of successful institutional catering | 2 | 1, 2 | Remembering & | |
| | programs? | | | understanding | |
| | UNIT 9 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 3. | Describe meal tracking software. | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 7 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 4. | What is consumer feedback program? | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 4 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 5. | Describe some modes of food delivery. | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 5 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 6. | What we should keep in mind while selecting a | 2 | 1, 2 | Remembering & | |
| | place for restaurant? | | | understanding | |
| | SECTION- B | | | 6*3=18 marks | |
| | UNIT 5 Long answer type question | Marks | Mapped | Category | |
| | (approx. 500-800 words) | | CO | | |
| 7. | How do food service managers plan and oversee | 6 | 1, 2, 3 | Analyzing & | |
| | large-scale meal preparation and service in institutional settings like hospitals and schools? | | | understanding | |
| | UNIT 4 Long answer type question | | | | |
| | (approx. 500-800 words) | | | | |
| Q | What are the key considerations in menu planning | 6 | 1 2 2 4 | Analyzina 0- | |
| 8. | Trial are the key considerations in menu planning | U | 1, 2, 3, 4 | Analyzing & | |

| | for institutional food service? | | | understanding |
|----|--|---|---------|---------------------------|
| | UNIT 7 Long answer type question (approx. 500-800 words) | | | |
| 9. | Explain the role of dietitians and nutritionists in institutional food administration. | 6 | 1, 2, 4 | Analyzing & understanding |

| Session: 2023-2024 | Max. Marks: 30 |
|----------------------|---|
| Program Name: MFN | |
| Course Code: MFN 119 | Course Name: Nutrition in Emergencies and |
| | Disasters |

| | SECTION- A | | | | |
|-----------|--|-------|---------|---------------------------|--|
| Q. No. | UNIT 2 Short answer type question | Marks | Mapped | Category | |
| | (approx. 200-300 words) | | CO | | |
| 1. | Name some major deficiency diseases in | 2 | 1, 2 | Remembering & | |
| | emergency. | | | understanding | |
| | UNIT 5 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 2. | Explain food distribution strategy in disaster. | 2 | 1, 2, 3 | Remembering & | |
| | | | | understanding | |
| | UNIT 5 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 3. | How does local foods help in emergency? | 2 | 1, 2, 3 | Remembering & | |
| | | | | understanding | |
| | UNIT 5 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 4. | How does sanitization effect in disaster? | 2 | 1, 2 | Remembering & | |
| | | | | understanding | |
| | UNIT 4 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 5. | What is nutritional surveillance? | 2 | 1, 2, 3 | Remembering & | |
| | | | | understanding | |
| | UNIT 3 Short answer type question | | | | |
| | (approx. 200-300 words) | | | | |
| 6. | Describe importance of immunization during | 2 | 1, 2 | Remembering & | |
| | emergency. | | | understanding | |
| | SECTION- B | | | 6*3=18 marks | |
| | UNIT 2 Long answer type question | Marks | Mapped | Category | |
| | (approx. 500-800 words) | | CO | | |
| 7. | Explain the factors contributing to malnutrition in | 6 | 1, 2, 3 | Analyzing & | |
| | emergency situations, including conflict zones, and how they differ from non-emergency contexts. | | | understanding | |
| | UNIT 1 Long answer type question | | | | |
| | (approx. 500-800 words) | | | | |
| 8. | How does climate change influence the | 6 | 1, 2 | Analyzing & | |
| 0. | distribution and prevalence of vector-borne | U | 1, 4 | Analyzing & understanding | |
| | diseases like malaria and dengue, and what | | | unucistanung | |

| | challenges does this pose in disaster-prone | | | |
|----|--|---|---------|---------------|
| | regions? | | | |
| | UNIT 5 Long answer type question | | | |
| | (approx. 500-800 words) | | | |
| 9. | What are the key components of an emergency | 6 | 1, 2, 3 | Analyzing & |
| | nutrition response plan, and how is it activated | | | understanding |
| | during crises or disasters? | | | |