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முழுப் பதிப்புரிமையுடையது]

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2562 – Mulika Piriven Final Examination – 2018 December

NEW

(New Syllabus)

09 | E | I, II

(09) Health Science – I, II

Three hours

2018.12.29 / 12.30 - 15.40

Additional Reading Time - 10 minutes

Use additional reading time to go through the question paper, select the questions and decide on the questions that you give priority in answering.

Health Science – Paper I

Note :

- * Answer **all** questions. This paper carries **40** marks.
- * In each of the questions from No. 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.

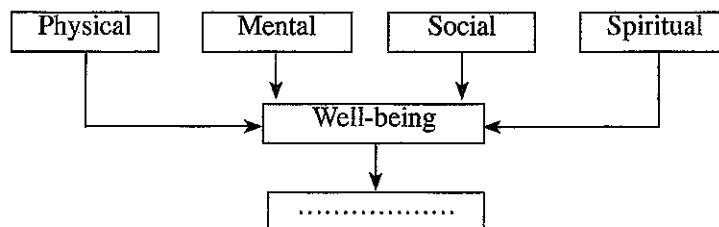
Part I

(01×40=40 marks)

1. The person who presented a view on the origin of life, which is comparable to the view presented by NASA is

- (1) Charles Darwin. (2) Aristotle.
(3) Lord Buddha. (4) Jesus Christ.

2.



The most suitable words to fill in the blank box of the above diagram is

- (1) Total Personality. (2) Health Promotion.
(3) Total Health. (4) Good Health.

● Some actions taken by the chief monk of a pirivena to make his pirivena a health promotion pirivena are stated in the following sentences (a), (b), (c), (d) and (e). Answer the questions 3 to 5 using these information.

- (a) Minimize the use of polythene inside pirivena
(b) Keep windows to provide adequate aeration to classrooms and hostel rooms
(c) Use a daily routine that is common to all
(d) Hold health clinics for students in the pirivena
(e) Clear the road to the pirivena with the assistance of the devotees

3. The sentence/s that indicate the policies taken by the monk to achieve health promotion is/are

- (1) 'a' only. (2) 'c' only.
(3) 'a' and 'c' only. (4) 'a' 'b' and 'd' only.

4. The sentences showing that the community participation has been obtained to achieve health promotion is/are
- (1) 'a' and 'd'. (2) 'c' and 'e'.
(3) 'c'. (4) 'e'.

5. The sentence that describe an action taken by the monk to reorganize the health services is,
- (1) 'b'. (2) 'c'. (3) 'd'. (4) 'e'.

- The following table shows the method to determine the nutritional status of an adult when his/her BMI is marked in a graph in which, BMI is plotted against age. Answer questions No. 6 to 8 based on the given information.

Colour	BMI Range
Orange	Less than 18.5
Green	18.5 - 22.9
Light Purple	23.0 - 26.9
Dark Purple	Greater than 27

6. The individual 'A' has an appropriate weight for his height. He belongs to
- (1) Green range (2) Light purple range
(3) Dark purple range (4) Orange range
7. The individual 'B' who belongs to the Orange range
- (1) is suffering from obesity (2) is suffering from thinness
(3) has the correct weight (4) is over weight
8. The colour of the range to which the individual 'C', who is obese belongs is
- (1) Light purple. (2) Green. (3) Orange. (4) Dark Purple.
9. A student monk in a pirivena is maintaining a good relationship with all who are helping him to maintain a good life. According to the above information, this monk is
- (1) a person with good inter-personal relationships.
(2) a kind person.
(3) a person with seela.
(4) a person with shraddha.
- Some features of a student monk are given below. Using these information answer question No. 10 and 11.
- A - The body grows rapidly.
B - Likes to work independently, shows creativity.
C - Sociable.
10. The above student monk is in his
- (1) youth. (2) childhood. (3) adolescent stage. (4) older age.
11. The statement/s that shows the mental changes in the above monk is/are
- (1) A only. (2) B only. (3) C only. (4) all A, B and C.

- Some facts that were revealed about the nutrient deficiencies of the student monks *P*, *Q*, *R*, *S* during a medical inspection are given below. Answer the questions 12 to 14 using this information.

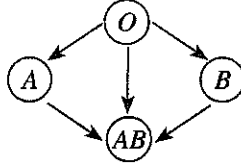
Student monk	Deficient nutrient
<i>P</i>	Iron
<i>Q</i>	Vitamin A
<i>R</i>	Calcium
<i>S</i>	Iodine

- Of the above monks, weaknesses in vision could be observed in
 (1) monk *P*. (2) monk *Q*. (3) monk *R*. (4) monk *S*.
- The monk who is most likely to be suffering from goitre is
 (1) monk *P*. (2) monk *Q*. (3) monk *R*. (4) monk *S*.
- Anaemia could be seen in
 (1) monk *P*. (2) monk *Q*. (3) monk *R*. (4) monk *S*.
- Of the following food items, the food that **do not** supply several nutrients in one portion is
 (1) mixed green leaf mallow. (2) soups.
 (3) hath maluwa. (4) boiled sweet potatoes.
- The major symptom of a disease that is caused by consuming food or water contaminated by a bacteria is excretion of feces in liquid form. This disease could be
 (1) Diarrhoea. (2) Dengue. (3) Pneumonia. (4) a worm infection.
- Consider the following statements about Dengue fever.
 A - It is our duty to take steps to eliminate dengue fever.
 B - The responsibility of eliminating Dengue fever totally falls upon the medical doctors and public health officers.
 C - Dengue fever could be fatal.
 Of the above statements, the correct statement/s is/are
 (1) A and B. (2) B and C.
 (3) A and C. (4) all A, B and C.
- The action that you should follow firstly when giving first-aid to a person who has got electrocuted is
 (1) massaging the patient.
 (2) allaying the fear of the patient.
 (3) take the patient to a hospital immediately.
 (4) turning off the main switch.
- A particular virus can enter the human body and destroy the immune system, thereby exposing the body to numerous infections. This virus could possibly be the
 (1) Dengue virus. (2) Ebola virus.
 (3) HIV. (4) Herpes virus.
- The building block of the human body is the
 (1) cell. (2) organ. (3) tissue. (4) system.

21. Of the following statements, select the statement that is **false**
- (1) Eggs are washed before breaking because the shell could be contaminated with 'Salmonella' bacteria.
 - (2) HIV could be transmitted through saliva, tears and sweat of an infected individual.
 - (3) Kidney stones will be formed as a result of the deposition of calcium oxalate in kidneys or the bladder.
 - (4) Skin, which can act as an excretory organ, is also the largest organ.
22. A person who consumes alcohol and smokes as a habit was hospitalized following a chest pain. The doctors' opinion was that he is suffering from a heart disease. The system that is directly related to the above person's disease condition is the
- (1) respiratory system.
 - (2) digestive system.
 - (3) blood circulatory system.
 - (4) nervous system.
23. During swallowing the food ingested from mouth is blocked from entering the respiratory tract by the
- (1) epiglottis.
 - (2) larynx.
 - (3) pharynx.
 - (4) tongue.
- In questions 24 and 25, select the most suitable words to fill in the blanks.
24. The fluid containing the food digested in the stomach is called
- (1) chime
 - (2) gastric juice
 - (3) bile
 - (4) intestinal fluid
25. The respiratory process that occurs in some organisms without the presence of oxygen is
- (1) aerobic respiration.
 - (2) anaerobic respiration.
 - (3) inhalation.
 - (4) exhalation.
26. The volume of urine that is excreted by a healthy individual per day is
- (1) 1.5 - 2.0 litres.
 - (2) 2.5 - 3.0 litres.
 - (3) 3.5 - 4.0 litres.
 - (4) 4.5 - 5.0 litres.
- Answer the questions 27 to 29 using the following information about the systems *M*, *N* and *O*.
- M* - Conveys messages related to impulses and reactions.
N - Removes toxic wastes that are produced within the cells during various biological reactions.
O - Obtains oxygen from air, which is required for biological reactions occurring in cells, and releases carbon dioxide produced within cells, into air.
27. The systems representing *M*, *N* and *O* in the correct order are
- (1) excretory system, nervous system and respiratory system.
 - (2) nervous system, excretory system and respiratory system.
 - (3) respiratory system, nervous system and excretory system.
 - (4) nervous system, respiratory system and excretory system.
28. The letters of the systems that are directly affected by paralysis and tuberculosis, in the correct order, are
- (1) *M* and *N*.
 - (2) *N* and *O*.
 - (3) *M* and *O*.
 - (4) *O* and *M*.

29. Of the following which disease is related to system *O*?
- (1) Diabetes (2) Epilepsy
(3) Thrombosis (4) Pneumonia

● Answer questions 30 and 31 using the following diagram about matching the blood groups during blood transfusion.



30. The blood group of the universal donor is
(1) *O*. (2) *A*. (3) *B*. (4) *AB*.
31. Which is the blood group of the universal acceptor?
(1) *O*. (2) *AB*. (3) *A*. (4) *B*.
32. I attended a Dhamma sermon conducted by a monk. During this instance, the sense that affected the ear, which is the sensory organ, is
(1) the sound generated from the monk's mouth.
(2) hearing of the sermon.
(3) appreciating the sermon.
(4) discussing about the sermon.
33. For immunization purposes, immediately after birth, the neonatal is given the
(1) *BCG* vaccine. (2) *MMR* vaccine. (3) *JE* vaccine. (4) Triple injection.
34. In indigenous medicine, the first priority is given to
(1) being informed about diseases. (2) identifying the diseases.
(3) treating diseases. (4) preventing diseases.
35. An Ayurveda doctor instructed a patient to take a balanced diet. Accordingly, he should take
(1) a food containing 'pasgorasa' (five dairy foods).
(2) a food containing 'shad rasa' (six tastes).
(3) a fresh food.
(4) a simple food.
36. According to Ayurvedic concepts, the 'Yogya kala' (suitable time) to consume food in order to maintain health is described as
(1) consuming food whenever a person feels hungry.
(2) consuming food half-an-hour after a person feels hungry.
(3) consuming food one hour after a person feels hungry.
(4) consuming food before a person feels hungry.
37. The treatment that **does not** belong to 'Abhicharathmaka' treatments is
(1) chanting pirith. (2) *bali-thovil*. (3) *shanthi karma*. (4) meditation.

38. A person who is suspected to be suffering from a spinal cord injury should be taken to a hospital
- (1) seated on a chair.
 - (2) in a layed position, with 3 persons carrying the injured person.
 - (3) by laying securely on a wooden board.
 - (4) on the shoulders of a person.

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

A – (i) Refraining from driving after alcohol consumption.

(ii) Incidence of road accidents.

B – (i) Limiting the consumption of foods containing higher amounts of salt, sugar and fats.

(ii) Risk of contracting non-communicable diseases.

C – (i) Not getting adequate amounts of iodine to produce thyroxine.

(ii) Enlargement of the thyroid gland.

D – (i) Suffering from Haemophilia

(ii) Nose bleeding.

39. The pairs of incidents of which the **increase** of the first incident results in the **increase** of the second incident are

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

40. The pairs of incidents of which the **increase** of the first incident results in the **decrease** of the second incident are

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

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2562 – Mulika Piriven Final Examination – 2018 December

NEW

(New Syllabus)

09 E I, II

(09) Health Science – I, II

Health Science – Paper II

- * This paper consists of **eight** questions.
- * Question No. **one** is compulsory and **four** other questions should be selected and answered.
- * The total number of questions to be answered is **five**.

1. The Health Society of the 'Siri Sarana' pirivena which was recognized as a Healthy-promoting pirivena organized an educational programme on Health Education, and monks residing in nearby pirivens as well as the devotees attended the programme.

From the entrance to the pirivena it was evident that a garbage-free environment is maintained. However, some waste products such as used oil lamps and polythene bags could be seen here and there. Further, water used for pooja could be seen, accumulated at the edges of the drains.

The western medical doctor who conducted the first lecture explained about non-communicable diseases such as cancer and heart diseases that are common in today's society, and discussed about good habits such as healthy food habits that can be followed to prevent such diseases. He further explained the importance of engaging in physical activities regularly.

The nutritionist who conducted the next lecture mentioned about the instances such as food manufacturing and transport, which require attention in maintaining food safety. He further explained about the features such as off-odours and colour changes that can be used to identify spoiled foods and revealed the outcomes of consuming spoiled foods.

During his sermon, the chief monk of the piriven explained about the Disciplinary Rules in Buddhism (Vinaya Shiksha Pada) that are related to Health Science and mentioned about the benefits of using five-medicines (pas beheth) such as Ghee, sesame oil and sugar cane, and about meat purified by three places (thrikoti parishuddha mansa) as preached by Lord Buddha.

For dhana, the devotees had prepared rice, tempered dhal, beans, a green leaf malluma and fruits. After dhana, the monks engaged in walking for a short period and in the evening, an Ayurvedic Doctor explained about the techniques such as 'vamana', 'virechana' and 'vasthi', which are the major treatment methods of 'Pancha Prathikarma'.

At the end of the programme, a meditation session was carried out and all participants left the premises happily with a peaceful mind.

- (i) Mention **two** instances in piriven environment, which could become a threat to health.
- (ii) Write **two** good habits that can reduce the risk of non-communicable diseases, which are not mentioned in the case.
- (iii) Name **two** non-communicable diseases other than the diseases mentioned by the medical doctor, which are common in today's society.
- (iv) State the other **two** instances which require attention when ensuring food safety, as mentioned by the nutritionist.
- (v) Write down **two** features that can be used to identify spoiled foods, which are not mentioned in the case.
- (vi) According to the sermon of the chief monk, mention the **two** medicines of the 'pas beheth' as preached by Lord Buddha, which are not mentioned in the passage.

[See page eight.

- (vii) According to the chief monk, explain what is meant by meat purified by three places (thri koti parishuddha mansa)
- (viii) Name the nutrients that were present in the dhana which was prepared by the devotees and served to the monks.
- (ix) Write down **four** benefits that the monks may have received by engaging in walking after dhana.
- (x) Explain the treatment methods 'vamana' and 'virechana' included in panchakarma treatment which was explained by the Ayurvedic doctor. (02×10=20 marks)
2. (i) Mention **two** challenges that are faced when attempting to preserve health in today's context. (02 marks)
- (ii) Write down the things that you can do as a monk to make the environment of your pirivena an appealing environment, according to Health-promoting piriven concept. (03 marks)
- (iii) Name a programme that can be conducted to obtain the community participation for health promotion, and explain the procedure to conduct the named programme. (05 marks)
3. (i) Illustrate the path of the transport of food in the digestive system from mouth to the anus using a flow diagram. (02 marks)
- (ii) Briefly explain the contribution of mouth to food digestion. (03 marks)
- (iii) State **five** good habits that can be followed to ensure the well-being of the digestive system. (05 marks)
4. (i) State **two** suitable activities that you can do as a student, to spend your leisure time productively. (02 marks)
- (ii) Briefly mention **three** procedures that should be followed by a Buddhist monk to maintain personal sanitation. (03 marks)
- (iii) 'Planting trees plays an important role in maintaining a comforting environment'. Justify the above statement taking suitable examples from Buddhism. (05 marks)
5. (i) Write down **four** benefits of consuming foods to meet requirements. (02 marks)
- (ii) "In order to preserve the health of Maha Sangha, so that they can preserve Buddhism and pass it to future generations, it is important to popularize the procedures that can be used to prepare healthy meals among devotees."
According to the above statement, state **three** advices that can be given to devotees regarding preparing dhana for Maha sangha. (03 marks)
- (iii) List **five** good habits that should be followed by Buddhist monks when consuming dhana, as preached by Lord Buddha. (05 marks)
6. (i) Write down **four** features that can be seen in a monk having a peaceful mind. (02 marks)
- (ii) Mention **three** benefits that you can gain through meditation, in addition to curing illnesses. (03 marks)
- (iii) Explain how meditation can be used as a psychological treatment to cure illnesses. (05 marks)
7. (i) Mention the reasons that caused Lord Buddha to implement the disciplinary rule on eating at awkward times (*Vikala Bhojana*). (02 marks)
- (ii) Mention the **five** benefits (*Panchavida Anisansa*) that can be gained by refraining from eating at awkward times (*Vikala Bhojana*). (03 marks)
- (iii) To demonstrate the scientific facts presented in Buddhism related to health, compare the verse. "Arogya parama labha" in Dhamma pada and the WHO definition on "Health". (05 marks)
8. (i) Write down the **three** types of Dosha (*Thun dos*) mentioned in Ayurveda. (02 marks)
- (ii) Present **three** facts that caused indigenous medicine to be named as 'Ayurveda'. (03 marks)
- (iii) Explain what is meant by 'Goodness of foods' (*hitha bawa*) as described by Ayurvedic principles related to healthy food habits. (05 marks)