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අධ්‍යාපන පොදු සහතික පත්‍ර (ලුස්ස පෙළ) විභාගය, 2024
කළුවිප පොතුත් තරාතරුප පත්තිර (ඉයර තරුප) පරිශ්‍යා, 2024
General Certificate of Education (Adv. Level) Examination, 2024

සාමාන්‍ය පොදු පරීක්ෂණය පොතුස් සාතුරුණුප් පර්ශ්‍යීස් **Common General Test**

12 E

இரண்டு மணித்தியாலும்
Two hours

Instructions:

- * Answer all the questions.
- * Use of calculators is not allowed.
- * Write your Index Number in the space provided in the answer sheet.
- * Instructions are given on the back of the answer sheet. Follow them carefully.
- * In each of the questions from 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.

[See page two]

8. The Centre for Liver Diseases in Sri Lanka was inaugurated for liver transplant surgeries in March 2024 with a donation of 2.5 billion rupees from M. H. Omar Foundation. In which hospital was this special unit established?

(1) Colombo National Hospital (2) Colombo North Teaching Hospital, Ragama
 (3) Peradeniya Teaching Hospital (4) Anuradhapura Teaching Hospital
 (5) Colombo South Teaching Hospital, Kalubowila

9. The International Monetary Fund (IMF) has recommended a number of measures to the Sri Lankan government to stabilise the economy of the country. Which one of the following is **not** recommended?

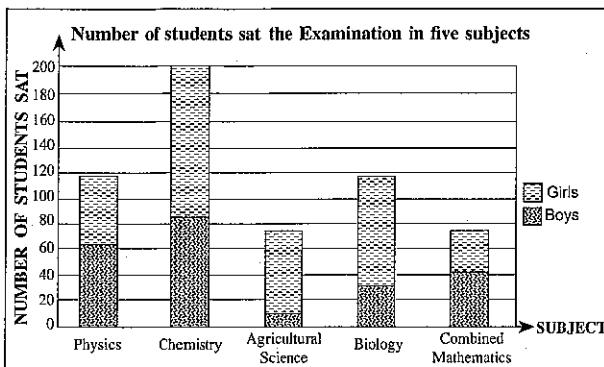
(1) Strengthening tax administration (2) Actively eliminating tax evasion
 (3) Building confidence among creditors (4) Removing tax exemptions
 (5) Promoting tourism industry

10. The book '*A Brief History of Time*', a landmark in scientific writing was first published in 1988 and a response to it was published recently with the title '*On the Origin of Time*'. The physicist who wrote '*A Brief History of Time*' was

(1) Stephen Hawking. (2) Steen Pinker. (3) James Gleick.
 (4) Rachel Carson. (5) Carl Sagan.

● Questions number 11 and 12 are based on the following graph.

The bar graph illustrates the number of students genderwise separately who sat the G.C.E. Advanced Level Examination last year at an examination centre, for each subject of Physics, Chemistry, Agricultural Science, Biology and Combined Mathematics.



11. The subjects for which the number of boys sat the examination is greater than that of girls are

(1) Physics and Chemistry. (2) Physics and Agricultural Science.
 (3) Physics and Biology. (4) Physics and Combined Mathematics.
 (5) Agricultural Science and Combined Mathematics.

12. In one of these subjects, the percentage of the difference between the number of girls and boys who sat for the subject with respect to the total number of students who sat for the same subject becomes lowest. What is this subject?

(1) Physics (2) Chemistry (3) Agricultural Science
 (4) Biology (5) Combined Mathematics

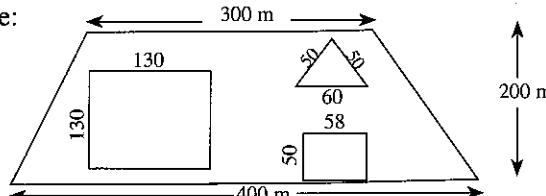
13. After selling a property for a certain amount, Mr. Samuel deposited 40% of it in a bank for 10% annual interest. At the end of one year, he received Rs. one million as the interest. What is the amount he received by selling his property?

(1) Rs. 15 million (2) Rs. 20 million (3) Rs. 25 million
 (4) Rs. 30 million (5) Rs. 35 million

14. Padmini was born in 1982. Shani, one of her daughters is 5 years younger than her other daughter Tina. In the year 2032, age of Tina would be half of Padmini's age. In which year was Shani born?

(1) 2000 (2) 2005 (3) 2007 (4) 2010 (5) 2012

15. The dimensions of a land in the shape of a trapezium are given in the diagram below. The dimensions required to determine the floor areas of three buildings of different shapes in this land are given in the table:



Shape of Building	Length of Side/s (m)
Square	130
Rectangular	58, 60
Triangular	50, 50, 60

What is the percentage of area covered by the three buildings with respect to the total area of the land?

(1) 17% (2) 25.5% (3) 29.1% (4) 30% (5) 30.4%

16. In a multi-storey apartment building, price of apartments in each floor above the ground floor is calculated using a formula based on the price of an apartment in the ground floor. The pricing formula for apartments in each floor consisting of two parameters namely the common factor and the floor number is given below.

$$\text{Price of an apartment in floor } L = \text{Ground floor price} \times \left[1 - \frac{\text{Common Factor} \times L}{100} \right]$$

If the price of an apartment in the ground floor is Rs. 30 million and the Common Factor is 0.25, what is the price of an apartment on the 24th floor in million Rupees?

(1) 25 (2) 26.5 (3) 27.6 (4) 28.2 (5) 29.3

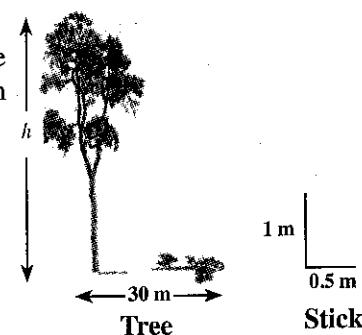
17. An express train leaves the station X at 07.30 am and passes the stations P and Q at 07.45 am and 08.25 am respectively and arrives at the destination Y at 09.00 am. If the uniform speed of the train is 100 km h⁻¹, the total distance travelled by the train and the distance between the stations P and Q are respectively,

(1) 150 km and 52.2 km (2) 150 km and 60.4 km (3) 150 km and 66.7 km
(4) 165 km and 50.7 km (5) 165 km and 67 km

18. A simple method to estimate the height of a tall tree standing alone in a flat ground is to compare its height to shadow length ratio with that of a stick posted straight on the ground at the same time.

What is the height (h) of the tree shown in the figure?

(1) 20 m (2) 30 m (3) 50 m
(4) 60 m (5) 80 m



- Questions number 19 and 20 are based on the following information.

Expenditure and revenue records of cultivations of several crops in a large coconut estate for a certain year are given below.

	Capital Investment In Rs.'000	Labour Cost In Rs.'000	Loan Instalment In Rs.'000	Revenue In Rs.'000	Net Profit In Rs.'000
Coconut	1700	900	516	3900	784
Coffee	16.5	8.1	—	32.1	7.5
Pepper	15.32	11.6	20.0	94.5	47.58
Ginger	5.5	7.2	—	23.4	10.7
Turmeric	13.8	9.9	—	33.7	10

19. Which crop has the highest percentage of profit with respect to the revenue?
(1) Coconut (2) Coffee (3) Pepper (4) Ginger (5) Turmeric

20. Which crop has the lowest percentage of profit with respect to the total cost?
(1) Coconut (2) Coffee (3) Pepper (4) Ginger (5) Turmeric

21. A fruit juice manufacturing company produces 250 ml of pure pineapple juice from 750 g of pineapple. 200 ml of pure pineapple juice is diluted with water to make 1 litre of pineapple drink. Five pineapple drink cartons of equal amount are made from 1 litre of diluted pineapple drink. What is the weight of pineapple used to make (in grammes) a single carton of pineapple drink?
(1) 110 (2) 120 (3) 130 (4) 140 (5) 150

- Questions from number 22 to 24 are based on the following information.

The mythical civilisation named Usopotamia had three digits in their number system, while the neighbouring Mitipotamia had only two. However, the Mitipotamians have borrowed all digits and symbols for arithmetic operations from Usopotamians.

The Mitipotamian equation was written as by Usopotamians.

22. Usopotamians needed only two digits to write a particular number, which the Mitipotamians wrote with four digits. How many such numbers are there?
(1) 1 (2) 2 (3) 3 (4) 4 (5) 0

[See page four]

23. Which of the following Usopotamian numbers is a prime number?

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

24. Which of the following Mitipotamian expression depicts a correct equation?

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

● Questions from number 25 to 27 are based on the following information.

A snail is approaching a plant so that at the end of each minute its distance from the plant is exactly half the distance from the plant at the beginning of that minute. The distance travelled by the snail from the end of the second minute to the beginning of the fifth minute is 3 cm.

25. How far was the snail from the plant when it started the journey?

(1) 8 cm (2) 10 cm (3) 16 cm (4) 32 cm (5) 64 cm

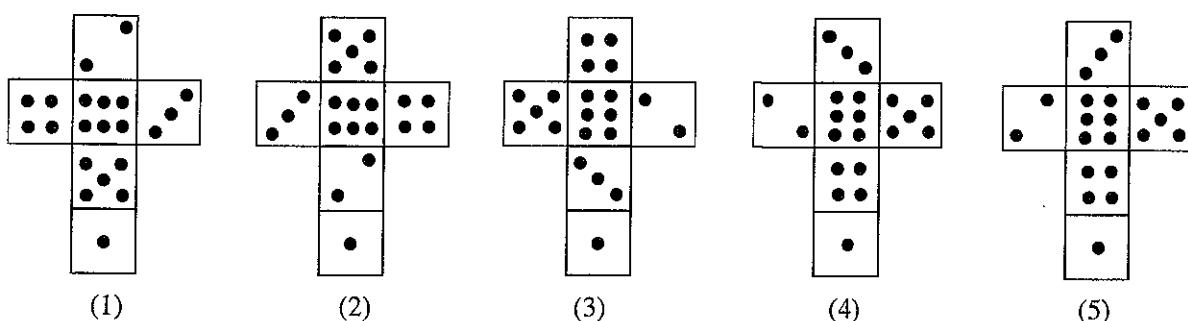
26. What is the value of $n-m$ if the ratio of the average speed in the m^{th} minute to the n^{th} minute is 128 : 1 in the snail's motion?

(1) 7 (2) 8 (3) 16 (4) 32 (5) 64

27. Which of the following is **incorrect**?

(1) If the snail ended the second minute by increasing its speed, then the third minute must begin by decreasing the speed.
 (2) The distance travelled by the snail by the end of the third minute is 14 cm.
 (3) If the snail achieved an increase of speed in the second minute, it must have achieved a decrease of speed in the same minute.
 (4) The snail does not reach the plant within one hour.
 (5) In a real context, it is impossible for a snail to reach a plant according to this speed.

28. The five options of this question represent five patterns that could be used to create five dice. Which one of these patterns creates a different dice from the dice the other four patterns create?



(1)

(2)

(3)

(4)

(5)

29. Consider the given figures: figure 01, figure A, figure B and figure C.

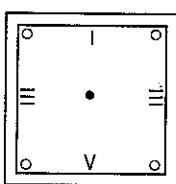


Figure 01

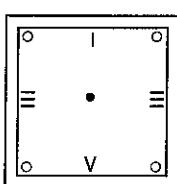


Figure A

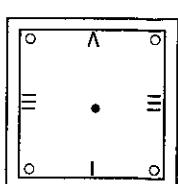


Figure B

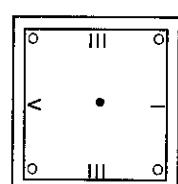


Figure C

The figure/figures that could be obtained as an image/images of figure 01 on a plane mirror is/are

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

30. Select the option which classifies the following statements as definite (A), very probable (B), probable (C), less probable (D) and impossible (E) respectively.

1. There are two persons in the world having exactly same number of hair on each of their heads.
2. Hair loss is associated with stress levels and dietary habits.
3. 'Red-Headed League' is the least liked story for some of Sherlock Holmes fans.
4. A number of celebrities have chosen to shave their heads as a rejection of worldly pride.
5. Astronauts do not go through a growth of hair on head during their stays at space stations.

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

31. Which of the following observation-conclusion pair needs to be valid even when the observation and the conclusion are interchanged?

Observation	Conclusion
(1) The radius of circle A is less than the radius of circle B.	The area of circle A is less than the area of circle B.
(2) $X = 2$	$X^2 - 3X + 2 = 0$
(3) $X > 1$	$X > 0$
(4) Wednesday of the next week is a Full moon poya day.	Friday of the next week is not a Full moon poya day.
(5) Amal's parrot can speak some English and French words.	Some parrots can speak words from more than one language.

● Questions from number 32 to 36 are based on the following information.

The predictions made by the YouTube channels Shani Tube, Kuja Tube, Guru Tube, Budha Tube and Ravi Tube, predicting the number of runs scored by the Sri Lanka women's team in a cricket match to be held on a future day, were different from each other. While Shani Tube predicted the score to be between 100 and 200, Kuja Tube said that it is definitely not less than 100. Guru Tube said in a pessimistic tone that predictions of both of them are wrong and they will not get so many runs. Budha Tube said in a firm tone that women's team would score exactly 200. Ravi Tube only said that predictions of both Shani Tube and Guru Tube would be wrong.

32. If the team scored 276 runs, how many of these channels' predictions would be correct?

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

33. If the team's score resulted the highest possible number of wrong predictions, which channel's prediction was correct?

(1) Shani Tube (2) Kuja Tube (3) Guru Tube (4) Budha Tube (5) Ravi Tube

34. How many runs must the team score to get the most number of predictions correct?

(1) Any number less than 150 (2) 200 (3) Any number greater than 250
 (4) 275 (5) Data insufficient

35. Which channel has a chance for its prediction to be correct for any number of runs that makes only two predictions correct?

(1) Shani Tube (2) Kuja Tube (3) Guru Tube (4) Budha Tube (5) Ravi Tube

36. Imagine a situation where the team scoring one more run to end the inning makes the number of correctly predicted channels decrease by one. In such a case, which channel will be added to the list of incorrectly predicted channels?

(1) Shani Tube (2) Kuja Tube (3) Guru Tube (4) Budha Tube (5) Ravi Tube

● Questions from number 37 to 39 are based on the following information:

Six friends A, B, C, D, E and F, are sitting around a circular table facing towards the centre of the table in anti-clockwise order so that the distances AB, BC, CD, DE, EF and FA are equal. This group consists of three males and three females. Three of these six friends are from Western province, two are from Eastern province and one is from Central province. Three females of this group are from the three provinces. The seating arrangement of this group is in accordance with the following conditions:

- * A is facing the female from the Western province.
- * The female sitting next to the female from the Western province on her right hand side is from the Central province.
- * E too is facing a female.
- * On either side of B are two males from the Western province.

37. Consider the following statements *P*, *Q* and *R*.

P - Two males of these six friends are from the Western province.

Q - *A* is a male from the Western province.

R - Two males and one female are sitting at the vertices of an equilateral triangle.

Of the statements,

(1) only *P* is true. (2) only *Q* is true.
 (3) only *R* is true. (4) only *P* and *Q* are true.
 (5) all *P*, *Q* and *R* are true.

38. The male from the Eastern province is

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

39. The three males of this group are

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

40. Select the strongest evidence that weakens the following claim:

Claim : In any city, there is a park that everyone who lives in that city has spent an evening at least once in their life.

(1) An urban old couple who spent every evening of their life on the balcony
 (2) A city where most of the citizens have emigrated
 (3) An old city park where nobody comes to spend an evening
 (4) A municipality that made ID checks mandatory before entering the park
 (5) A country inhabited by people who used to spend their evenings in surfing

● Questions number 41 and 42 are based on the following information related to classification of fire extinguishers and their use of extinguishing fires.

* Five main types of fire extinguishers, their active agents and standard colour codes are given below:

Type	Active agent/agents	Colour code
(i)	Water, water mist or water spray	red, white and red
(ii)	Foam	cream
(iii)	Dry powder-standard or specialist	blue
(iv)	Carbon dioxide (CO ₂)	black
(v)	Wet chemical	yellow

* Six different fire classes each caused by different substances and recommended fire extinguishers for each class to use are given below.

Class of fire	Cause of the fire	Fire extinguisher type/types to use
A	Combustible carbon based solids	water, water mist, foam, dry powder, wet chemical
B	Flammable liquids	water mist, foam, dry powder, CO ₂ , wet chemical
C	Flammable gases	water mist, dry powder
D	Burning metals	specialist dry powder
Electrical	Electrical equipment	CO ₂ , dry powder
F	Fats and cooking oils	water mist, wet chemical

41. What are the colour codes of the fire extinguishers that could be used to extinguish a fire caused by electrical equipment?

(1) red and white (2) red and cream (3) red and yellow
 (4) cream and blue (5) blue and black

42. Out of the five main types of five extinguishers, one particular type can be used to extinguish five fire classes mentioned above. This particular type of fire extinguisher **cannot** be used to extinguish the fire class

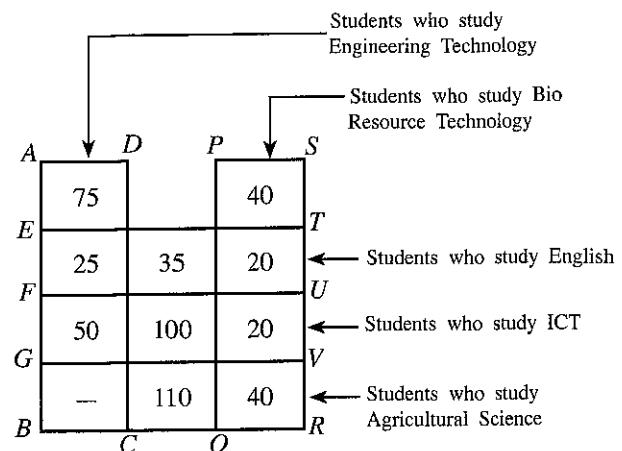
(1) *A*. (2) *B*. (3) *C*. (4) *D*. (5) *F*.

- Questions number 43 and 44 are based on the following information:

The diagram illustrates some statistics related to the students who follow the Technology stream in Advanced Level classes of a certain school. The three main subjects that these students in Technology stream of this school study are as follows:

1. Either Engineering Technology or Bio Resource Technology
2. Science for Technology
3. One of the three subjects English, Information and Communication Technology (ICT) and Agricultural Science.

The rectangles $ABCD$, $PQRS$, $EFUT$, $FGVU$ and $GBRV$ represent the students who study Engineering Technology, Bio Resource Technology, English, ICT and Agricultural Science respectively.



43. How many students in the Technology stream of this school study the subject ICT?

(1) 50 (2) 70 (3) 100 (4) 120 (5) 170

44. How many students in the Technology stream of this school study the subject Science for Technology?

(1) 120 (2) 150 (3) 245 (4) 270 (5) 515

45. In this question, the sentences A , B , C , D , E between the two sentences denoted by 1 and 7 are not in the correct order. Select the appropriate arrangement of them to form a logical sequence of the seven sentences.

1 – Livestock such as cattles, goats and buffaloes are reared in Sri Lanka.
 A – Livestock are generally used for milk and meat.
 B – Livestock production faces challenges as the availability of grasslands for free range for cattles reduces in every year.
 C – In order to compensate the loss of grasslands, fodder grasses are grown particularly in organised farmlands.
 D – Consumption of milk and meat is generally recommended to supplement the protein, mineral and calorie requirement of the body.
 E – Milk and meat are being sold as raw food as well as processed food.
7 – Organised farmlands and livestock farms are owned by the government and the private sector.

(1) $ABCDE$ (2) $ADEC B$ (3) $AED B C$ (4) $DBCAE$ (5) $DEBCA$

46. Each of the following five sections A , B , C , D and E consists of three statements. Which one of these sections contains statements that could be rearranged in a meaningful sequence?

A (a) Mala is good at sports.
(b) The provincial athletic meet and the inter house athletic meet are usually held during the first and the second terms of the school.
(c) Mala refrains from going to any pilgrimage during the first and the second terms.

B (a) The wind is strong enough to fly kites.
(b) During the forthcoming season, I am planning to make an aeroplane kite.
(c) My aeroplane kite got the first prize at the competition.

C (a) A dog has given birth to three puppies.
(b) A boy at the next door stole a puppy.
(c) Puppies have been fed enough milk by their mother dog.

D (a) A mother pays a lot of attention on her children's education.
(b) A father spends most of his time on earnings.
(c) It is the combination of hard work by a husband and a wife that makes the family successful.

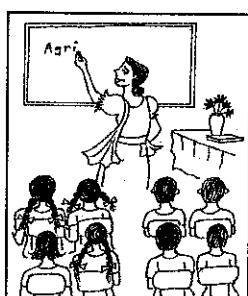
E (a) The sound of the horn of the bus is being heard but the bus is visible far away.
(b) Conductor sir, is it going to Colombo?
(c) The destination of the bus is not clearly visible but the route number is clear and correct.

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

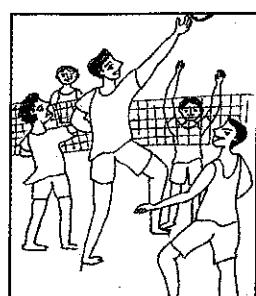
47. Consider the event described by the following pictures.



A



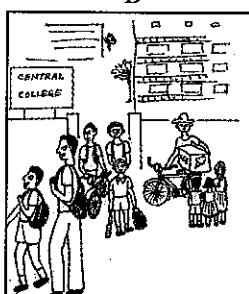
B



C



D



E



F

Which one of the following arrangements of pictures gives the correct sequence of the event?

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

● Questions from number 48 to 50 are based on a conversation among Vini, Sarika and her father about the visit to Dehiwala Zoo where they saw an elephant show. At the elephant show, they met their friend Raja. The conversation among them consists of parts from A to L, but they are not in the actual order of the conversation.

- A. Sarika, there is a big queue at the entrance.
- B. Sunday is a good day daddy, when special events like elephant show are generally held. My friend Vini also wants to join us daddy.
- C. It is generally expected to be crowded on Sunday Vini. Please read the instruction boards carefully.
- D. You are welcome to invite Vini with us.
- E. Daddy, when are we visiting the much awaited Dehiwala Zoo?
- F. Children, now we have approached the elephant show and the elephants have just commenced the act of walking in a queue only with two legs.
- G. Daddy, can you see Uncle Raja with the blue cap? He is coming towards us.
- H. The day following your birthday, 22nd Sunday December would be a convenient day Sarika.
- I. Sarika, before going to the elephant show, we must see the birds and animals. You can see how the animals are free to move in their cages.
- J. You can see Vini, how birds are free but they don't simply fly away.
- K. Hi! Uncle Raja.
- L. Hi! everybody. Good elephant show. People are going out. Let us also go. Bye!

48. Which of the following options gives the conversation between Sarika and father?

(1) A, B, E, F, G, H (2) B, D, E, F, G, H (3) E, F, G, H, I, J
 (4) E, F, G, H, K, L (5) E, F, I, J, K, L

49. Which of the following options gives the conversation among Sarika, Vini and Raja?

(1) A, B, C, I, J, L (2) A, B, I, J, K, L (3) A, C, D, I, J, K
 (4) A, C, I, J, K, L (5) C, D, I, J, K, L

50. Which of the following options gives the actual sequence of the full conversation?

(1) B, D, A, C, F, I, J, G, K, L, E, H (2) C, A, B, D, G, J, I, F, K, L, E, H
 (3) E, H, A, B, D, C, G, I, J, F, K, L (4) E, H, A, C, B, D, I, J, F, G, K, L
 (5) E, H, B, D, A, C, I, J, F, G, K, L

* * *