

# KANYASHREE UNIVERSITY

M.Sc. 4<sup>th</sup> Semester Examination-2023

Subject: Food & Nutrition

Course-CC 18

Genetics, Nutrigenetics and Nutrigenomics

Full Marks-40

Time-2.00 Hours

## Group A

[Answer **any four** of the following]

(5×4=20)

1. Write down the different applications of food omics. [5]
2. What do you mean by Agonist and Antagonist? [5]
3. Why is biotransformation of drug necessary? [5]
4. Give an idea about 'glucose regulated gene expression'. [5]
5. Write down the Separation Technique involved in MS-based untargeted metabolomics. [5]
6. Illustrate the role of Vitamin A in Gene Expression. [5]
7. What do you mean by the term Efficacy and potency? [5]

## Group B

[Answer **any two** of the following]

(10×2=20)

1. Describe the role of Bioinformatics in the detection of Allergen, crop improvement and effects of microorganisms in food. [3+3+4]
2. Elaborate the applications and limitations of CRISPER technology. [5+5]
3. Give a brief idea about the drug and nutrient interaction. How does Nutrigenomics approach help to take preventive measures in cancer and diabetes? [5+5]
4. What is Nutrigenomics? Discuss the role of PUFA and protein on Gene Expression. [2+4+4]

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