

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 7317

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Unique Paper Code : 2203030019

Name of the Paper : Food Toxicology

Name of the Course : **B.Sc. (H) Food Technology, NEP-UGCF**

Semester : VIII, DSE

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **four** questions in all.
3. **All** questions carry equal marks.

1. Explain briefly the following terms (**any 5**) : (5×3)

- (i) NOAEL
- (ii) Carcinogenicity
- (iii) In-vitro studies
- (iv) Mycotoxins
- (v) Radionuclides
- (vi) Trans fats

2. Justify the following statements with appropriate examples (any 3) (3×5)

- (i) Food adulteration has both health and economic implications
- (ii) Microplastics are an emerging threat to health
- (iii) Use of Persistent Organic Pollutants can be reduced
- (iv) Food allergies are a growing concern

P.T.O.

3. (a) Food toxicants can get generated at various stages of processing. Elaborate on the statement by giving examples of at least 4 such contaminants, their toxic effects and ways to reduce their production in foodstuffs. (10)
- (b) How can supplements of nutrients become hazardous for our health? (5)
4. (a) What are the adverse effects of consuming food contaminated with heavy metals? How can the risk be reduced? (8)
- (b) How can food additives pose a risk to health? Explain giving examples of types of additives which are of major concern. (7)
5. Write short notes on : (any 3) (3×5)
- (i) Veterinary drug residues
- (ii) Marine toxins
- (iii) Reducing exposure to pesticide residues
- (iv) Food packaging as a source of contaminants
6. (a) What are some of the common toxicants which are present in plant foods? How can the risk be managed? (8)
- (b) Using a suitable example explain how you would design an animal experiment to assess carcinogenicity of a contaminant. (7)