



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2020

(Under CBCS Pattern)

Semester - V

Subject : NUTRITION

Paper : DSE 1-T

Full Marks : 60

Time : 3 Hours

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

The figures in the margin indicate full marks.

Chemical Safety of Food

Answer any three questions from the following :

3×20

1. Mention the different legal guidelines on uses of sodium benzoate and sodium nitrate. Explain the action of autolysed yeast extract. Write the impacts of PAHs on human health.
2. Write short note on food additives. Write the health hazards of food colorants with examples. State the impact of any one heavy metal on human health.
3. Write short note on radioactive isotopes. Write the detection procedure of hydrogenated oil in food. Write a short notes on artificial sweeteners.
4. Write the uses of chemical preservatives with examples. What do you mean by defoaming agents? Write the detection procedure of BHT. How organo-halogens can be detected in food?

5. How do the packed foods are contaminated during packaging? State the differences between direct and indirect contamination. Write the use of steroids.
6. Write the use of high-fructose corn syrups. What do you mean by hydrolysed food proteins. State the detection procedures of nitrites in food. Write the health hazards of it.

Microbiological Safety of Foods

Full Marks : 60

Time : 3 Hours

Answer any three questions from the following :

3×20

1. Briefly describe extrinsic and intrinsic factors effecting growth of microorganism in food. What is water activity? Write in brief about beneficial mircorbes.
2. Write the process of milk and milk product spoilage. Briefly describe any two food borne disease. Write the mechanism of food preservation by irradiation.
3. Write in brief about isolation method. How spoilage of packed and canned food can be controlled? State the principle of PCR.
4. State the Immunological methods for detection of microbial metabolites. Write the sample collection method for microorganism analysis. What do you mean by GMP ?
5. State the growth curve of bacteria with figure. Describe in brief about sterilization. Write a short note on 'Lathyrism'.
6. Elaborate the illness associated with shigellosis infection. Describe about canning. Briefly describe the media used for microbiology laboratory.

Food Sanitation and Hygiene

Full Marks : 60 (Theory - 40 + Practical - 20)

Time : 3 Hours

[Theory]

Answer any two questions from the following :

2×20

1. Identify the common disease vectors. Write the mode of transmission vector borne disease. Briefly discuss about common control methods of vector borne disease.
2. What is food safety plan? How do you implement food safety training programme? Write the basic requirements of food safety plan.
3. Briefly discuss about different type of disinfectant methods. What do you mean by bacterial food borne illness? Write in general health risk of food contamination.
4. What do you mean by decontamination? Describe about integrated pest management. State the importance of personal hygiene.

[Practical]

Answer any one question from the following :

1×20

1. Write the principle of fruit based product preservation. Draw the line diagram of any one preservation technique of fruit based product.
 2. Write the steps of project formulation.
 3. Mention the steps of conduction of assignment programme.
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