

PG (CBCS)
M.SC. Semester- IV Examination, 2022
FOOD SCIENCE & NUTRITION
PAPER: FSN 401

(GENETICALLY MODIFIED FOODS, FOOD FORTIFICATION AND FOODTOXICOLOGY)

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

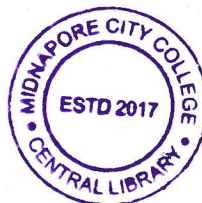
Candidates are required to give their answers in their own words as far as practicable.

GROUP-A

1. Answer any **FOUR** of the following questions:

2×4=8

- a) Define GMO.
- b) What are the changes made in “golden rice”?
- c) What is hidden hunger?
- d) State the purpose of tragated food fortification.
- e) Define LD50 & TD50.
- f) What do you mean by ‘subacute’ toxicity?
- g) Differentiate between toxin & poison.
- h) State the health benefits of GM food.



GROUP-B

2. Answer any **FOUR** of the following questions:

4×4=16

- a) Discuss about the role of gene technology for preparing GM food.
- b) Describe about the different steps of food fortification process.
- c) State about the effects of toxicity of mercury poisoning.
- d) Write the importance of mass food fortification.
- e) Mention the different criticism of GM Foods. Name the genetic modification made in NASA-potato.
- f) Classify commercialized GM crops with specific examples.
- g) Why GM foods are not popular in India? Give reasons.
- h) State the toxicity of Alfa-toxin poisoning.

GROUP-C

3. Answer any **TWO** of the following questions:

8×2=16

- a) Why is golden rice called a GM crops? Describe the steps involved in different types of tomatoes developed by GM food technology. 3+5
- b) Explain the toxicity of four naturally occurring food-plant toxin with their sources. 3+6
- c) State the role of FAO in GM food production. Discuss the different Health & safety concerning of GM Foods for Human consumption. 2+6
- d) Explain the toxicity of sea food poisoning with special reference to PSP, NSP & DSP. Draw a experimental design to assess liver toxicity on mice model.
