

C 82392

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Name.....

Reg. No.....28.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Environmental Science

ES4 E03—FOOD ADULTERATION AND DETECTION (Elective)

Time : Three Hours

Maximum : 36 Weightage

Section A

I. Answer *all* questions :

- 1 What are preservatives ?
- 2 Write the principle of dehydration.
- 3 Mention the use of an "electronic nose" instrument.
- 4 Write the use of amylases in food industry.
- 5 Differentiate "Pasteurization" and "Sterilization".
- 6 What is "Shigellosis" ?
- 7 Name the types of bacteria causing the spoilage of chicken meat.
- 8 What are anti-oxidants ? Give examples.
- 9 Name some natural food adulterants.
- 10 What are organochlorine pesticides ?
- 11 Write the laws enacted for food safety in India.
- 12 Name two fungal toxins in contaminated food and their sources.
- 13 What are proteolytic enzymes ?
- 14 What is Pickling ?

(14 × 1 = 14 weightage)

Section B

II. Answer any *seven* of the following :—

- 15 Write a note on different additives used commonly in food industry.
- 16 Mention the function of chemical preservatives used in food preservation with examples.
- 17 Describe the food-borne diseases and their causative organisms.
- 18 Explain the application of membrane separation methods in food industry.
- 19 Write a note on food preservation by radiations.

Turn over

- 20 Describe the principle of a flame photometer.
- 21 Write a note on artificial food adulterants.
- 22 Describe the preparation of vinegar and its use.
- 23 Write the factors affecting the quality of frozen foods.
- 24 Write a note on canning of foods.

(7 × 2 = 14 weight)

### Section C

III. Answer any *two* of the following :—

- 25 Describe the processing operations in a seafood industry.
- 26 Describe the principle and instrumentation of an Atomic Absorption Spectrophotometer.
- 27 Mention the sources of contamination of milk and milk products. Describe the method of preservation of milk.
- 28 Discuss the role of personal hygiene and food hygiene in the prevention of food poisoning.

(2 × 4 = 8 weight)