

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව இலங்கைப் பரீட்சைத் திணைக்களம் Department of Examinations, Sri Lanka		<b>86</b> <b>E</b> <b>I, II</b>
අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2019 දෙසැම්බර් கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2019 டிசெம்பர் General Certificate of Education (Ord. Level) Examination, December 2019		
සෞඛ්‍ය හා භාරීක අධ්‍යාපනය சுகாதாரமும் உடற்கல்வியும் Health and Physical Education	I, II I, II I, II	06.12.2019 / 0830 – 1140
ප්‍රශ්න කාලය மூன்ற மணித்தியாலம் Three hours	අතිරේක කියවීමේ කාලය - මිනිත්තු 10 යි மேலதிக வாசிப்பு நேரம் - 10 நிமிடங்கள் Additional Reading Time - 10 minutes	
Use the additional reading time to go through the question paper, select the questions and decide on the questions that you give priority in answering.		



### Health and Physical Education I

#### Note :

- Answer all questions.
- In each of the questions from 1 to 40, pick one of the alternatives (1), (2), (3), (4), which is correct or most appropriate.
- Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.
- Further instructions are given on the back of the answer sheet. Follow them carefully.

- Hashan is popular. He has friends from different nationalities. Accordingly, it can be concluded that Hashan is
  - a person with good inter-personal relationships.
  - a person with empathy.
  - a sensitive person.
  - a kind person.
- Information about four persons A, B, C and D are given below. Answer questions 2 and 3 using the given information.
 

A - An intelligent, efficient person who respects all religions and ethnic groups equally  
 B - An educated intellectual person who works hard to accomplish innovations  
 C - A social worker who voluntarily engages in social service  
 D - A religious leader who works hard to promote his religion
- According to the above information, out of these people, the person having a total health is
  - A.
  - B.
  - C.
  - D.
- The person/s with social well-being is/are
  - C.
  - D.
  - A and C.
  - B and D.
- My friend has the ability to manage stress and emotions. Accordingly, it can be stated that
  - he has a good physical health.
  - he has a good mental health.
  - he has a good social health.
  - he is a person with psycho-social well-being
- X and Y are diagrams showing two postures that are used when sitting in front of a computer while working, and lifting a weight, respectively. Select the correct statement about these postures.
 

  - Both X and Y postures are correct.
  - Both X and Y postures are incorrect.
  - X posture is correct whereas Y posture is incorrect.
  - X posture is incorrect whereas Y posture is correct.
- Out of the following statements about walking and running, select the correct statement.
  - Walking is a static posture while running is a dynamic posture.
  - Running is a static posture while walking is a dynamic posture.
  - Walking and running are static postures.
  - Walking and running are dynamic postures.

- Use the following information to answer questions 7 and 8.

Sanduni, who is frequently consuming large amounts of fats, sugar and salt, never engages in exercises.

- The colour of the zone to which Sanduni belongs in the Body Mass Index (BMI) chart could most likely be  
(1) orange. (2) light purple. (3) green. (4) light purple or dark purple.
- According to the above information, the disease condition that could most likely affect Sanduni is  
(1) appendicitis. (2) tuberculosis. (3) diabetics. (4) cirrhosis.

- Choose the correct sentence about the following statement and the reason for the statement.

**Statement :** Foods such as onions and potatoes are stored in dark, dry and well-aerated places

**Reason :** To prevent fungal growth and toxin (the green pigments that can be seen in potato skin) production in potatoes and onions.

- The statement and the reason are incorrect.
- The statement and the reason are correct.
- The statement is correct while the reason is incorrect.
- The statement is incorrect while the reason is correct.

- Consider the following characteristics.

- Consist of elastic wall
- Urine is stored in the inside space
- Urine is passed when the walls are contracted

The human organ/s that possess the above-mentioned characteristics is/are

- kidneys. (2) nephrons. (3) the bladder. (4) the urethra.

- The chest cavity expands due to contraction of the diaphragm and intercostal muscles. As a result, the air pressure within the chest cavity falls below the atmospheric pressure. Consequently, the atmospheric air enters the lungs. This process is named as,  
(1) respiration. (2) air exchange. (3) inhalation. (4) exhalation.

- When an athlete extends his right arm at the elbow joint to release the shot, his elbow joint works as a,  
(1) ball and socket joint. (2) hinge joint.  
(3) pivot joint. (4) gliding joint.

- For a successful growth, the zygote formed after an ovum being fertilized by a sperm, must be deposited in the  
(1) ovary. (2) Fallopian tube. (3) uterus. (4) cervix.

- Several methods by which a certain disease can be spread are listed below.

- From unsafe sexual intercourse (homosexual or heterosexual)
- From blood transfusion
- From infected mother to child
- From unsterilised syringe needles

The disease condition that could be spread from all of the above methods is

- Gonorrhoea. (2) Syphilis.  
(3) HIV/AIDS. (4) Genital warts.

- Consider the following information.

- Ravi - A young male
- Kumari - A female adolescent
- Rifas - A patient with a low blood haemoglobin level
- Kamani - A lactating mother

Of the above individuals, the persons with the **highest** iron requirements are

- Ravi and Rifas. (2) Kumari and Kamani.  
(3) Kumari and Rifas. (4) Ravi and Kamani.

16. Several statements about preventing the transmission of Dengue are given below under letters *K*, *L*, *M* and *N*.

*K* - We all have a duty to take actions to prevent the transmission of Dengue

*L* - The transmission of Dengue can be prevented by destroying water-accumulating areas

*M* - The transmission of Dengue can be prevented by keeping the environment clean

*N* - Health Department is solely responsible for preventing the transmission of Dengue

Of the above statements, the correct statements are

- (1) *K*, *L* and *M*.      (2) *K*, *L* and *N*.      (3) *L*, *M* and *N*.      (4) *K*, *L*, *M* and *N*.

- Use the following information to answer questions 17 and 18.

Several steps that should be followed when giving first aid for a sprained ankle are given below as *A*, *B*, *C* and *D*.

*A* - Apply ice wrapped in a cloth on the injured area from time to time.

*B* - Keep the injured area slightly elevated above the level of the heart.

*C* - Apply a slight pressure on the injured area.

*D* - Keep the patient at rest.

17. Select the choice that gives the correct order of steps that should be followed in this first aid procedure.

(1) *D* → *A* → *B* → *C*

(2) *D* → *C* → *A* → *B*

(3) *D* → *B* → *A* → *C*

(4) *D* → *A* → *C* → *B*

18. Another injury type that could be treated with the above first aid procedure is

(1) an open bone fracture.

(2) a closed bone fracture.

(3) a joint dislocation.

(4) a muscle sprain.

- Study the pairs of events *A*, *B*, *C* and *D* and answer questions 19 and 20.

*A* - [Failing to manage time appropriately to achieve goals  
Occurrence of mental stress]

*B* - [Developing intense emotions such as anger and fear  
Physiological changes such as changes in heart rate, respiration and sweating]

*C* - [Washing the burned area with clean, running water immediately after a burn  
Blister formation]

*D* - [Getting vaccines at the right time  
Tendency to contract diseases]

19. The pairs of events of which the **increase** of the first event results in the **increase** of the second event are

(1) *A* and *B*.

(2) *A* and *D*.

(3) *B* and *C*.

(4) *C* and *D*.

20. The pairs of events of which the **increase** of the first event results in the **decrease** of the second event are

(1) *A* and *B*.

(2) *A* and *D*.

(3) *B* and *C*.

(4) *C* and *D*.

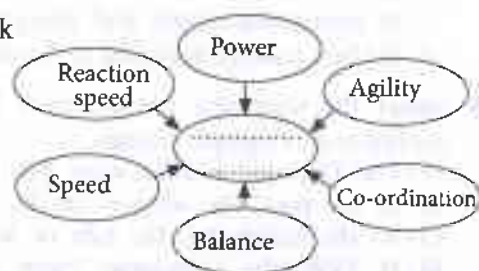
21. Select the choice with correct words to fill in the blank in the given diagram.

(1) Health-related physical fitness components

(2) Fitness components related to motor skills

(3) Body composition-related physical fitness components

(4) Muscular strength-related physical fitness components



22. A referee observed that the foot of an athlete participating in an event touches the ground in the order of heel, ball and toe. This athlete has been participating in

(1) race walking.

(2) a 100 m sprint.

(3) a long jump event.

(4) a triple jump event.



23. The **most** important component required at the sprint start is  
 (1) speed. (2) flexibility.  
 (3) reaction speed. (4) strength.
24. The school relay team used the mixed change to change the baton at the  $4 \times 100$  m relay of the sports-meet. Select the choice that describes the baton changing method used by the team.  
 (1) Receiving the baton with the left hand and passing it with the right hand  
 (2) Receiving the baton with the right hand and passing it with the left hand  
 (3) Receiving and passing the baton using only the left hand  
 (4) Changing the baton using a combination of inside pass and outside pass
25. After his third attempt, a discus thrower left the circle through the back half before the discus touched the ground. At this instance, as a judge, you would  
 (1) record it as a correct throw in the result sheet.  
 (2) record it as a 'no throw' in the results sheet.  
 (3) award another attempt to the athlete.  
 (4) disqualify the athlete.

26. A phase completed by an athlete who participated in a hurdles event is shown in the diagram. This phase is

- (1) the take off. (2) clearing the hurdle.  
 (3) landing. (4) running between the hurdles.



27. Consider the following track event combinations.

- A - 400 m sprint,  $4 \times 400$  m relay, 400 m hurdles  
 B - 1500 m running, 3000 m running, marathon running  
 C - 3000 m running, 5000 m running, 10000 m running  
 D - 100 m sprint, 200 m sprint,  $4 \times 100$  m relay

Out of the above events, the event combination/s that use/s the command "On your mark, Get set, Go/sound of the starting gun" is/are given by the letter/s

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

28. The points on which the bodies of the long jumpers No. 28, 36, 44 and 52 touched the landing area during their event are marked by '•' in the diagram.

Out of these players, the numbers of players who will be winning the first and second places, respectively, are

- (1) 28 and 52. (2) 28 and 36.  
 (3) 52 and 44. (4) 36 and 44.



29. When a volleyball tournament with five teams is organized using the method given in the diagram,

- (1) all matches can be completed within a shorter period of time.  
 (2) the tournament can be conducted with a limited number of referees.  
 (3) the tournament can be conducted with minimum quantities of equipment, funds and playgrounds.  
 (4) the best team participated in the tournament can be selected.

	A	B	C	D	E
A		AB	AC	AD	AE
B	BA		BC	BD	BE
C	CA	CB		CD	CE
D	DA	DB	DC		DE
E	EA	EB	EC	ED	

30. Select the statement consisting of **false** information about the evolution of Olympic Games.

- (1) The Olympic Games were first held in 776 BC in Olympia, Greece.  
 (2) In the past, the winners of the Olympic Games were awarded olive branches.  
 (3) At the beginning, the rate of women's participation in Olympics remained at a higher level.  
 (4) In 1896, the Frenchman Pierre de Coubertin started the modern Olympic Games.

31. An athlete practised a technique that had the following phases,

Preparation → Gliding backward → Power position → Releasing → Follow through

The athlete was practising,

- (1) a technique of the javelin throw. (2) a technique of the hammer throw.  
 (3) a technique of the discus throw. (4) a technique of the shot put.

[see page five

32. Consider the following information.

- Glucose  $\xrightarrow{O_2}$  Carbondioxide + water + energy
- Fatty acids  $\xrightarrow{O_2}$  Carbondioxide + water + energy

The events that predominantly use the energy system denoted by the above equations to produce energy are,

- (1) 400m running and 1500m running      (2) 100 m sprint and 800 m running.  
 (3) 10000m running and marathon.      (4) 100 m sprint and 200m sprint.

- Diagrams *M* and *N* show two play areas in which the judges are getting ready to judge two events of All Island School Games. Answer questions 33 and 34 using these information.

33. The equipment that should be used by the athletes participating in the event held in play area *M* is the

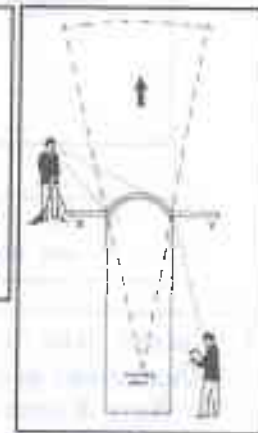
- (1) shot.      (2) discus.  
 (3) javelin.      (4) hammer.



*M*

34. The event that is judged by the two judges positioned in play area *N* is the

- (1) discus throw.      (2) shot put.  
 (3) javelin throw.      (4) hammer throw.



*N*

35. During the 100m event of an Olympic Games, an athlete was tested and found positive for consuming banned performance enhancers. The substance that was used for this test could be

- (1) a urine sample of the athlete.      (2) a blood sample of the athlete.  
 (3) a saliva sample of the athlete.      (4) a blood or urine sample of the athlete.

36. The player in the diagram has managed to maintain his balance by

- (1) moving the body parts in opposite directions.  
 (2) widening the base of support.  
 (3) bringing the centre of gravity to a lower level.  
 (4) bending the body toward an external force.



37. Select the correct sentence about the statement and the reason for the statement given below.

**Statement:** The body of a high-jump athlete acts as a projectile during his jump.

**Reason:** An object that is projected toward the air is called a projectile.

- (1) The statement is correct and the reason is incorrect.  
 (2) The statement is incorrect and the reason is correct.  
 (3) The statement and the reason are correct.  
 (4) The statement and the reason are incorrect.

38. In triple jump, the landing of the 'hop' should be performed using the

- (1) the take off leg.      (2) the free leg.  
 (3) the take off leg or the free leg.      (4) both legs.

- Study the pairs of events *A*, *B*, *C* and *D* and answer questions 39 and 40.

*A* - [ Taking part in the physical fitness programmes conducted in the school  
 Ability to develop a balanced personality ]

*B* - [ An athlete limiting the methodical training sessions  
 Ability to decompose lactic acid formed in the muscle ]

*C* - [ Moving the center of the gravity of a standing athlete to a lower level  
 Athlete obtaining balance ]

*D* - [ Lack of mutual understanding among the team members  
 Ability to show good performance ]

39. The pairs of events of which the **increase** of the first event results in the **increase** of the second event are

- (1) *A* and *B*.      (2) *A* and *C*.      (3) *B* and *D*.      (4) *C* and *D*.

40. The pairs of events of which the **increase** of the first event results in the **decrease** of the second event are

- (1) *A* and *B*.      (2) *A* and *C*.      (3) *B* and *D*.      (4) *C* and *D*.

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව இலங்கைப் பரீட்சைத் திணைக்களம் Department of Examinations, Sri Lanka	<b>86   E   I, II</b>
---	-----------------------

අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2019 දෙසැම්බර්  
 கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2019 டிசம்பர்  
 General Certificate of Education (Ord. Level) Examination, December 2019

සෞඛ්‍ය හා ශාරීරික අධ්‍යාපනය	I, II
சுகாதாரமும் உடற்கல்வியும்	I, II
Health and Physical Education	I, II

### Health and Physical Education II

\* Answer five questions only, selecting question No. 1, two questions from Part I and two questions from Part II.

1. Kumari, who is studying in Grade 11, has a weight appropriate for her height. She also demonstrates psycho-social changes such as (having innovative ideas) and enjoying the company of peers. Kumari's BMI value falls in the green zone of the BMI chart. Kumari regularly engages in exercises such as jogging to maintain a good health-related physical fitness level.

To enjoy the pleasures of nature, as an outdoor activity, she organized a jungle exploration together with friends in her class. When preparing the lists, she included information such as the name and the class of the participants in the participant information sheet, and included items such as potable drinking water and food in the list of items to be taken for the journey.

Provide short answers to questions (i) to (x) based on the above incident.

- (a) Name the stage of life to which Kumari belongs.
- (b) Mention the age range of the stage of life to which Kumari belongs, according to the definition of World Health Organization (WHO).
- (ii) Write down **two** characteristics other than those mentioned in the event, which can be used to identify the physical fitness level of Kumari, who is in the green zone of the BMI chart.
- (iii) Write down **two** physical changes that can be seen in Kumari, which are **not** mentioned in the incident.
- (iv) Mention **two** psycho-social changes that can be occurred in Kumari, except the changes mentioned in the incident.
- (v) Write **two** exercises other than jogging that Kumari can engage in, to maintain health-related physical fitness.
- (vi) In addition to the benefit mentioned in the incident, write down **two** other benefits that the Grade 11 students can gain by outdoor education.
- (vii) Mention **two** actions other than engaging in exercises, which Kumari can follow to develop health-related physical fitness.
- (viii) Mention **two** other important facts that should be included in the participant information sheet prepared by Kumari and her classmates.
- (ix) List **four** other items that they would include in the list of items to be taken for the jungle exploration.
- (x) Give **two** benefits they can gain by working as a team when organizing the jungle exploration.

(02 × 10 = 20 marks)



**Part I***Answer two questions only.*

2. The newly-appointed, efficient principal of Kurulugama Vidyalaya, which is a school with limited resources, is attempting to convert the school into a Health Promotion School with the help of Grade 11 students.
- Mention **two** policies that you would suggest to the principal to enhance health promotion of Kurulugama Vidyalaya. (02 marks)
  - State **three** actions that can be taken to build a mental environment favourable for health promotion of the students of this school. (03 marks)
  - Describe an activity that can be done with the contribution of the school community including parents to prevent smoking and alcohol consumption among students. (05 marks)
3. School medical tests have revealed that most of the students of Bharathi Vidyalaya are suffering from micronutrient deficiency diseases including Bitot spots.
- Name **three** other micronutrient deficiency diseases that the students of Bharathi Vidyalaya could be suffering from. (02 marks)
  - Mention separately, one micronutrient that could be the cause for each of the diseases you named in (i) above. (03 marks)
  - Mention **two** actions that can be taken to assure food safety during each of the following situations. (05 marks)
    - Choosing foods for consumption
    - Food production
    - Food transportation
    - Food storage
    - Food processing
4. Briefly explain the actions that can be taken to overcome the following challenges successfully.
- Your friend seeks your advice on what he/she should do to show his/her best performance at the G.C.E.(O/L) Examination as well as at the All Island School Games.
  - You notice that your little sister is getting ready to go to sleep without brushing her teeth after dinner on several days.
  - You notice that your elder brother is getting ready to ride a motor bicycle without wearing a helmet.
  - During a trip you went on with your parents, you observed that a group of people were illegally cutting trees in the nearby forest.
  - Although your school has kept labelled dustbins with three colours to dispose of different types of garbage as a waste management practice, you observe that a group of students dump all types of garbage to one dustbin. (02 × 5 = 10 marks)

**Part II***Answer two questions only.*

5. (i) Two techniques used by the two athletes No. 15 and No. 20 during their events are given below.
- Athlete No. 15 – Hitch kick technique  
Athlete No. 20 – Fosbury Flop technique
- Write down separately, the events of the two athletes. (02 marks)
- (ii) A draft results sheet prepared by a judge who judged a high jump event is given below.

Athlete No.	Height					Failures	Re-jumps		Place
	1.76	1.80	1.84	1.88	1.91		1.89	1.91	
52	0	×0	0	×0	×××	2	0	×	
64	–	×0	–	×0	×××	2	0	0	
76	–	0	×0	×0	×××	2	×		
88	–	×0	×0	×0	×××	3			

0 = Successful jump

× = No jump

– = Pass

According to the above results sheet, write down the numbers of athletes who first, second and third places separately. (03 marks)

[see page eight]

- (iii) If you have been provided a suitable playground and the following equipment, design and describe **two** activities that are suitable to train beginner athletes for hurdles.

- Lime to mark the play area
- Some cardboard boxes with a considerable height (depending on the number of athletes)
- Approximately 3 m long pieces of rope (depending on the number of athletes)

(05 marks)

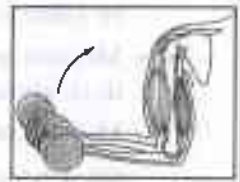
6. (i) Mention **two** characteristics of the muscle fibre type that can be found in abundance in the legs of a marathon runner. (02 marks)

- (ii) Complete the following diagram which shows how a nerve impulse is transmitted through the nervous system after a short-distance runner hears the sound of the gun at the start. (03 marks)



- (iii) The figure shows how an athlete lifts a dumb-bell by bending the lower arm at the elbow.

- (a) As which type of a lever does the lower arm act in this instance?  
 (b) Copy the figure given in the box to your answer script, and mark the positions of the fulcrum, the load and the effort during this activity.



(05 marks)

7. Answer only **one** question out of the questions A, B and C.

- A. (i) As a referee, state the penalty that you would issue for faults committed during volleyball service. (02 marks)

- (ii) During a volleyball match between the teams from North-western province and Western province, a player from North-western team hits the ball after blocking it by himself. Giving reasons, explain your decision during this situation as the referee. (03 marks)

- (iii) If you are assigned to train beginner volleyball players for spiking, describe **two** suitable activities that can be used to practice the spiking skill after training the team for the spiking technique. (05 marks)

- B. (i) As a referee, mention the penalty that you would issue for personal contact within the goal area when playing netball. (02 marks)

- (ii) During the netball match between Northern and Eastern province teams, the Centre of the Eastern team could not get hold of the ball and as a result, the ball went out of the side line of the centre third. Giving reasons, explain your decision during this situation as the umpire. (03 marks)

- (iii) If you are assigned to train beginner netball players for the chest pass, describe **two** suitable activities that can be used to practice the chest pass after training the players for the technique of the chest pass. (05 marks)

- C. (i) As a referee, mention the penalty that you would issue for offences committed within the goal area when playing football. (02 marks)

- (ii) During a football match between Southern and Central Province teams, the ball left the field passing the touch line after touching the foot of a Central team player. Giving reasons, explain your decision during this situation as the referee. (03 marks)

- (iii) If you are assigned to train beginner football players to control the ball by 'keeping the foot on the ball', describe **two** suitable activities that can be used to practice 'keeping the foot on the ball', after training the players for the same skill. (05 marks)

\*\*\*