

2024

Sem - 3

Roll no.....

Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi – 110062
M.Sc. Nutrition and Dietetics
 End Term Examination, Semester- III, December, 2024
Paper Title: Nutrigenomics; Paper Code: MDNEC-306

Duration: 3 Hours**Max Marks: 60****Note: write to the point, please make sure you have mentioned question no. before answering****SECTION-A****Q. no- I. Attempt any five** from the following questions:**(2marks each; 2X5=10marks)**

1)	Define SNP's.	(CO-1 PO-2,3)
2)	What is the role of lycopene and food sources rich in it?	(CO-4 PO-2,3)
3)	What is Nutritional Genomics?	(CO-2,3 PO-2,3)
4)	Give examples of foods which contain Allicin and selenium.	(CO-4 PO-2,3)
5)	Give examples of foods which contain DHA and resveratrol	(CO-4 PO-2,3)
6)	What are polyphenols ?	(CO-4 PO-2,3)
7)	What is the role of ADIPOQ2 gene in Diabetes?	(CO-2,3 PO-2,3)
8)	What are the steps used in human genome project imaging?	(CO-2,3 PO-2,3)

SECTION-B**Q. no-II. Attempt any five** of the following questions:**(5 marks each; 5X5=25 marks)**

1)	Why Nutrition is complicated? Justify	(CO-2 PO-2,3)
2)	Write a note on pre and probiotics.	(CO-4 PO-2,3)
3)	Elaborate the effects of lipids on gene expression.	(CO-2,3 PO-2,3)
4)	Explain the OMIC discipline.	(CO-1 PO-2,3)
5)	Explain the Human genome project and its application.	(CO-1 PO-2,3)
6)	Explain in detail the law of inheritance and its relation with genetic disease in an individual.	(CO-2,3 PO-2,3)
7)	Describe gene interaction in relation with Diabetes.	(CO-2,3 PO-2,3)
8)	Explain the relationship between chronic disease and nutritional genomics?	(CO-2,3 PO-2,3)

SECTION-C**Q. no- III. Choose any two** of the following questions:**(12.5marks each; 12.5X2=25)**

1)	Elaborate the lac operon model.	(CO-2,3 PO-2,3)
2)	What do you understand by nutraceuticals? Explain the role of nutraceuticals giving examples of animal and plant based foods.	(CO-4 PO-2,3)
3)	Explain Metabolome approaches.	(CO-1 PO-2,3)
4)	Describe gene involved with CVD development.	(CO-2,3 PO-2,3)