

ශ්‍රී ලංකා රජය පොදුජාලා ප්‍රංශ මධ්‍ය පොදුජාලා  
ඩොශුම් ප්‍රාග්ධන ප්‍රංශ මධ්‍ය පොදුජාලා  
Department of Examinations, Sri Lanka

அதையெல்லாம் கணக்கிக் கலை (உயிர் கலை) பிரதான, 2015 கலைக்கீழ் கல்விப் பொதுந் தராதாப் பத்திர (2 ம் நூப் பிரிவை, 2015 ஒக்டோபர் General Certificate of Education (Adv. Level) Examination, August 2015

## ଗଣ ଆର୍ଟେକ ବିଦ୍ୟାର ମନେଜ୍‌ମ୆ଣ୍ଟ ପୋର୍ଟଫୁଲ୍

28 E I

பூர் தேவை  
இரண்டு மணித்தியாலம்  
*Two hours*

**Instructions:**

- \* Answer all the questions.
- \* Write your **Index Number** in the space provided in the answer sheet.
- \* Use of calculators is not allowed.
- \* Read the instructions given on the back of the answer sheet 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) in accordance with the instructions given on the back of the answer sheet.

1. Which of the following statements shows 'flexibility'?
  - (1) placing the drawing room suite and the dining room suite in the drawing room.
  - (2) placing the dining room suite near the kitchen.
  - (3) having lavatory and bathroom adjoining the bed rooms.
  - (4) having a common corridor to enter the storeroom and the kitchen.
  - (5) having two bedrooms closer to each other.
2. The two colours that should be used for a double complementary colour scheme which includes orange and yellow orange are
  - (1) blue and blue purple.
  - (2) green and blue green.
  - (3) purple and red purple.
  - (4) red and red orange.
  - (5) yellow and yellow green.
3. Rhythm is a principle of design used in home decoration. The rhythm which shows a gradual change in size is termed as
  - (1) repetition.
  - (2) radiation.
  - (3) gradation.
  - (4) transition.
  - (5) opposition.
4. Following were some features seen in houses. From them, which is the **irrelevant** feature regarding principles of house planning?
  - (1) Facing an open verandah to the compound.
  - (2) Having a number of tall windows in the drawing room.
  - (3) Having a door to go out of the kitchen.
  - (4) Bathroom and lavatory opening to the corridor.
  - (5) Having a door of one bed room opening to another.
5. Following are the steps taken to create 'emphasis' in some drawing rooms. Out of them, the correct one is
  - (1) using curtains of the same colour for doors and windows.
  - (2) keeping two drawing room suites in a small drawing room.
  - (3) keeping a small flower arrangement on the television in a large drawing room.
  - (4) fixing a large picture on the wall behind the sofa in the drawing room.
  - (5) keeping several accessories in a small drawing room.
6. In a day two 60W bulbs, two 75W bulbs and one 40W bulb were lit for four hours in a house. The number of electrical units consumed were
  - (1) 1.08 kWh.
  - (2) 1.24 kWh.
  - (3) 1.62 kWh.
  - (4) 2.48 kWh.
  - (5) 2.52 kWh.

7. Given below are several ideas suggested by the members of the family regarding placement of furniture in the home.

A - Furniture should be placed according to the functions performed in the room.  
 B - Small furniture should be placed first and then the large ones.  
 C - Furniture should be placed so as to suit the size of the room.  
 D - Large furniture should be placed leaning to the walls.  
 E - Dressing table should be placed facing the window.

Out of them, the correct ones are

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

8. The two groups present in the structure of all amino acids are the

(1) amino group and methyl group. (2) ketone group and methyl group.  
 (3) amino group and carboxyl group. (4) carboxyl group and methyl group.  
 (5) ketone group and carboxyl group.

9. The ratio of hydrogen and oxygen is 2:1 in the composition of

(1) protein. (2) carbohydrate. (3) fat.  
 (4) protein and carbohydrate. (5) fat and protein.

10. Two food sources rich in cellulose are

(1) mukunuwenna and kohila. (2) carrot and papaw. (3) brinjal and pineapple.  
 (4) bean and cucumber. (5) katurumurunga and potato.

11. Which of the following is an **incorrect** statement regarding the trans-fats present in foods?

(1) present in bakery products like pastries and cakes.  
 (2) produced when oils are reheated.  
 (3) abundant in food items such as gingelly, peanuts and cashew nuts.  
 (4) affect in causing heart diseases.  
 (5) formed in the synthesis of margarine.

12. Two nutrients needed for the synthesis of haemoglobin in blood are

(1) iron and protein. (2) protein and zinc. (3) fat and copper.  
 (4) iron and carbohydrate. (5) calcium and fat.

13. Following are some facts given by a student regarding Osteoporosis.

A - A disease that could occur with aging.  
 B - It prevails equally among females and males.  
 C - Decrease of bone density is a cause for the disease.  
 D - May occur due to the deficiency of hormones, oestrogen and thyroxine.  
 E - Diseased are prone to fractures.

The correct facts from them are

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

14. Two food sources rich in retinol are

(1) eggs and carrot. (2) liver and mango. (3) meat and pumpkin.  
 (4) fish and milk. (5) papaw and guava.

15. Two vitamins which are excreted in urine when taken in excess are

(1) vitamin C and E. (2) vitamin B<sub>12</sub> and D. (3) vitamin B<sub>3</sub> and K.  
 (4) vitamin A and B<sub>6</sub>. (5) vitamin B<sub>1</sub> and B<sub>2</sub>.

16. Two symptoms of the deficiency of vitamin B complex are

(1) Night blindness and Diarrhoea. (2) Numbness of feet and Constipation.  
 (3) Dryness of skin and Fall of hair. (4) Oedema and Bowed legs.  
 (5) Paleness and Fatigue.

17. The proteins in milk, wheat and beans respectively are

(1) caesin, legumin and gluten. (2) myosin, gluten and collagen.  
 (3) albumin, legumin and collagen. (4) caesin, gluten and legumin.  
 (5) collagen, myosin and gelatin.

18. Two carbohydrates present in rice are

(1) pectin and maltose. (2) amylose and maltose. (3) amylose and amylopectin.  
 (4) pectin and starch. (5) amylopectin and dextrin.

More Past Papers at  
[tamilguru.lk](http://tamilguru.lk)

19. Out of the following, which is the correct statement regarding the nutritive value of the food sources; green gram, fish and milk?

(1) supply empty calories. (2) rich in the essential amino acid, lysine.  
 (3) abundant in vitamin A and C. (4) rich sources of iron and calcium.  
 (5) contain complete proteins.

20. Given below is a lunch taken by Thanuja.

• Samba rice	• Fried fish	• tempered beans
• Dhal white curry	• brinjal moju	• gotukola curry

Which is the **incorrect** statement regarding this meal?

(1) shows protein supplementation. (2) includes fibre containing foods.  
 (3) rich in vitamin C and D. (4) food items containing haem iron are included.  
 (5) high in calorie value.

21. Out of the following, which is the correct statement regarding the table of recommended dietary allowances (2007)?

(1) Calcium requirement does not change during different stages of the life cycle.  
 (2) Iron requirement of females is more than that of males.  
 (3) Protein requirement decreases in old age.  
 (4) Requirements of vitamin A and C are shown in milligrams.  
 (5) Energy requirement does not change during pregnancy.

22. Following are some facts given by the students regarding nutritional problems of Sri Lanka. Out of them the correct fact is

(1) Protein calorie malnutrition is more prevalent in coastline and estates.  
 (2) Iron and iodine deficiency during pregnancy may cause defects in the foetus.  
 (3) Vegetarianism of the mother is a factor causing nutritional problems in the newborn.  
 (4) Iron deficiency, calcium deficiency, protein calorie malnutrition and iodine deficiency are some nutritional problems in Sri Lanka.  
 (5) Protein calorie malnutrition is termed as Kwashiorkor.

23. The value of the Body Mass Index (BMI) of a Sri Lankan healthy adult would be,

(1) 17. (2) 24. (3) 27. (4) 30. (5) 32.

24. Two food sources rich in omega-3-fatty acids are

(1) butter and ghee. (2) gingelly oil and coconut oil.  
 (3) margarine and chicken. (4) salmon and sardine.  
 (5) mustard oil and sunflower oil.

25. Following are some points taken from a note written by a student regarding gastritis. Out of them, what is the **incorrect** one?

(1) Should control the intake of acidic foods.  
 (2) It is not suitable to delay the dinner.  
 (3) Milk and milk foods are much suitable.  
 (4) Frequent small meals are preferred.  
 (5) Should provide easily digestible light meals.

26. The **incorrect** statement regarding the hormone Insulin is,

(1) Protein is needed for the synthesis. (2) It is synthesised in the pancreas.  
 (3) Zinc is a constituent of Insulin. (4) Its deficiency causes diabetes.  
 (5) It converts glycogen to glucose.

27. From the following, which is the most suitable meal for a person having diabetes?

(1) Parboiled rice, potato curry, bean curry, tempered capsicum, carrot sambol.  
 (2) Parboiled rice, dhal curry, fried sprats, brinjal moju, beet salad.  
 (3) Parboiled rice, cucumber curry, savoury fish curry, mukunuwenna mallung, tomato salad.  
 (4) Red raw rice, pumpkin curry, chicken stew, jak mallung, fried kankun.  
 (5) Red raw rice, ash plantain curry, cabbage curry, prawns fried, gotukola sambol.

28. A preservative used in processing meat products is

(1) citric acid. (2) propionic acid. (3) sodium nitrite.  
 (4) sodium benzoate. (5) sodium metabisulphite.

More Past Papers at  
[tamilguru.lk](http://tamilguru.lk)

29. Following are some facts taken from a note written by a student regarding food preservation. Which is the correct fact from them?

- The preservative common salt is an organic salt.
- Pasteurization destroys all the micro-organisms in milk.
- Biological causes such as getting crushed and scarred affect spoilage of food.
- Blanching inactivates the enzymes in the food.
- Water, substrate and optimum temperature are the factors needed for the growth of micro-organisms.

30. During digestion of food, the conversion of fats into fatty acids and glycerol occurs in the

- stomach and duodenum.
- duodenum and small intestine.
- duodenum only.
- stomach and small intestine.
- small intestine only.

31. From the following, which is the true statement regarding the process, metabolism of nutrients?

- Anabolism is the breaking down process.
- The end products of metabolism are energy, water and oxygen.
- Ketone bodies are formed in the metabolism of fats.
- Metabolism of carbohydrates is an anaerobic process.
- In the metabolism of protein, deamination takes place in the kidneys.

32. Gelatinization occurs when

- beating egg whites.
- making jam.
- boiling potatoes.
- making marshmellow pudding.
- stewing fish.

33. The group of vitamins which are least destroyed during cooking is

- vitamin A, D and B<sub>12</sub>.
- vitamin B<sub>2</sub>, B<sub>6</sub> and C.
- vitamin A, B<sub>3</sub> and E.
- vitamin B<sub>1</sub>, K and C.
- vitamin A, D and E.

34. The steps followed when making the choux pastry are

- mixing flour and fat well and adding eggs.
- heating fat, adding eggs and then mixing the flour.
- beating fat, adding eggs and then mixing the flour.
- heating fat, adding flour and then mixing eggs.
- mixing eggs and fat, and then adding flour.

35. The **incorrect** statement regarding child development is

- training is not needed for the abilities shown during infancy.
- the emotions of an infant are instant and unstable.
- some children during early childhood show tempertantrums.
- children use imitation in learning.
- there is a relationship between the physical development and intellectual development in children.

36. The neonate is the infant

- from birth to two days.
- from birth to one week.
- from birth to two weeks.
- from birth to four weeks.
- from birth to six weeks.

37. From the following, what is the **incorrect** statement regarding the nutrients in breast milk?

- The amount of lactose in breast milk is more than that of cow's milk.
- Contains essential fatty acids.
- Immunoglobulins are present.
- The amount of protein in breast milk is more than that of cow's milk.
- The fat present in breast milk is easily digestible.

38. The development of a child progresses in the proximo-distal sequence (from the centre to the peripheral parts). Which of the following statements justifies this phenomenon regarding the motor development?

- The infant who hugs large light toys with both hands gradually picks up small toys.
- A child who can sit up at about 7 months, stands up by about 10 months.
- The infant who sleeps on his back is gradually able to raise his head.
- The infant of about one month moves his hands and feet well.
- The child who is able to walk, gradually gets the ability to run.

39. The vaccine that should be given to the child when he completes five years is  
 (1) JE vaccine. (2) Dual vaccine (DT vaccine). (3) MMR vaccine.  
 (4) oral Polio vaccine. (5) Pentavalent vaccine.

40. In caring for infants, it is very important to provide opportunities for their different developmental aspects. An instance which justifies this statement is  
 (1) giving a toy that makes sound when shaken, to a two month old baby.  
 (2) allowing a nine month old child to play see-saw.  
 (3) providing food whenever the child cries.  
 (4) training a child of ten months to pronounce words.  
 (5) singing lullabies when the infant goes to sleep.

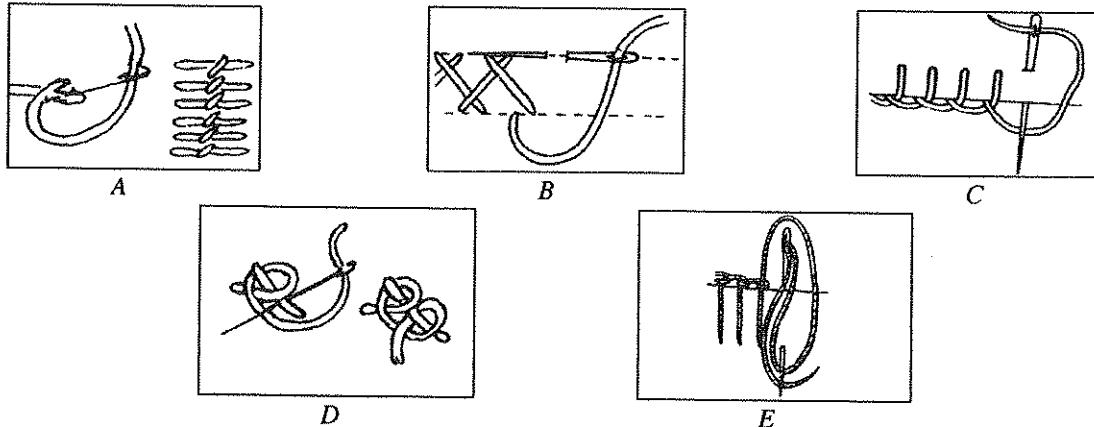
41. Which of the following is the correct statement related to physical development of a child of late childhood?  
 (1) Shows a rapid rate of physical development.  
 (2) All the permanent teeth are erupted.  
 (3) The physical development is almost the same in both boys and girls at about ten years.  
 (4) Due to the development of bones, the proper shape and size of the body start to appear.  
 (5) May become obese due to the rapid development of muscles.

42. Maladjustment is identified as, children  
 (1) behaving against parents.  
 (2) behaving in a manner that is not accepted by peers.  
 (3) behaving in a manner which leads to punishments.  
 (4) behaving against social norms.  
 (5) behaving as delinquents.

43. Which of the two decorative stitches show a similarity in twisting the thread around the needle when stitching?  
 (1) Bullion stitch and chain stitch. (2) French knots and Bullion stitch.  
 (3) Chain stitch and French knots. (4) French knots and Lazy Daisy stitch.  
 (5) Lazy Daisy stitch and Bullion stitch.

44. The symbols  $\Delta$  and  $\square$  were mentioned in the care label of a ready-made garment. These symbols represent respectively that  
 (1) it could be bleached and line dried.  
 (2) it could be line dried and dry cleaned.  
 (3) it should be dried on a flat surface and could be bleached.  
 (4) it could be dry cleaned and line dried.  
 (5) it could be bleached and should be dried on a flat surface.

45. Shown below are diagrams of some stitches.

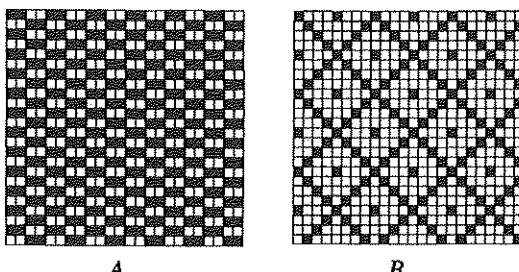


From them, Roumanian stitch and Button hole stitch are shown respectively by

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

46. Which of the following chemical reagents could be used to remove a tea stain on a cotton garment?  
 (1) Turpentine. (2) Sodium carbonate. (3) Methylated spirit.  
 (4) Carbon tetrachloride. (5) Borax.

47.



The diagrams A and B show

(1) Regular twill weave and Warp rib weave. (2) Weft rib weave and Diamond twill weave.  
 (3) Wavy twill weave and Warp rib weave. (4) Regular twill weave and Basket weave.  
 (5) Basket weave and Zigzag twill weave.

48. 'Tentering' is a finish given to fabrics. In this process

(1) the sheen of the fabric increases. (2) the strength of the fabric increases.  
 (3) the width of the fabric is made even. (4) the absorbency of dyes increases.  
 (5) a raised effect of motifs is seen.

49. Different types of fibres are used in manufacturing fabrics. Following are some characteristics and properties of fibres/fabrics.

A - Fibre is transparent; appears as a glass tube.  
 B - Could be subjected to sanforization.  
 C - In washing mild alkali soap does not weaken the fibres.  
 D - Shows more affinity towards dyes.  
 E - Resistant to strong sunlight and heat.

From these, the characteristics and properties related to silk fibres are

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

50. Following are some statements given by a student regarding Textile Technology. The **incorrect** statement from the following is

(1) When washing clothes with soapy water, the dirt particles are removed forming micelles.  
 (2) When stitching the saree blouse, the front waist darts should be turned towards the side seam.  
 (3) There is no bleaching action in blueing.  
 (4) When sewing the shirt, the sleeve should be fixed to the bodice, after sewing the under arm seam.  
 (5) The strength of a woven fabric depends on the number of threads in one square inch.

\* \* \*

အောင် အာရပါက သိပ္ပာသ  
မဏေပဲ ပောကြုံပါယလဲ  
**Home Economics**

28 E II

ஏடு ஓக்டை  
மூன்று மணித்தியாலம்  
*Three hours*

**Instructions:**

\* Answer three questions from Part I including question No. 1 and answer four questions from Part II including question No. 5.

## Part I

(Answer three questions including question No. 1 and two others.)

1. A family consisting of five members live in a pleasant two bedroomed house in a semi-urban area. There are two school aged daughters and a son in this family. Both the parents are employed. The mother has special skills in cookery and sewing. This family is interested in creating a pleasant home environment.

- Suggest **four** ways that could be taken by the family to minimize the problems that may arise regarding time management.
- Explain the steps that could be taken to organize space, so as to fulfil the needs of the family members.
- A beautiful flower arrangement is placed on the tea-poy of the drawing room suite. Mention the principles that were followed by them in arranging the same.
- It is the experience of the mother that cotton fabrics are the most suitable to construct household linen and garments. Give facts to justify this.
- Name **two** seams that should be used in sewing night dresses for the daughters. Describe how one of them is sewn and finished.

2. (i) Explain,  
(a) Saponification  
(b) Process of oxidative bleaching,  
in caring for fabrics.

- Show with diagrams, the drafting of the yoke of a shirt.
- Explain, how the round shaped neckline of a saree blouse could be sewn and finished.
- Describe the manufacturing process of nylon fibres.

3. (i) There are **two** ways of showing balance in interior decoration of houses. Show them with the help of diagrams.

- "The proper utilization of human resources of the family members affects the well-being of the family." Discuss.
- Explain the following briefly.  
(a) Trip switch. (b) Three pin plug.  
(c) Purification of water at home. (d) Compact Fluorescent Lamp (CFL)

4. (i) Electrical appliances and tools are important for the convenience of household chores. Explain the working, use and maintenance of an electric oven.

- 'Light' and 'ventilation' are principles of house planning.  
Explain,  
(a) the points to be considered in obtaining proper light to the kitchen.  
(b) the ways of obtaining cross ventilation in a room.
- The quality of household linen is improved by surface decoration.  
(a) Write the steps to be followed in quilting.  
(b) Mention **two** methods of printing fabrics and describe one of them.

## Part II

(Answer **four** questions including question No. 5 and three others.)

5. Following are headlines of some articles exhibited on the news bulletin in the Home Economics laboratory.  
 'Active life style leads to healthy living.'  
 'There is an increase in the consumption of milk and small fish in the community.'  
 'It is important to organize programmes to motivate adolescents to consume nutritious meals.'  
 'Awareness programmes are conducted for parents regarding the development of adolescents.'  
 The teacher informed groups of students to study by reviewing the facts in those articles and to present reports. She also took steps to discuss and evaluate the reports.

(i) How does an active life style result in healthy living? Give **four** points.  
 (ii) Explain the nutritional value of milk and small fish.  
 (iii) Write the main points that should be included in an awareness programme on, 'Nutrition in adolescence'.  
 (iv) Discuss the role of the parents regarding the mental development of adolescents.  
 (v) "The awareness of the reproductive health in adolescence is very important." Review.

6. (i) The services rendered by ante-natal clinics are immense in reducing the infant mortality and maternal death rates. Give **four** points to justify this.  
 (ii) Explain the steps to be taken in caring, to safeguard the health of the children in early childhood.  
 (iii) Discuss how the moral values could be inculcated in children of late childhood.  
 (iv) Describe the role of **three** services implemented in Sri Lanka in directing adolescents in the right path.

7. (i) The minerals which are micro nutrients are classified under two main groups. Name them. Write **two** examples for each.  
 (ii) Discuss the importance of consuming fibre containing foods for a healthy living.  
 (iii) Identify,  
     (a) Body Mass Index (BMI).  
     (b) Nitrogen balance of the body.  
     (c) Saturated fatty acids.

8. (i) Explain **four** steps that could be taken to maintain the food security while preparing food at home.  
 (ii) Mention the techniques to be applied in processing tomato jam and explain how each of them affect in its preservation.  
 (iii) Review the following:  
     (a) The food items such as fish and meat should be stored in the deep freezer.  
     (b) The organoleptic factors affect the digestion of food.  
     (c) It is important to include citrus fruits along with the iron rich sources given to a vegetarian.  
     (d) It is suitable to include toasted bread as a food for a convalescing person.

9. (i) Mention the main function of each of the following nutrients to the body.  
     (a) vitamin K  
     (b) folic acid  
 (ii) Discuss the steps taken at National level to minimize the nutritional problems in Sri Lanka.  
 (iii) Explain the following.  
     (a) The importance of placenta during prenatal development.  
     (b) Expressing regressive behaviour by some children in the early childhood.  
     (c) Role of the school in developing language skills in children of late childhood.

\* \* \*