UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, January 2021

Course: Fundamental of Food Science   **Semester: I**
Program: M.Sc. Nutrition and Dietetics   **Time 03 hrs.**
Course Code: - HSND 7002   **Max. Marks: 100**

SECTION A

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

S. No.	Question	CO
Q 1	a) Milk produced by mother in the first few days after birth is known as …… b) ………is the browning associated with cut or bruised fruit? c) ……….are starches that have been chemically or physically altered in order to obtain a desired property. d) The oxidation involves phenolase, also called ………….. e) Fermentation is another anaerobic pathway for breaking down of ………	CO1
Q2	a) A liquid contains a dispersion of the other liquid ………….. b) ………..is a hydrogenated vegetable shortening c) ……. Also known as sodium bicarbonate. d) Fats used in a flour for mixing and softening then it is called ……. e) Food rich in egg, milk and pulses are called ………….	CO1
Q3	a) Controlled germination process is known as …………….which activate the ………… b) A ……….will minimize errors in measurement and errors in conclusions and decisions. c) …………..are nonfat substances that act like fat. d) ……are aquatic vertebrates with fins for swimming and gills for breathing.	CO1
Q4	a) What is roasting and puffing method in food preparation? b) How would you compare the process of decortication and syneresis of grain and pulses?	CO2

Q5	a) ………is the outer layer of the kernel and constitutes …….. % of the kernel. It is rich in …… b) Taste is only one component of the sensation of……….. in the mouth. c) ………….adsorb at the oil-water interface.	**CO4**
Q6	• How would you classify starch processing? • Write down five major uses of leaving agents in food industry?	**CO3**

SECTION B

1. **Each question will carry 10 marks**
2. **Instruction: Write short / brief notes**

Q 7	• How would you classify emulsion, give suitable example and structure? • What is the main factor which affect crystallization process?	**CO3**
Q 8	• Write down Difference between gelatinization and retro gradation? • Illustrate Process of ripening of fruits and its prevention?	**CO1**
Q 9	• Characteristics of cooking treatments on the nutrient composition? • Illustrate process of yeast based product and their effect?	**CO4**
Q 10	• Characteristics of fresh whole egg and write down their composition and structure? • Factors affecting amount of fat absorbed during cooking in human life?	**CO3**
Q 11	• Classification and structure of fish with their five characteristics? • Write down specific parameters for sensory evaluation?	**CO4**

Section C

1. **Each Question carries 20 Marks.**
2. **Instruction: Write long answer.**

Q12	• Illustrate the composition and nutritive value of different cereals and compare with pulses • How would you solve the problem of ageing in meat Or • What approach would you use for preparation of foam, gel and emulsion from starch? • How would you show your understanding of hedonic scale and sensory analysis for new food product development?	**CO2**