නව/පැරණි නිර්දේශය – புதிய/பழைய பாடத்திட்டம் – New/Old Syllabus

NEW/OLD



අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2020
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2020
General Certificate of Education (Adv. Level) Examination, 2020

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** (×) on the number of the correct option in accordance with the instructions given on the back of the answer sheet.*

**1.** The major field of soft technology is
(1) Nanotechnology. (2) Biotechnology.
(3) Industrial technology. (4) Food technology.
(5) Information technology.

**2.** The major atmospheric pollutant that is generated from agricultural activities is
(1) $CH_4$ (2) $CO_2$ (3) $NO_2$ (4) $N_2O$ (5) CFC

**3.** The basement of the food pyramid represents the required amount of
(1) fat for a balanced diet. (2) proteins for a balanced diet.
(3) vitamins for a balanced diet. (4) minerals for a balanced diet.
(5) carbohydrates for a balanced diet.

**4.** Select the correct formula that is used to calculate the Body Mass Index (BMI) of an individual.

(1) $\text{BMI} = \dfrac{\text{Height of a person (cm)}}{[\text{Weight of the person (kg)}]^2}$

(2) $\text{BMI} = \dfrac{\text{Height of a person (cm)}}{\text{Weight of the person (kg)}}$

(3) $\text{BMI} = \dfrac{\text{Weight of a person (kg)}}{[\text{Height of the person (m)}]^2}$

(4) $\text{BMI} = \dfrac{\text{Weight of a person (kg)}}{\text{Height of the person (m)}}$

(5) $\text{BMI} = \dfrac{\text{Weight of a person (kg)}}{[\text{Height of the person (cm)}]^2}$

**5.** The macro nutrients in food mainly contribute to
(1) prevention from diseases. (2) successful reproduction.
(3) growth and development. (4) maintaining a healthy body.
(5) improve brain function.

*[see page two*

**6.** Consider the following statements.

A - Oxidation of lipids can be explained as a non-enzymatic process.

B - Peroxides are the final products generated from lipid oxidation.

C - Photo-oxidation of lipid can be controlled by using carotenoids.

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

(1) A only. (2) B only. (3) C only.

(4) A and B only. (5) A and C only.

**7.** The non-organoleptic parameter which can change due to spoilage of food is

(1) taste. (2) colour. (3) texture. (4) odour. (5) mineral content.

**8.** Food security and food safety are best explained as,

(1) accessibility of food with no health hazards and adequate food, respectively.

(2) availability of adequate food and food with moderate health hazards, respectively.

(3) accessibility for non-hazardous food and adequate food, respectively.

(4) availability of nutritious food and its ability to safeguard human health, respectively.

(5) availability of adequate food with correct nutrition and no health hazards, respectively.

**9.** Consider the following statements.

A - Use of cold chain to distribute fruits and vegetables may assure food security at the national level.

B - Practice of cold chain may extend the shelf-life of fruits and vegetables.

Of the above,

(1) Both A and B are correct.

(2) A is correct and B is incorrect

(3) A is incorrect and B is correct.

(4) A is correct and it is further explained by B.

(5) B is correct and it is further explained by A.

**10.** A farmer transplanted chilli seedlings obtained from a nursery bed and covered them with coconut leaves. The purpose of providing cover for the seedlings after transplanting is to protect them from

(1) wind. (2) rain. (3) insects. (4) frost. (5) direct sun light.

**11.** The environmental parameter/s, which influence the soil genesis is/are

(1) humidity. (2) temperature. (3) rainfall.

(4) humidity and temperature. (5) rainfall and temperature.

**12.** Consider the following statements.

A - Seed dormancy would help seeds to overcome unfavourable conditions.

B - Scarification of passion fruit (*Passiflora edulis*) seeds helps removing seed dormancy.

C - Mature viable crop seeds have a dormancy period of more than 2 weeks.

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.

**13.** An advantage of row seeding as a method of field establishment of crop seeds is the

(1) facilitation of removing unhealthy seedlings.

(2) facilitation of weed control using weeding equipment.

(3) ability to provide optimum conditions for seed germination.

(4) ability to transplant excess seedlings in the extra spaces available in rows.

(5) ability to obtain vigorous seedlings compared to other crop establishment methods.

*[see page three*

**14.** Seed purity percentage is a main factor that should be considered in the seed industry. Presence of seeds belonging to the paddy variety Bg358 and the weed *Echinochloa crus-galli* in a seed lot of the paddy variety Bg360, could be best described as an issue related to

(1) physical purity only. (2) genetic purity only.
(3) species and physical purity only. (4) genetic and physical purity only.
(5) weed and physical purity only.

**15.** Kothalahimbutu (*Salacia reticulata*) is used to treat

(1) asthma. (2) chicken-pox. (3) measles. (4) Mumps. (5) diabetes.

**16.** Select the medicinal plant that the roots are used for de-coxing mixtures.

(1) Bulu (2) Aralu (3) Ginger (4) Nelli (5) Adathoda

**17.** From the following, select the most appropriate tool to obtain the economically important harvest of Savandara for medicinal purposes.

(1) Knife (2) Pair of Scissors (3) Spoon
(4) Scraper (5) Crow bar

**18.** Select the fish that needs a brackish water environment to complete it's life cycle.

(1) Snake-head fish (Loola) (2) Cat fish (Magura) (3) Carp
(4) Tilapia (5) Wekkaya

**19.** The most appropriate example to describe a method of lowering post-harvest losses is

(1) making curd from milk.
(2) wrapping of papaya fruits using paper during transportation.
(3) use of rice bran as an animal feed.
(4) feeding of leftover food to domestic animals.
(5) application of bio-pesticides to control leafhopper.

**20.** The post-harvest losses of fruits and vegetables in Sri Lanka is generally considered to be

(1) 5%-10%. (2) 10%-20%. (3) 20%-40%. (4) 40%-60%. (5) 60%-80%.

**21.** The foundation unit of a living organism is

(1) tissue. (2) protein. (3) cell. (4) organelle. (5) nucleic acid.

**22.** A fresh graduate in management studies plans to start a poultry farm. A suitable land and a market with high demand are available for this project, but several companies supply chicken meat for this market. According to the SWOT analysis the strength, weakness, opportunity and threat of this business are

(1) suitable land, insufficient training, market and other suppliers, respectively.
(2) market, suitable land, insufficient training and other suppliers, respectively.
(3) suitable land, management degree, market and insufficient training.
(4) other suppliers, management degree, insufficient training and market.
(5) market, other suppliers, insufficient training and management degree.

**23.** An example for a production-oriented food based technological entrepreneurship is

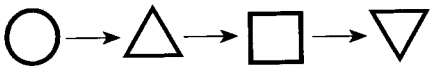
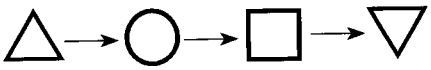
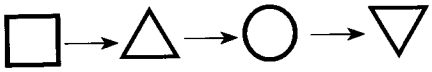
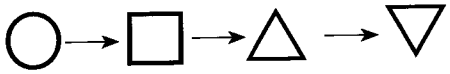
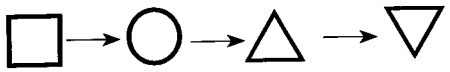
(1) food catering service.
(2) operating a restaurant.
(3) operating a dairy cattle farm.
(4) operating a yoghurt factory.
(5) selling face masks to get protected from COVID - 19 disease.

*[see page four*

**24.** Select the correct statement regarding composting.

(1) The C:N ratio declines with the composting of the raw material.
(2) The release of $CO_2$ is more at the end of composting.
(3) The C content increases in the pile during composting.
(4) There is a continuous increase of temperature of the pile during composting.
(5) The moisture content in the compost pile increases at the end of composting.

**25.** Different production processes could be explained using standard symbols. The correct procedure to represent the manufacturing process of set-yoghurt using standard symbols is

(1) 
(2) 
(3) 
(4) 
(5) 

**26.** Consider the following statements.

A - Use of modern technology always negatively affects the nutrition profile of a food.
B - Combination of modern and traditional technologies may improve the nutritional profile of a food.
C - Most of the traditional technologies positively affect the nutrition profile of a food.

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.

**27.** Consider the following statements on antioxidants.

A - Antioxidants protect food from lipid oxidation.
B - Dietary antioxidants promote human health.
C - Vitamin B and vitamin K are natural antioxidants in some foods.
D - Citrus fruits are rich in natural antioxidants.

Of the above, correct statements are,

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

**28.** Polyunsaturated fatty acids

(1) are abundant in coconut oil.
(2) can easily get oxidized.
(3) in fish oil are considered essential fatty acids.
(4) in food are considered unhealthy.
(5) are always higher in animal-based foods compared to plant-based foods.

**29.** Select the option that includes only convenient foods.

(1) Jam, canned fish and noodle
(2) Cordial, canned fish and noodle
(3) Frozen fish, flour mixture for dosai and canned food
(4) Minimally processed vegetables, canned food and frozen fish
(5) Canned fish, minimally processed fruits and flour mixture for string-hoppers

*[see page five*

**30.** Wheat flour is suitable for making bread compared to rice flour because,
(1) wheat flour gets fermented by yeast easily compared to rice flour.
(2) the quality of gluten in rice flour decreases during fermentation.
(3) fiber in rice flour hinders the textural development in bread dough.
(4) gluten in wheat flour produces $CO_2$ to develop the texture of bread.
(5) protein in wheat flour entraps $CO_2$ to volume up the bread dough.

**31.** According to the classification of rice available in the market, red raw nadu rice is
(1) an unpolished, parboilled and long grain rice type.
(2) a polished, parboilled and medium grain rice type.
(3) a polished, unparboilled and long grain rice type.
(4) an unpolished, unparboilled and short grain rice type.
(5) an unpolished, unparboilled and medium grain rice type.

**32.** The leavening agents used in bread, biscuit and hopper making are
(1) sodium bicarbonate, yeast and yeast, respectively.
(2) yeast, sodium bicarbonate and yeast, respectively.
(3) ammonium bicarbonate, yeast and sodium bicarbonate, respectively.
(4) yeast, ammonium bicarbonate and sodium bicarbonate, respectively.
(5) ammonium bicarbonate, sodium bicarbonate and yeast, respectively.

**33.** Higher consumption of legume seeds may lead to poor digestion of protein and flatulence due to the presence of
(1) phytate and trypsin inhibitors in seed kernal.
(2) phytate and lipoxygenase in seed kernal.
(3) trypsin inhibitors and phytate in seed coat.
(4) lipoxygenase and phytate in seed coat.
(5) trypsin inhibitors and resistant starch in seed kernal.

**34.** The correct sequence of unit operations in making soya milk from soya bean seeds is
(1) grinding, soaking, heating and filtering.
(2) soaking, blending, filtering and boiling.
(3) grinding, steaming, filtering and boiling.
(4) soaking, steaming, blending and filtering.
(5) soaking, blending, steaming and filtering.

**35.** Pectin and sulphur dioxide in jam served as
(1) a thickener and a preservative, respectively.
(2) a preservative and a flavouring agent, respectively.
(3) an emulsifier and a preservative, respectively.
(4) a gelling agent and an antioxidant, respectively.
(5) a stabilizer and an antimicrobial agent, respectively.

**36.** Total soluble solid of a food is determined using a
(1) pH meter. (2) tensiometer. (3) Brix meter.
(4) viscometer. (5) ebliometer.

**37.** During minimal processing of fruits and vegetables
(1) high heat processing is applied.
(2) good manufacturing practices need to be employed.
(3) diversified food products are produced.
(4) preservatives are added to extend the shelf-life.
(5) advanced and costly unit operations can be applied.

*[see page six*

**38.** Osmotic dehydration is
(1) used for drying of fruits.
(2) commonly used in processing dry fish.
(3) a modern technique of food preservation.
(4) used to make food powders.
(5) performed with high concentration of alcohol.

**39.** Following are few requirements related to commercial production of ice-cream.
A - Availability of good quality milk and cream
B - Addition of starter cultures and flavours
C - Cold storage
D - Sensory evaluation of the product
Of the above, the correct requirements are
(1) A and B only. (2) B and C only. (3) A, B and C only.
(4) A, C and D only. (5) all A, B, C and D.

**40.** An example for a diversified fish product is
(1) jadi. (2) dry fish. (3) fish balls.
(4) Maldive fish. (5) smoked fish.

**41.** Sausages are a processed meat product. They are categorized as
(1) fermented food. (2) smoked food. (3) value added food.
(4) chemically preserved food. (5) osmotically dehydrated food.

**42.** Select the correct statement regarding virgin coconut oil.
(1) Cannot be used for frying of foods
(2) Widely used in the soap manufacturing process
(3) Extraction temperature range is 90°C - 100°C
(4) Contains less amount of antioxidants compared to raw coconut oil
(5) Contains more unsaturated fatty acids compared to raw coconut oil

**43.** Consider the following statements.
A - Oleoresin contains aromatic compounds.
B - Oleoresin adds characteristic taste and flavour to the food product.
Of the above,
(1) Both A and B are correct.
(2) A is correct and B is incorrect.
(3) B is correct and 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.

**44.** An important characteristic that should be considered when selecting glass containers as a packaging material is
(1) low weight. (2) low cost.
(3) attractive shape. (4) attractive colour.
(5) photochemical interactions.

**45.** Select the correct statement regarding the different packaging techniques.
(1) Vacuum packaging is commonly used in sausage production process.
(2) Controlled atmospheric packaging always prevents the oxidation of food.
(3) Aseptic packaging preserves the colour of a food product.
(4) Aseptic packaging is commonly used in milk powder production.
(5) Controlled atmospheric packaging is widely used in the beverage industry.

*[see page seven*

**46.** The possible critical control points available in the sterilized milk bottling industry are
(1) sterilization temperature, sealing environment, temperature of the distribution environment and bottle washing.
(2) bottle washing, sterilization temperature, sterilization time duration and sealing environment.
(3) sealing environment, bottle washing, hygienic condition at the sales outlet and distribution environment.
(4) bottle washing, distribution environment, hygienic condition of the sales outlet and sterilization time duration.
(5) sterilization temperature, sterilization time duration, bottle washing and hygienic condition of the sales outlet.

**47.** Ash content in a food represents
(1) fat content. (2) fiber content. (3) mineral content.
(4) calorific value. (5) vitamin content.

**48.** Osteoporosis and xerophthalmia conditions in human that are caused due to deficiencies of
(1) calcium and iron. (2) vitamin B and calcium.
(3) calcium and vitamin A. (4) iron and calcium.
(5) calcium and vitamin D.

**49.** Consider the following statements.
A - Iodine deficiency directly affects the function of the thyroid gland.
B - Iodine deficiency indirectly affects the calcium metabolism.
Of the above,
(1) Both A and B are correct.
(2) A is correct and B is incorrect.
(3) B is correct and 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.

**50.** The critical factor of flour that should be considered by a biscuit and bread manufacturer is
(1) colour of the flour.
(2) fat content of the flour.
(3) fiber content of the flour.
(4) protein content of the flour.
(5) reducing sugar content of the flour.

* * *

නව/පැරණි නිර්දේශය – புதிய/பழைய பாடத்திட்டம் – New/Old Syllabus

NEW/OLD



අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2020
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2020
General Certificate of Education (Adv. Level) Examination, 2020

ආහාර තාක්ෂණවේදය II
உணவுத் தொழினுட்பவியல் II
**Food Technology II**

**17 E II**

පැය තුනයි
மூன்று மணித்தியாலம்
***Three hours***

අමතර කියවීම් 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* **08** *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 - 7 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. 8)**

* *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 | |

[see page two

**Part A - Structured Essay**

*Answer **all** questions **on this paper itself.***

*(Each question carries **100** marks.)*

Do not write in this column

1. (A) State the **two** controversial concepts that describe how human perceive the interaction among them.

(1) .....

(2) .....

(B) State a method each to control pollution from following activities.

(1) Particulate emission due to burning diesel in agricultural tractors:

.....

.....

(2) Runoff of excess nutrients from farmlands to surface water:

.....

.....

(C) State **two** advantages of providing a balanced diet to school children.

(1) .....

.....

(2) .....

.....

(D) Write **two** disadvantages of frequent consumption of fast foods.

(1) .....

(2) .....

(E) Spoilage of food could occur due to different reasons. State **one** reason for each of the following food spoilage conditions.

| Spoilage condition | Reason |
|---|---|
| (1) Rancidity | ..... |
| (2) Formation of brown colour of certain cut fruits | ..... |
| (3) Development of sour taste in milk products | ..... |
| (4) Development of black spots on bread slices | ..... |

(F) Propose **two** ways to achieve household food security.

(1) .....

(2) .....

*[see page three*

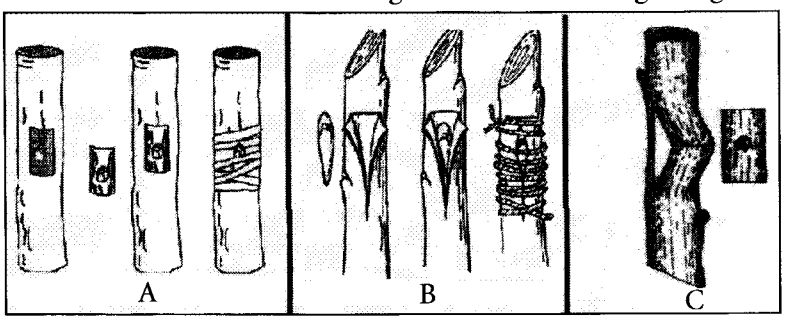
0089

Do not write in this column

(G) Names of species of few commonly used agricultural crops are given below. State a vegetative propagation structure found in each species.

| Species | Vegetative propagation structure |
|---|---|
| (1) *Centella asiatica* | ..... |
| (2) *Solnaum tuberosum* | ..... |

(H) Name the different methods of budding shown in the diagram given below.




A .....

B .....

C .....

(I) Write the appropriate propagule and a plant part used as medicine in each of the following medicinal plants.

| Medicinal plant | Propagule | A part used for medicine |
|---|---|---|
| (1) Aratta | ..... | (1)..... |
| (2) Lunuwila | ..... | (2)..... |
| (3) Ginger | ..... | (3)..... |

Q. 1 (100)

**2.** (A) (1) Name months in the year in which the highest rainfall is expected by the farmers in the Dry Zone of Sri Lanka.

.....

(2) Name an instrument that is used to measure the speed of the wind.

.....

(3) List **two** factors to be considered in establishing a rain gauge in a meteorological station.

(i) .....

(ii) .....

(B) Write **one** example each for the brackish and salt water ecosystems.

| Ecosystem | Example |
|---|---|
| Brackish water ecosystem | ..... |
| Salt water ecosystem | ..... |

*[see page four*

(C) State **four** methods to minimize post-harvest losses in vegetables.

(1) .....

(2) .....

(3) .....

(4) .....

(D) List **two** examples for traditional biotechnological techniques used in agriculture.

(1) .....

(2) .....

(E) List **two** good characteristics of a successful entrepreneur.

(1) .....

(2) .....

(F) Following are few incidences that happened to a business involved in producing herbal tea. State whether they are changes occurred in the internal environment or external environment of the business.

(1) Drop in production due to low supply of raw materials.

.....

(2) Reduction in quality of tea due to errors in the production process.

.....

(G) State **two** reasons for preparing a market plan before starting a food production business.

(1) .....

(2) .....

(H) State **two** components of a cash flow statement.

(1) .....

(2) .....

(I) State **three** risks associated with using soft technology.

(1) .....

(2) .....

(3) .....

Do not write in this column

*[see page five*

(J) Pile method and pit method are the widely used composting methods. Name **two** other methods of composting practiced in Sri Lanka.

(1) .....

(2) .....

Do not write in this column

Q. 2

100

**3.** (A) State **two** traditional food technologies.

(1) .....

(2) .....

(B) Name **two** major nutrient deficiencies of human that can be seen in Sri Lanka.

(1) .....

(2) .....

(C) List **four** benefits of quality assurance of a food material.

(1) .....

(2) .....

(3) .....

(4) .....

(D) State **two** national institutes that can share information on formulation of fruits and vegetable products.

(1) .....

(2) .....

(E) State **two** adverse impacts of the consumption of street food on human health.

(1) .....

(2) .....

(F) (1) State **three** advantages of diversification of food.

(i) .....

(ii) .....

(iii) .....

(2) Provide **two** examples for diversified food products of pineapple.

(i) .....

(ii) .....

*[see page six*

(G) Rice flour and pepper mixed confectionery items are commonly consumed in Sripada pilgrimage. State **two** scientific objectives of the consumption of the above mentioned confectionery items at Sripada.

(1) .....

(2) .....

(H) Write **one** advantage of employing osmotic dehydration in food processing and provide one example for such food product.

(1) Advantage .....

(2) Example .....

(I) State **two** major refining processes available for coconut oil.

(1) .....

(2) .....

(J) Name **two** types of essential oils.

(1) .....

(2) .....

Do not write in this column

Q. 3 100

**4.** (A) (1) Write **two** physico-chemical changes that take place in rice grains during parboiling.

(i) .....

(ii) .....

(2) State **two** parameters that can be used in classifying rice types available in the market.

(i) .....

(ii) .....

(B) (1) Write **three** nutritional advantages of consuming bean sprout over un-sprouted bean seed.

(i).....

(ii).....

(iii).....

(2) State an advantage of using soya as one of the ingredients in a morning grain mix.

.....

(3) Name **two** soya based food products available in the market.

(i) .....

(ii) .....

*[see page seven*

(C) (1) Write an advantage of adding antioxidants into processed food.

Do not write in this column

.....

(2) State the role of natural dietary antioxidants in the human body.

.....

(3) Write **one** example each for water soluble and fat soluble natural antioxidants present in food.

water soluble antioxidant .....

fat soluble antioxidant .....

(D) State **four** factors that should be considered when selecting a container for canned food production.

(1) .....

(2) .....

(3) .....

(4) .....

(E) (1) State **three** external characteristics to identify the freshness of fish.

(i) .....

(ii) .....

(iii) .....

(2) Name **two** methods of dehydration of fish.

(i) .....

(ii) .....

(F) State **two** major differences between yoghurt and ice cream.

(1) .....

(2) .....

Q. 4

$\frac{}{100}$

* *

*[see page eight*

නව/පැරණි නිර්දේශය – புதிய/பழைய பாடத்திட்டம் – New/Old Syllabus

NEW/OLD



අධ්‍යයන පොදු සහතික පත්‍ර (උසස් පෙළ) විභාගය, 2020
கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2020
General Certificate of Education (Adv. Level) Examination, 2020

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) Explain the following statement, with examples.
"Soft technology is always simple and cost-effective."
(ii) Describe the impact of wind and humidity on the agricultural production in Sri Lanka.
(iii) Describe how different plant parts are processed to make medicinal products giving appropriate examples.

**2.** (i) Explain the important activities in relation to proper management of a business.
(ii) Describe the risk of using chemical disinfectants at home to sanitize fresh fruits and vegetables giving appropriate examples.
(iii) Explain the importance of propagation by seeds in food crop production.

**3.** (i) Describe the importance of food processing in achieving national level food security.
(ii) Explain how the fishery industry contributes to the pollution of aquatic ecosystems.
(iii) Explain the following statement.
"Use of some of the modern biotechnological techniques increases the need for preservation of genetic resources."

## Part C

**4.** (i) Briefly explain the basic steps that should be followed to obtain the Sri Lanka Standards (SLS) for a food product.
(ii) Briefly explain the impact of different cultural food habits on nutrition profile of a person.
(iii) Describe the unit operations of bread making, highlighting the specific roles of its ingredients and additives.

**5.** (i) Describe the factors to be considered in minimal processing of fruits and vegetables as a business.
(ii) Explain the unit operations involved in making frozen fish products.
(iii) Briefly explain the benefits of consuming virgin coconut oil over raw coconut oil.

**6.** (i) Describe the information that can be obtained from a label of a food product.
(ii) Briefly explain the use of sensory evaluation in a new food formulation process.
(iii) Describe the physico-chemical changes that take place in major constituents of food processing providing examples.

* * *