



**KOLEJ YAYASAN PELAJARAN JOHOR
ONLINE FINAL EXAMINATION**

COURSE NAME : FOOD NUTRITION
COURSE CODE : DCA 1083
EXAMINATION : JUNE 2022
DURATION : 3 HOURS

INSTRUCTION TO CANDIDATES

1. This question paper consists of **THREE (3)** parts :
PART A (30 Marks)
PART B (40 Marks)
PART C (30 Marks)
2. Please refer to the detailed instructions in this question paper.
3. Answer ALL questions in the answer sheet which is A4 size paper (or other paper with the consent of the relevant lecturer).
4. Write your details as follows in the upper left corner for each answer sheet:
 - i. Student Full Name
 - ii. Identification Card (I/C) No.
 - iii. Class Section
 - iv. Course Code
 - v. Course Name
 - vi. Lecturer Name
5. Each answer sheet must have a page number written at the bottom right corner.
6. Answers should be **neat and clear in handwritten form**.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

*This examination paper consists of **12** printed pages including front page.*

PART A

This part consists of **THIRTY (30)** questions.

Answer ALL questions in the Answer Sheet.

1. What element makes carbohydrate different from protein?
 - A Oxygen.
 - B Carbon.
 - C Nitrogen.
 - D Hydrogen.

2. The four characteristic of healthy diet are adequate, balanced, varied and _____.
 - A color
 - B value
 - C healthy
 - D moderate

A measure unit of the energy in food, specifically energy yielding nutrients.

Figure 1

3. Which is the best word to refer the statement in **Figure 1**?
 - A Energy.
 - B Calorie.
 - C Sodium.
 - D Kilogram.

4. Below are the major function of Calcium in our body, **EXCEPT** _____.
 - A blood clotting.
 - B muscle contraction.
 - C aids in nerve impulse transmission.
 - D major positive ion of intracellular fluid.

5. What is the largest component of energy expenditure from our body?
- A Resting.
 - B Sleeping.
 - C Physical activity.
 - D Basal metabolism.
6. Which of the followings are considered as a water soluble vitamins?
- A Vitamin A and D.
 - B Vitamin E and K.
 - C Vitamin B and C.
 - D None of the above.
7. Amino acids are the building blocks of _____.
- A protein
 - B minerals
 - C fat and lipis
 - D carbohydrates
8. The word protein is derived from _____ word which means 'first'.
- A Latin
 - B Greek
 - C Arabic
 - D English
9. The process in which plants make their own carbohydrates from carbon dioxide in the air and water from soil is called _____.
- A browning
 - B denaturation
 - C hydrogenation
 - D photosynthesis

10. When should an infant begin eating semi-solid food gradually?

- A 5 months to 7 months.
- B 1 month to 3 months.
- C 1 month to 1 ½ month.
- D Above 2 years old.

11. What is another name for vitamin C?

- A Lysine
- B Retinol
- C Ascorbic Acid
- D Alpha-tocopherol

12. Hyponatremia means _____

- A Above normal body temperature.
- B A below normal body temperature.
- C A decreased concentration of sodium in blood.
- D The normal range for human body temperature.

13. Another name for simple carbohydrates is _____

- A Galactose.
- B Gelatinization.
- C Disaccharides.
- D Polysaccharides.

14. How many grams do both men and women need for protein based on Recommended Dietary Allowance (RDA) recommendation?

- A 0.80 gram.
- B 9.10 gram.
- C 1.50 gram.
- D 0.95 gram.

15. A nutrient that does not provide calories is _____
- A fat.
 - B iron.
 - C protein.
 - D carbohydrates.
16. Which of the following statement describes the vitamin A, D, E and K?
- A Soluble in water.
 - B Excreted via the urine.
 - C Daily consumption is necessary.
 - D Can be stored in adipose and liver tissue.
17. What is the term that describes the process in which nutrients pass through the wall of the gastrointestinal tract?
- A Digestion.
 - B Absorption.
 - C Dehydration.
 - D Segmentation
18. Which of the following is a false statement?
- A Lipids are soluble in water.
 - B Lipids include triglycerides, phospholipids and sterols.
 - C Lipids are comprised of carbon, hydrogen and oxygen.
 - D Lipids yield more calories per gram than carbohydrates or protein.
19. What is the term for lipid that is liquid in room temperature?
- A Oil.
 - B Fat.
 - C Gelatine.
 - D Cholesterol.

20. The simple units of carbohydrates are called _____
- A fatty acids.
 - B amino acid.
 - C monosaccharides.
 - D simple carbohydrates.
21. Which of the following is the problem resulted from high sugar diet?
- A Scurvy.
 - B Rickets.
 - C Kwashiorkor.
 - D Dental carries.
22. Which age group does a child between age 1 to 12 months belongs to?
- A Infant.
 - B Childeren.
 - C Teenager.
 - D Adolescence.
23. Major mineral is a mineral of which more than 100mg is needed per day. Which of the followings are considered as major mineral?
- A Selenium and vitamin.
 - B Iron, Copper and Zinc.
 - C Manganese and Fluoride.
 - D Chloride, Calcium and Potassium.
24. Human body needs _____ of carbohydrates daily to spare protein and fat from being burned for fuel and to provide glucose for nervous system.
- A 60 gram – 90 gram
 - B 95 gram – 100 gram
 - C 100 gram – 120 gram
 - D 100 gram – 150 gram

25. The need of _____ is more important than the need of any nutrients for our body.

- A oil
- B water
- C vitamin
- D mineral

26. Which of the following foods are the healthy sources of carbohydrates?

- i. Rye
- ii. Fries
- iii. Quinoa
- iv. White bread

- A i, ii
- B i, iii
- C ii, iv
- D i, ii, iii

27. There are _____ blocks of amino acid, which form complete protein.

- A 10
- B 30
- C 40
- D 20

28. What is the age group for people who are in 65 to 74 years old?

- A Old.
- B Longevity.
- C Young old.
- D Y Generation.

29. What is the estimated daily kcalories for children below 3 years old?

- A 1000 kcal – 1400 kcal.
- B 1200 kcal – 1800 kcal.
- C 1400 kcal – 2000 kcal.
- D 1800 kcal – 2600 kcal.

30. Which of these are fat soluble vitamins?

- i. Vitamin A
- ii. Vitamin B
- iii. Vitamin E
- iv. Vitamin C

- A i, ii
- B i, iii
- C ii, iv
- D i, ii, iii

[30 MARKS]

PART B

This part consists of **SEVEN (7)** questions.

Answer ALL questions in the Answering Sheet.

QUESTION 1

Human needs to eat a complete meal to ensure their bodies get adequate nutrients for daily life.

a) What is nutrients?

(1 mark)

b) Discover **five (5)** examples of nutrients.

(5 marks)

QUESTION 2

Malaysian Food Pyramid is a simple guide for individuals to vary their food intake according to the total daily food serving recommended. A balanced diet contains the combination of foods that will provide all the nutrients needed by our body.

a) List **two (2)** Malaysian Dietary Guidelines suggested by the Ministry of Health Malaysia.

(2 marks)

b) Draw and label Malaysian Food Pyramid.

(6 marks)

QUESTION 3

A protein is a major structural part of the body cells. It can be found in many enzymes, some hormones and all antibodies.

a) List **two (2)** functions of protein.

(2 marks)

b) Describe **two (2)** health effects related to protein intake.

(4 marks)

QUESTION 4

Cholesterol normally found in foods, of animal origin. The body's cell and its liver produce cholesterol, this type of food contains an essential nutrients.

a) List down **two (2)** examples of food that contain cholesterol.

(2 marks)

b) Explain **two (2)** characteristics of pure cholesterol.

(4 marks)

QUESTION 5

Obesity now is major health concern in Malaysia. The number of obese people triple in the past 15 years from 4% in 1996 to 14% in 2010.

a) Explain the risk of obesity.

(2 marks)

b) Explain gastric bypass and liposuction surgery for obese people treatment.

(4 marks)

QUESTION 6

No one should practice inactivity. Some physical activity is better than none. Those who practice fitness shall gain some health benefits. Assess **five (5)** benefits gained when he/she become physically fits.

(5 marks)

QUESTION 7

Free radicals alters DNA, RNA and proteins that eventually will contribute to cell damage, disease progression and aging. Meanwhile, antioxidants neutralize free radicals by donating one of their own electrons, thus ending the chain electron.

Explain the meaning of free radicals.

(3 marks)

[40 MARKS]

PART C

This part consists of **THREE (3)** questions.

Answer ALL questions in the Answering Sheet.

QUESTION 1

Overweight and underweight can create serious health problem. Weight management strategies are key components for good health.

- a) List **three (3)** causes of underweight to people. (3 marks)
- b) Identify **four (4)** weight management strategies for weight lost. (4 marks)
- c) Explain Bulimia Nervosa disease. (3 marks)
- d) In your opinion, state **two (2)** weight gain strategies. (2 marks)

QUESTION 2

Calorie need calculation has been used by Nutritionist to ensure the calories intakes for daily consumption is sufficient.

- a) Calculate in details the Body Mass Index (BMI) for Daniel if his weight is 78kg and his height is 172 cm, then identify his BMI belongs to which categories. (4 marks)
- b) If Luqman's weight is 62kg and he is an active person, calculate his daily calorie need.

Formula to calculate calorie need is:			
1kg	= 2.2046 pound	Activity	= 20% for light
Gender	= 11 for male		= 30% for sedentary
	10 for female		= 40% for moderate
			= 50% for active

(4 marks)

QUESTION 3

Daily food dietary intakes are very important to ensure our bodies getting enough sources of nutrients and for daily energy used. Different age groups need different daily menu planning. Suggest a complete meal daily includes breakfast, lunch, evening snack and dinner for pregnant women.

(10 marks)

[30 MARKS]**END OF QUESTION PAPER**