

සියලු ම හිමිකම් ඇවිරිණි / முழுப் பதிப்புரிமையுடையது / All Rights Reserved

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව  
இலங்கைப் பரீட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம்  
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Department of Examinations, Sri Lanka

අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2021(2022)  
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2021(2022)  
General Certificate of Education (Adv. Level) Examination, 2021(2022)

ආහාර තාක්ෂණවේදය I  
உணவுத் தொழினுட்பவியல் I  
Food Technology I

17 E I

පැය දෙකයි  
இரண்டு மணித்தியாலம்  
Two hours

### Instructions:

- \* Answer **all** questions.
- \* Write your **Index Number** in the space provided in the answer sheet.
- \* Instructions are given on the back of the answer sheet. Follow those carefully.
- \* In each of the questions 1 to 50, pick one of the alternatives from (1), (2), (3), (4), (5) which is **correct** or **most appropriate** and mark your response on the answer sheet with a cross (x) on the number of the correct option in accordance with the instructions given on the back of the answer sheet.

1. Select an appropriate example to describe the application of soft technology.

- (1) Manufacturing of a new type of screwdriver.
- (2) Use of a simple wood-fired oven for bread making.
- (3) Development of a new yeast strain for alcohol fermentation.
- (4) Introduce a new methodology to produce an organic fertilizer.
- (5) Use of an electronic soil moisture sensor in irrigation.

2. Spread-sheet software is more appropriate for

- (1) writing letters to customers.
- (2) presentation of progress in a meeting.
- (3) programming an application software.
- (4) web development and web page maintenance.
- (5) tabulation of data and plotting of graphs.

3. Consider the following statements.

- A - Goitre condition can be caused by protein energy malnutrition.  
B - Cassava and okra are examples for the foods that contain goitrogens.  
C - Seafood helps to prevent the formation of goitre.

Of the above,

- (1) Only A is correct.
- (2) Only B is correct.
- (3) Only C is correct.
- (4) Only A and B are correct.
- (5) Only B and C are correct.

4. Select the **incorrect** statement regarding proteins.

- (1) All enzymes are proteins.
- (2) Secondary structure of proteins gets denatured at high temperature.
- (3) Proteins are polypeptides.
- (4) Certain amount of proteins are converted into fat in the human body.
- (5) Urea is one of the by-products of protein metabolism.

5. An enzyme or a group of enzymes responsible for the rancidity is

- (1) lipase.
- (2) amylase.
- (3) catalase.
- (4) peptidase.
- (5) polyphenol oxidase.

6. A microorganism which is used in food processing is

- (1) *Bacillus cereus*. (2) *Staphylococcus aureus*.  
 (3) *Lactobacillus bulgaricus*. (4) *Clostridium perfringens*.  
 (5) *Clostridium botulinum*.

7. Consider the following.

- A - Homegardening  
 B - Surplus of fresh fruits and vegetables  
 C - Sufficient food in market  
 D - Adequate family income

Of the above, the factors that could positively affect the household food security are

- (1) A and B only. (2) C and D only. (3) A, C and D only.  
 (4) B, C and D only. (5) All A, B, C and D.

8. In a soil profile, Horizon C consists of

- (1) humus containing more nutrients.  
 (2) partly withered rock.  
 (3) soil made out of humus, clay and minerals.  
 (4) sub-soil containing clay and other minerals.  
 (5) loose layer of leaves and other plant materials.

9. Select the correct answer that best reflects land degradation.

- (1) Removal of top soil from the land.  
 (2) Removal of vegetation from the soil surface.  
 (3) Loss of economic productivity of land.  
 (4) Reduction of biological productivity of land due to human influence.  
 (5) Negative effects on the land due to natural or human-induced processes.

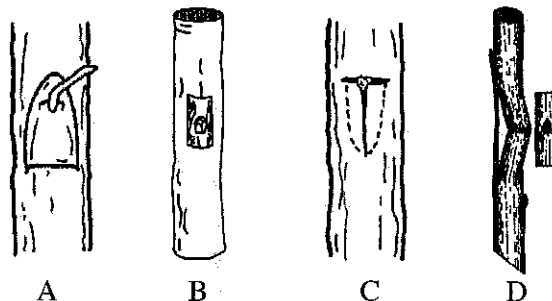
10. Consider the following statements.

- A - Breeder seeds are the seeds of a new variety that has the highest purity.  
 B - Foundation seeds are the first progeny of the breeder seeds.  
 C - Registered seeds are the first progeny of the certified seeds.

Of the above, the correct statement/s is/are

- (1) A only. (2) B only. (3) C only.  
 (4) A and B only. (5) B and C only.

11. The diagram given below shows four commonly used budding methods denoted as A, B, C and D.



Select the answer which shows the correct budding methods.

- (1) A : Patch budding, B : H-budding, C : T-budding and D : Chip budding  
 (2) A : Chip budding, B : Patch budding, C : T-budding and D : H-budding  
 (3) A : Patch budding, B : Chip budding, C : T-budding and D : H-budding  
 (4) A : T-budding, B : Chip budding, C : H-budding and D : Patch budding  
 (5) A : Chip budding, B : H-budding, C : T-budding and D : Patch budding

12. Consider the following statements.

A - Soaking in water at 30 °C for 2 hours, is the most efficient method to overcome dormancy in teak (*Tectona grandis*) seeds.

B - The main cause of delay in the germination of teak seeds is the thick pericarp, which does not soften sufficiently for the embryo cells to multiply.

Of the above

- (1) A is correct and B is incorrect.
- (2) B is correct and A is incorrect.
- (3) both A and B are correct.
- (4) A is correct and it is further explained by B.
- (5) B is correct and it is further explained by A.

13. A few medicinal plants are given below.

A - *Adathoda*

B - *Kothalahimbutu*

C - *Katupila*

Of the above, the plant/s commonly found in the Dry Zone of Sri Lanka is/are

- (1) A only.
- (2) B only.
- (3) C only.
- (4) A and B only.
- (5) B and C only.

14. Akkapana (*Kalanchoe pinnata*) is a medicinal plant used to treat

- (1) sore throat.
- (2) kidney stones.
- (3) hypertension.
- (4) worm infestations.
- (5) diabetes.

15. A destructive activity which takes place away from the coral habitats affecting the coral ecosystem is

- (1) coral mining.
- (2) sand mining.
- (3) surface runoff.
- (4) ocean acidification.
- (5) anchorage of marine vessels.

16. Drying is a common preservation method of agricultural commodities. Preservation by drying is achieved due to

- (1) disinfection.
- (2) thermal treatment.
- (3) destruction of pathogens.
- (4) lowering moisture content that reduces biochemical activities.
- (5) inability of micro-organisms to survive on dried materials.

17. The longest shelf life of milk can be achieved by

- (1) sterilization.
- (2) chilling.
- (3) freezing.
- (4) pasteurization.
- (5) use of preservatives.

18. Microbial fermentation is used to process

- (1) soya meat.
- (2) beer.
- (3) ice cream.
- (4) Maldivian fish.
- (5) peanut butter.

19. 'SWOT' analysis is most appropriate for

- (1) developing a strategic plan of an institution.
- (2) preparing the annual budget of an institution.
- (3) assessing the previous year's progress of an institution.
- (4) purchasing goods for an institution.
- (5) conducting a sensory evaluation of a newly developed product by an institution.

20. Some of the main factors that should be considered in selecting a business opportunity are
- (1) labor requirement, political stability and family background of a consumer.
  - (2) labor requirement, market and technology available.
  - (3) religious factors, competitors and demand for the product.
  - (4) availability of educated human resources, capital investment and social factors.
  - (5) sources of funds, availability of modern technology and management skills.
21. Following data are recorded from a plant nursery during one year period.
- |                         |                 |
|-------------------------|-----------------|
| Capital investment      | Rs. 4 million   |
| Salaries and wages      | Rs. 1 million   |
| Other costs             | Rs. 1 million   |
| Annual depreciation     | Rs. 0.5 million |
| Income from total sales | Rs. 3.5 million |
- The net profit of the plant nursery would be, Rs.
- (1) 0.1 million.
  - (2) 0.5 million.
  - (3) 1.5 million.
  - (4) 2.5 million.
  - (5) 3.0 million.
22. The risk of technological failures in agriculture can be lessened by
- (1) applying suitable remedial measures.
  - (2) adhering to traditional knowledge.
  - (3) training and developing skills of users.
  - (4) avoiding prevailing technology in agricultural production systems.
  - (5) use of technology in sectors that have no direct interaction with human.
23. An industry that makes the highest contribution to the global greenhouse gas emission is
- (1) hydroelectric power generation.
  - (2) steel manufacturing.
  - (3) manufacturing of cement.
  - (4) plastic manufacturing.
  - (5) livestock farming.
24. Consider the following statements.
- A - Sun drying of fish to make dry fish is an example for application of soft technology.
- B - Development of a new computer software is an example for soft technology.
- C - Assembling an irrigation system is an example for hard technology.
- Of the above, the correct statement/s is/are
- (1) A only.
  - (2) B only.
  - (3) A and B only.
  - (4) B and C only.
  - (5) All A, B and C.
25. Following are few bio-resources.
- |                |              |
|----------------|--------------|
| A - Paddy husk | B - Saw dust |
| C - Cow dung   | D - Swill    |
- Of the above, the materials that can be directly used in biogas production are,
- (1) A and B only.
  - (2) A and C only.
  - (3) B and C only.
  - (4) B and D only.
  - (5) C and D only.
26. Soaking and parboiling of paddy
- (1) enhance the digestibility of rice.
  - (2) remove vitamins from rice.
  - (3) results in pre-gelatinized rice.
  - (4) converts non-digestible fiber into digestible fiber.
  - (5) partially degrades starch into oligosaccharides.

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- 27. Rice flour available in Sri Lankan market is**
- (1) made only by using raw rice.
  - (2) made by using both raw and parboiled rice.
  - (3) fully gelatinized.
  - (4) made by using polished rice.
  - (5) fortified with vitamins and micro elements.
- 28. In wheat bread making**
- (1) baking soda is used as an leavening agent.
  - (2) salt reduces the shelf-life.
  - (3) gluten enhances the porous structure of the crumb.
  - (4) use of an appropriate packaging material is essential.
  - (5) kneading is essential to mix the ingredients.
- 29. Consumption of germinated pulse seeds are more nutritious than consumption of non-germinated pulse seeds, because germination**
- (1) decreases the fiber content.
  - (2) enhances protein content.
  - (3) facilitates digestion and absorption of nutrients.
  - (4) enhances flavour, texture and palatability.
  - (5) enhances fat and protein content.
- 30. The most appropriate combination of ingredients that can be used in formulating a breakfast porridge include**
- (1) soya bean, cowpea, mung bean and maize flour.
  - (2) cowpea, wheat, maize flour and dried fruit pieces.
  - (3) mung bean, maize flour, pumpkin and dried fruit pieces.
  - (4) rice, wheat, maize flour and dried moringa leaf powder.
  - (5) mung bean, pumpkin, dried moringa leaf powder and dried fruit pieces.
- 31. Minimal processing of fruits and vegetables**
- (1) uses preservatives to control pathogenic micro-organisms.
  - (2) targets busy consumers.
  - (3) uses refrigeration as the only method of storage.
  - (4) can be applied successfully for any variety.
  - (5) targets producing infant food.
- 32. The natural thickening agent in jam is**
- (1) pectin.                      (2) gelatin.                      (3) agar.                      (4) carrageenan.                      (5) collagen.
- 33. Select the correct statement regarding fruit juice and fruit nectar.**
- (1) Fruit nectar is concentrated fruit juice.
  - (2) Fruit juice is a natural extract of fruit pulp, but fruit nectar is fruit juice with added water.
  - (3) Fruit nectar is fruit juice with added water and fruit juice is concentrated fruit pulp.
  - (4) Fruit nectar should be reconstituted before consumption, but not the fruit juice.
  - (5) Fruit juice is a ready-to-serve product, but not the fruit nectar.

34. Some mango varieties are **not** suitable for minimal processing due to
- (1) high sugar content.
  - (2) high fiber content.
  - (3) high polyphenol oxidase content.
  - (4) high acidity.
  - (5) high total soluble solids content.
35. The average fat and solid non fat (SNF) contents of Friesian cow milk are, respectively,
- (1) 2.5% and 9.4%.
  - (2) 3.0% and 8.9%.
  - (3) 3.5% and 8.4%.
  - (4) 4.0% and 7.5%.
  - (5) 4.5% and 7.0%.
36. Yoghurt produced by a farm family was observed to be too thick. The most possible reason for this would be
- (1) boiling of milk for a longer period than required.
  - (2) adulteration of milk with milk powder.
  - (3) addition of high quantity of starter culture to milk.
  - (4) addition of high quantity of gelatin.
  - (5) incubation of the yoghurt mixture for a longer time.
37. Sausages and meat balls are processed meat products. They are generally preserved by
- (1) pre-cooking.
  - (2) adding various spices.
  - (3) pre-cooking and smoking.
  - (4) adding sodium metabisulfite.
  - (5) adding potassium nitrate and common salt.
38. Refined, Bleached, and Deodourized (RBD) process seriously affects the
- (1) saturated fatty acids found in coconut oil.
  - (2) unsaturated fatty acids found in coconut oil.
  - (3) antioxidant compounds found in coconut oil.
  - (4) smoke point of coconut oil.
  - (5) flash point of coconut oil.
39. The most suitable solvent that can be used in the manufacturing process of ginger oleoresin is
- (1) benzene.
  - (2) toluene.
  - (3) ethanol.
  - (4) acetone.
  - (5) carbon tetra chloride.
40. Consider the following statements.
- A - Aseptic packaging may decrease the nutritional value of a food material.
- B - Aseptic packaging preserves the colour of a food material.
- Of the above
- (1) both A and B are correct.
  - (2) A is correct but B is incorrect.
  - (3) B is correct but A is incorrect.
  - (4) A is correct and it is further explained by B.
  - (5) B is correct and it is further explained by A.

41. Select the correct combination of brand name and product name with respect to the size of the letters in a label,

	Letter size of the brand name (mm)	Letter size of the product name (mm)
(1)	09	27
(2)	24	09
(3)	20	60
(4)	15	05
(5)	10	02

- Consider the following instruments labelled as A, B, C, D and E for the question numbers 42 and 43.

A – Desiccator

B – Brix meter

C – Centrifuge

D – Muffle Furnace

E – Autoclave

42. The instrument that will help in determining the moisture content of a food material is

(1) A. (2) B. (3) C. (4) D. (5) E.

43. The correct instrument that can be used to determine the soluble sugar content of a food material is

(1) A. (2) B. (3) C. (4) D. (5) E.

44. Contamination of coconut oil by aflatoxin can be correctly explained as a food safety problem associated with

(1) chemical contaminant. (2) microbiological contaminant.  
(3) physical contaminant. (4) physico-chemical contaminant.  
(5) biochemical contaminant.

45. The most appropriate explanation about highly processed fast foods is, they have excessive amounts of

(1) fat, sugar, salt and fiber.  
(2) fat and sugar, but lesser amounts of salt and fiber.  
(3) fat, salt and sugar, but lesser amounts of fiber.  
(4) fat and salt, but lesser amounts of sugar and fiber.  
(5) fiber and salt, but lesser amounts of sugar and fat.

46. Consider the following statements.

A - The main task of the Industrial Development Board (IDB) is to reduce post harvest losses of fruits and vegetables through research and analysis.

B - The main role of the National Engineering Research and Development (NERD) institute is industrial innovations of appropriate technology for the food industry.

Of the above

(1) both A and B are correct.  
(2) A is correct but B is incorrect.  
(3) B is correct but A is incorrect.  
(4) A is correct and it is further explained by B.  
(5) B is correct and it is further explained by A.

47. Application of traditional technology in food processing may

- (1) increase the nutritive value of a food.
- (2) reduce the cost of a food.
- (3) decrease the availability of a food.
- (4) decrease the retail price of a food.
- (5) decrease the market share of a food.

48. Consider the following statements with respect to food proteins.

- A - Growth and development is the main function of food proteins in human body.
- B - Proteins are made out of a combination of amino acids.
- C - Carbon, hydrogen, oxygen, nitrogen and magnesium are present in proteins.
- D - Proteins are considered as one of the major nutrients of human nutrition.

Of the above the correct statements are,

- |                      |                        |                      |
|----------------------|------------------------|----------------------|
| (1) A and B only.    | (2) B and C only.      | (3) A, B and D only. |
| (4) B, C and D only. | (5) All A, B, C and D. |                      |

49. In the human digestive system,

- (1) protein is digested and absorbed in duodenum and small intestine, respectively.
- (2) vitamins and water are mainly absorbed in the large intestine.
- (3) alpha-amylase is mixed with the food at two locations.
- (4) dietary fiber negatively affects the absorption of nutrients.
- (5) acidic pH in duodenum facilitates digestion.

50. Consider the following statements.

A - Certain convenient foods are minimally processed foods.

B - Considerable amount of chemical preservatives are added to the minimally processed foods.

Of the above,

- (1) both A and B are correct.
- (2) A is correct but B is incorrect.
- (3) B is correct but A is incorrect.
- (4) A is correct and it is further explained by B.
- (5) B is correct and it is further explained by A.

\* \* \*



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ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව  
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Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka

අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2021(2022)  
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2021(2022)  
General Certificate of Education (Adv. Level) Examination, 2021(2022)

ආහාර තාක්ෂණවේදය II  
உணவுத் தொழினுட்பவியல் II  
Food Technology II

17 E II

පැය තුනයි  
மூன்று மணித்தியாலம்  
Three hours

අමතර කියවීමේ කාලය - මිනිත්තු 10 යි  
மேலதிக வாசிப்பு நேரம் - 10 நிமிடங்கள்  
Additional Reading Time - 10 minutes

Use additional reading time to go through the question paper, select the questions you will answer and decide which of them you will prioritise.

Index No. : .....

### Instructions:

- \* This question paper consists of 10 questions in 09 pages.
- \* This question paper comprises of Parts A, B and C.  
The time allotted for all three parts is three hours.

#### Part A - Structured Essay (2 - 8 pages)

- \* Answer all questions on this paper itself.
- \* Write your answers in the space provided for each question. Please note that the space provided is sufficient for your answers and extensive answers are not expected.

#### Part B and C - Essay : (page No. 9)

- \* Select two questions from each of the Parts B and C and answer four questions only. Use the papers supplied for this purpose.
- \* At the end of the time allotted for this paper, tie the three parts together so that Part A is on the top of Parts B and C before handing over to the supervisor.
- \* You are permitted to remove only Parts B and C of the question paper from the Examination Hall.

### For Examiner's Use only

Part	Question No.	Marks
A	1	
	2	
	3	
	4	
B	5	
	6	
	7	
C	8	
	9	
	10	
Total		

#### Total

In Numbers	
In Letters	

#### Code Numbers

Marking Examiner 1.	
Marking Examiner 2.	
Marks Checked by	
Supervised by	

**Part A - Structured Essay**  
*Answer all questions on this paper itself.*  
*(Each question carries 100 marks.)*

Do not  
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column

1. (A) State **two** environmental benefits of technological interventions in agriculture.

(1) .....

(2) .....

(B) Write **one** source of information that can be used in starting a new business for each of the following categories.

(1) Printed media : .....

(2) Electronic media : .....

(C) State **two** reasons for **not** having a rapid increase of blood sugar level after consumption of certain carbohydrate-rich foods.

(1) .....

(2) .....

(D) State **two** benefits of consumption of leafy vegetables.

(1) .....

(2) .....

(E) List **four** physical changes that can be observed in spoiled food.

(1) .....

(2) .....

(3) .....

(4) .....

(F) State **two** deficiency symptoms of vitamin A in humans.

(1) .....

(2) .....

(G) State **two** examples of foods considered to be in the apex of the food pyramid.

(1) .....

(2) .....

(H) State **two** ways how cultivation of the same crop by the majority of farmers in the same season could affect the national food security.

(1) .....

(2) .....

- (I) (i) State the **three** major climatic zones in Sri Lanka and their average annual rainfall.

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column

Climatic Zone	Average Annual Rainfall (mm)
(1) .....	.....
(2) .....	.....
(3) .....	.....

- (ii) How many agro-climatic zones are there in Sri Lanka? .....

- (J) Write one traditional preservation method used for each of the following agricultural produce.

Agricultural Produce	Traditional preservation method
(1) Paddy .....	.....
(2) Fish .....	.....
(3) Milk .....	.....
(4) Meat .....	.....

Q. 1

100

2. (A) Germination percentage is an estimate of the viability of seeds. A study was conducted to evaluate the germination percentage of legume seeds and results are shown in the table given below.

Days from the commencement of the study	Total viable seeds in the Petri dish	Number of germinated seeds
0	50	0
2	48	35
3	42	38
4	41	39
5	41	37
6	40	38

- (i) Write a suitable equation to calculate the seed germination percentage.

.....  
.....

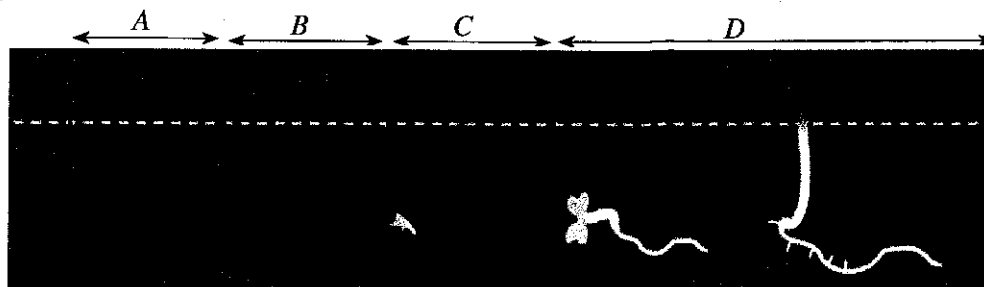
- (ii) Calculate the seed germination percentage at the end of the 6<sup>th</sup> day of the study period.

.....  
.....

- (iii) State an internal factor that affects the legume seed germination.

.....

- (B) Seed germination stages A, B, C and D of a legume crop are illustrated in the figure given below.



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State the germination stages given in the diagram.

A - ..... B - .....

C - ..... D - .....

- (C) List **two** important factors to be considered in selecting suitable plants for a medicinal garden.

(1) .....

(2) .....

- (D) Name **three non-traditional** structures that can be introduced to a medicinal garden.

(1) .....

(2) .....

(3) .....

- (E) Name **one** appropriate drying method that can be used for medicinal plants/products.

.....

- (F) State **two** examples for modern biotechnological techniques used in commercial agriculture.

(1) .....

(2) .....

- (G) State whether the following enterprises are production-oriented or service-oriented by deleting the **incorrect** answer given in brackets.

(1) Conducting training programs to rice farmers in order to increase the rice production.  
(production-oriented/service-oriented)

(2) Operating a fruit processing factory to produce fruit juices.  
(production-oriented/service-oriented)

- (H) State **two** examples for service-oriented businesses related to bioresources technology.

(1) .....

(2) .....

Do not  
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column

(I) State the **four** main steps of successful management of a business.

- (1) .....
- (2) .....
- (3) .....
- (4) .....

(J) State the human health risk associated with each of the following technological advancements.

(1) Use of food additives:

.....

.....

(2) Use of plant-based pesticides in agriculture:

.....

.....

Q. 2

100

3. (A) State **two** advantages of traditional food technologies that are practiced in the food industry.

- (1) .....
- (2) .....

(B) List **two** nutritional benefits of traditional food habits.

- (1) .....
- (2) .....

(C) Name **two** macronutrients in food and the location at which the digested end products of those macronutrients are absorbed into the body.

**Macronutrient**

**Location of absorption**

- (1) ..... (1) .....
- (2) ..... (2) .....

(D) State **two** physical characteristics used to identify spoiled fish.

- (1) .....
- (2) .....

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column

(E) Fresh fish is eviscerated, washed and wrapped with polyethylene for cold storage. State **one** reason for each of the following activities.

(1) Evisceration and washing .....

.....

(2) Wrapping with polyethylene .....

.....

(F) (i) Write **two** differences between raw rice and parboiled rice.

(1) .....

(2) .....

(ii) Write the **two** main changes that take place in starch granules during geletinization.

(1) .....

(2) .....

(iii) State **three** parameters that are used to develop standards for rice.

(1) .....

(2) .....

(3) .....

(G) Name **three** diversified fruit products available in the market

(1) .....

(2) .....

(3) .....

(H) State **three** disadvantages of sun drying of high moist food.

(1) .....

(2) .....

(3) .....

Q. 3

100

4. (A) State **one** advantage of food product diversification.

Do not  
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in this  
column

(B) State **one** advantage and **one** disadvantage of frequent consumption of soya-based food products.

(1) Advantage : .....

(2) Disadvantage : .....

(C) Write **two** reasons for the high demand for minimally processed food in the market.

(1) .....

(2) .....

(D) Name **two** fermented fish products.

(1) .....

(2) .....

(E) List **two** differences of raw coconut oil and virgin coconut oil.

(1) .....

(2) .....

(F) State the main active chemical compound found in Turmeric and Pepper.

**Crop**

**Main active chemical compound**

(1) Turmeric .....

(2) Pepper .....

(G) Tetra packs are widely used packaging material in dairy food industry.

(i) State **two** characteristic benefits that could be obtained using tetra packs in dairy food industry

(1) .....

(2) .....

(ii) List **two** legal requirements that should be fulfilled by the manufactures in designing a label for dairy food that is packed in tetra packs.

(1) .....

(2) .....

(H) State **four** physical parameters that are used to evaluate the quality of a food material.

Do not  
write  
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column

(1) .....

(2) .....

(3) .....

(4) .....

(I) Write **two** health issues associated with frequent consumption of high starchy foods.

(1) .....

(2) .....

(J) The Food Act No. 26 of 1980 in Sri Lanka has imposed some conditions to ensure food safety. List **two** such conditions.

(1) .....

(2) .....

(K) Write **two** main services that can be obtained from *Vidatha* centres.

(1) .....

(2) .....

Q. 4

100

\*\*\*



සියලු ම හිමිකම් ඇවිරිණි / முழுப் பதிப்புரிமையுடையது / All Rights Reserved

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව  
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கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2021(2022)  
General Certificate of Education (Adv. Level) Examination, 2021(2022)

ආහාර තාක්ෂණවේදය II  
உணவுத் தொழினுட்பவியல் II  
Food Technology II

17 E II

### Essay

- \* Select **two** questions from each of the Parts B and C and answer **four** questions only.
- \* Each question carries **150** marks.

### Part B

1. (i) Describe the uses of internet in successful management of a business.  
(ii) Briefly describe the use of food composition tables for the formulation of a balanced diet.  
(iii) Briefly explain the soil formation process.
2. (i) Describe the problems associated with assuring national food security of a country.  
(ii) Describe the process of preparing herbal porridge using one or few medicinal herbs, highlighting the steps to maintain the quality of the product.  
(iii) Explain potential uses of recombinant DNA technology in food and agriculture.
3. (i) Explain the importance of using improved vegetative propagation methods in fruit crops in Sri Lanka.  
(ii) Describe the post harvest handling and processing practices of a selected spice grown in Sri Lanka.  
(iii) Describe the management methods suitable to ensure sustainable use of aquatic ecosystems.

### Part C

4. (i) Briefly describe the factors to be considered in formulating a food menu for a person who suffers from a heart disease.  
(ii) Describe the selection of fruits for preparation of jam, and the process of making jam.  
(iii) Giving examples, briefly describe the use of oleoresin and essential oil in food industry.
5. (i) Describe the importance and contribution of major natural constituents in food during food processing.  
(ii) Describe various methods used to produce dehydrated fish.  
(iii) Briefly explain the benefits of the Consumer Protection Act No. 01 of 1979.
6. (i) Describe the unit operations of manufacturing dessicated coconut.  
(ii) Briefly explain the factors that should be considered in selecting metallic cans for packaging.  
(iii) Explain the impact of the dietary and lifestyle changes that have taken place in the Sri Lankan society on the health of the consumers.

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