

MSc.
1st Sem.
2023

Roll no.....

Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi – 110062
M.Sc. Nutrition and Dietetics
Semester-I Examination, March, 2023,
Paper Title: Principles of Food Science
Paper code: MDNCC-102

Time: 3 hours

Max. Marks: 60

Note: The paper is divided into Three sections A, B and C.

Section A, *has fill in the blanks attempt all*

Section B, *choose any five from* questions asked.

Section C, Answer *any three detailed questions from the choices given.*

Marks are mentioned against each question

Section -A

Q 1. Fill in the blanks

1 each (1 x 5 = 5)

1. The two types of enzyme inhibitors _____ and _____.
2. Non- competitive inhibitors binds away from the _____ site.
3. _____ is the amount of free or available water in a product as opposed to bound water.
4. Formula to calculate the degree of freedom _____.
5. There are number of chlorophylls _____.

Section -B

Q 2. Answer any five of the following

(5 x 5 = 25)

1.	ISO 22000 and FSMS	5	(CO-4, PO-3)
2.	What is adulteration? Specify different types of adulterants detected in food items	5	(CO-3, PO-1,3)
3.	Preservation by high temperature	5	(CO-3, PO-1,3)
4.	Water soluble Vitamins	5	(CO-1, PO-3)
5.	Nutrition labelling and its guidelines	5	(CO-4, PO-3)
6.	Colloidal chemistry of foods and food hydrogen ion concentration	5	(CO-1, PO-3)
7.	Marketing strategies at different stages of product life cycle	5	(CO-3, PO-3)
8.	Classification of proteins	5	(CO-1, PO-3)
9.	Write short note on types of sensory tests	5	(CO-3, PO-1,3)
10.	Application of sensory evaluation	5	(CO-3, PO-1,3)

Section -C

Q 3. Answer any three of the following

(10 x 3 = 30)

1.	What are food laws and regulations? Explain any five food laws and regulations.	10	(CO-4, PO-1,3)
2.	What are Minerals? Explain Macronutrients and Micro nutrients.	10	(CO-1, PO-3)
3.	What is product development? Elaborate the stages involved in new product development.	10	(CO-3, PO-1,3)
4.	What is food preservation and its principle? Give in detail the methods of food preservation.	10	(CO-3, PO-1,3)
5.	Define Food additives. Explain functional role of different additives.	10	(CO-2, PO-1,3)
6.	Define sensory evaluation. What is the criterion of selection of panel for sensory evaluation?	10	(CO-3, PO-1,3)