



विद्यासागर विश्वविद्यालय
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - V

Subject : NUTRITION

Paper : DSE 2 - T & P

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

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.

[QUALITY ASSURANCE IN FOOD SECTORS]

(Theory : Marks - 60)

Group-A

Answer any **four** questions from the following :

12×4=48

1. (a) Write about accreditation of food laboratory.

(b) Briefly describe the advantage facility of GLP.

(c) What is sensory analysis.

5+5+2

2. (a) What are the anti nutritive compounds present in food? Give their adverse effects.

- (b) Why do we prefer ELISA over RIA?
- (c) Define food contamination. How does food become contaminated? 5+3+4
3. (a) Write about SOP in brief.
- (b) State the performance report of GLP.
- (c) What do you mean by primer and dimer in PCR? 4+4+4
4. (a) Write the microbiological method for quality detection of food.
- (b) How do you determine the quantity of protein present in a food?
- (c) What do you mean by anti-nutritive and natural toxic compounds of food? 4+4+4
5. (a) Briefly describe about food referral laboratories. Write the advantages of it.
- (b) Write the functions of food analysts. 6+6
6. (a) Write a note on 'Triple Quadra pulse system'.
- (b) Write about chemical parameters of food quality assessment.
- (c) What are the adverse effects of food additives? 4+4+4
7. (a) Write the criteria of advanced food analytical laboratory. 2
- (b) Write the working principles and application of the following : 5+5
- (i) HPLC
- (ii) Real Time PCR
8. (a) Write in brief the sample collection technique for microbiological analysis of food.
- (b) What are the physical parameters for food quality assessment?
- (c) Write about inductively coupled Plasma Mass Spectroscopy and PCR.

Group-B

Answer any *six* questions from the following :

2×6=12

9. (a) What do you mean by GLP? Give its significance.
 - (b) What are food additives?
 - (c) Write the full forms of c-ELISA and s-ELISA.
 - (d) Define natural toxic compound and give anyone example.
 - (e) Write any two major objectives of ISO.
 - (f) Write any two functions of FSSAI.
 - (g) Define Chromatography.
 - (h) What is referral laboratory?
 - (i) What is SOP?
 - (j) Write the name of the method of each for analysing saccharide and lipid in food.
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OR

[QUALITY CONTROL AND FOOD STANDARDS]

(Theory : Marks - 60)

Group-A

Answer any *four* questions from the following : 12×4=48

1. (a) Write the importance of food sample collection.
(b) Briefly describe the sample collection technique. 6+6

2. (a) What do you mean by SQF : 2000?
(b) Write the full forms of SOP and GLP.
(c) Briefly describe the structure of ISO-22000. 2+3+7

3. (a) Write about the different guidelines and recommendations of CODEX.
(b) Write the core functions of National Codex Contact Point. 6+6

4. (a) Write the pre-requisites and principles of HACCP.
(b) State the HACCP applications. 8+4

5. (a) Write the principles of GVP and GMP.
(b) Discuss about the safety in food service unit covering 'Food Safety Regulation and Food Safety Management.' 6+6

6. (a) What do you mean by BRC? Write the function of it.
(b) Write about sanitation and safety in food services. 6+6

7. (a) Write the differences between routine versus investigational sampling.
(b) Discuss about the standards and the applications of these codex standards. 6+6

8. (a) Write about GHP. State the advantages of GHP practice?

(b) What are the tools and container used in sampling?

3+5+4

Group-B

Answer any *six* questions from the following :

2×6=12

9. (a) What do you mean by documentation of food sampling?

(b) Write full forms of HACCP and GMP.

(c) Write the structure of ISO.

(d) Write full forms of CODEX and GVP.

(e) Write any two functions of national codex contact point.

(f) Write full forms of GAP and GHP.

(g) Write short note on packaging of Food Sample.

(h) Write any two functions of FSSAI.

(i) Write short note on 'Dispatch of food sample.'

(j) Write the major objectives of ISO.

OR

[FOOD QUALITY AND SENSORY EVALUATION]

(Theory : Marks - 40)

Group-A

Answer any **three** questions from the following : 12×3=36

1. (a) Write about the mechanism of taste perception.
(b) Write different classifications of odour. Write any two demerits of odour measurement techniques. 6+3+3
2. (a) Write the factors affecting taste quality?
(b) Briefly write about the measurement of taste?
(c) What is taste abnormality? 5+5+2
3. (a) Write about Munsell colour measurement system.
(b) Mention the dimensions and importance of colour.
(c) What do you mean by perception of colour. 5+4+3
4. (a) What are the consequences of olfactory abnormalities?
(b) Enumerate your idea about quality attributes of food. 5+7
5. (a) Write about the application of texture measurement in cereals and fruits.
(b) Write the functions of colorimetry. 7+5
6. (a) Write the phases of oral processing.
(b) Write the importance of texture?
(c) What do you mean by Rheology of food? 5+3+4

Group-B

Answer any *two* questions from the following :

2×2=4

7. What is papillae?
8. Write about the functions of salivary glands.
9. Write briefly about texture measurement in cereals.
10. Write two procedures used in colour measurement.

(Practical : Marks - 20)

Group-A

Answer any *one* out of the following :

15×1=15

1. How do you perform analytical and affective tests of sensory evaluation? 15
2. Discuss the various methods of recognition tests for any two food flavours. 15
3. Conduct the texture evaluation of any two food items. 15

Group-B

Answer any *one* out of the following :

5×1=5

1. Submission of laboratory report and viva—vocc. 3+2
 2. What are the effects of temperature and p^H on vegetables? 5
 3. Write about any one recognition test for food flavours. 5
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