

AGA KHAN UNIVERSITY EXAMINATION BOARD

SECONDARY SCHOOL CERTIFICATE

CLASS IX

ANNUAL EXAMINATIONS (THEORY) 2023

Food and Nutrition Paper I

Time: 1 hour 10 minutes Marks: 40

INSTRUCTIONS

1. Read each question carefully.
2. Answer the questions on the separate answer sheet provided. DO NOT write your answers on the question paper.
3. There are 100 answer numbers on the answer sheet. Use answer numbers 1 to 40 only.
4. In each question, there are four choices A, B, C, D. Choose ONE. On the answer grid, black out the circle for your choice with a pencil as shown below.

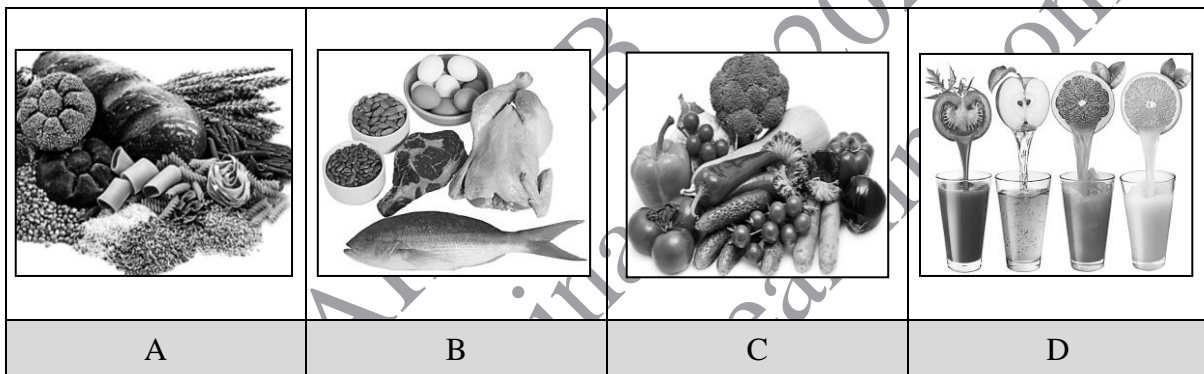
Correct Way				Incorrect Ways					
1	(A)	(B)	●	(D)	1	(A)	(B)	(C)	(D)
					2	(A)	(B)	(C)	(D)
					3	(A)	(B)	(C)	(D)
					4	(A)	(B)	(C)	(D)

Candidate's Signature

6. If you want to change your answer, ERASE the first answer completely with a rubber, before blacking out a new circle.
7. DO NOT write anything in the answer grid. The computer only records what is in the circles.
8. You may use a simple calculator if you wish.

1. The term 'diet' refers to the food that is eaten
 - A. during illness.
 - B. at midday as lunch.
 - C. as the main course only.
 - D. by an individual every day.
2. The set of food items that provides proper nutrition to human body is
 - A. boiled eggs, bran bread and apples.
 - B. white bread, French fries and apples.
 - C. white bread, apple juice and fried eggs.
 - D. bran bread, French fries and apple juice.

3. Which of the following food items helps in body growth and repairing of wounds?



4. Ahsan was often getting ill. Upon diagnoses by a doctor, it was found that Ahsan's defence mechanism is unable to produce enough antibodies to fight against diseases.

To boost the production of antibodies in his body, the doctor should advise him to take a diet which is rich in
 - A. fats and salts.
 - B. proteins and vitamins.
 - C. dietary fibres and fats.
 - D. carbohydrates and calcium.
5. Consider the given food items.
 - Red meat
 - Egg
 - Fish
 - Milk and dairy products

The disease that can be prevented by consuming these food items is

- A. scurvy.
- B. beri-beri.
- C. osteomalacia.
- D. night blindness.

6. The part of the human body that stores minerals like calcium and phosphorus is

- A. liver.
- B. teeth.
- C. bones.
- D. kidneys.

7. In the human digestive system, the parts involved in the absorption of digested food and egestion (removal) of undigested food are

	Absorption	Egestion
A	small intestine	colon
B	small intestine	anus
C	large intestine	colon
D	large intestine	anus

8. Eating insufficient food as compared to the higher level of physical activity may leads to

- A. lower basal metabolic rate.
- B. higher body mass index.
- C. lethargy.
- D. obesity.

9. In a living body, the process that produces energy is

- A. protein synthesis.
- B. oxidation of glucose.
- C. formation of amino acids.
- D. formation of disaccharides.

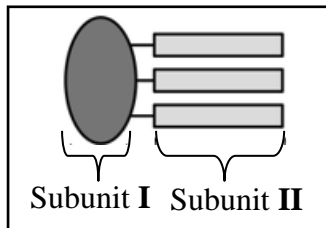
10. Regular consumption of an iron deficient diet may lead to

- A. fatal damage to the brain and liver.
- B. decreased production of red blood cells.
- C. increased production of white blood cells.
- D. the formation of tumour in the digestive tract.

11. In the liver, the vitamin that requires fats for its storage is

- A. vitamin A.
- B. vitamin C.
- C. vitamin B2.
- D. vitamin B12.

12. An immediate effect of consuming a low carb diet regularly on the human body is that it will
- lower the risk of cancer.
 - improve the heart function.
 - cause the breakdown of fat for energy.
 - allow the efficient absorption of nutrients.
13. The given diagram shows the generalised structure of a fat molecule.



The option that identifies the subunits **I** and **II** of fat is

	Subunit I	Subunit II
A	peptide	amino acids
B	amino acid	peptides
C	glycerol	fatty acids
D	fatty acid	amino acids

14. In humans, night blindness can be treated by increasing the intake of
- iron.
 - calcium.
 - vitamin A.
 - vitamin D.
15. The food items that must be AVOIDED by gluten intolerant people are
- eggs and milk.
 - fish and poultry.
 - cheese and butter.
 - bread and biscuits.

16. The given table shows the recommended dietary allowances (RDAs) of a micronutrient for different individuals.

(Note: N/A stands for Not Applicable)

Age	Male (mg/day)	Female (mg/day)	Pregnancy (mg/day)	Lactation (mg/day)
19 to 50 years	8	18	27	9
Above 60 years	8	8	N/A	N/A

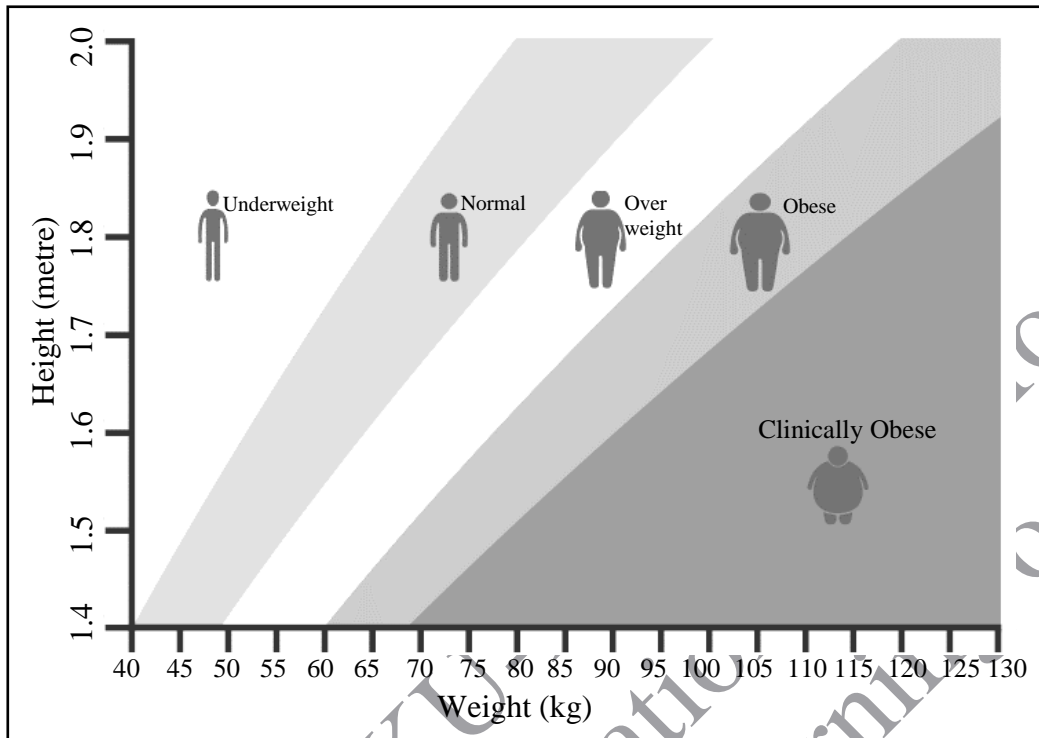
Based on the given information, the micronutrient is identified as

- A. iron.
 - B. sodium.
 - C. calcium.
 - D. phosphorus.
17. In plants, carbohydrates are stored as an energy source in the form of
- A. starch.
 - B. lactose.
 - C. fructose.
 - D. cellulose.
18. In the human digestive system, bile facilitates the digestion of fats.

Bile contains all of the following substances EXCEPT

- A. salts.
- B. water.
- C. enzymes.
- D. cholesterol.

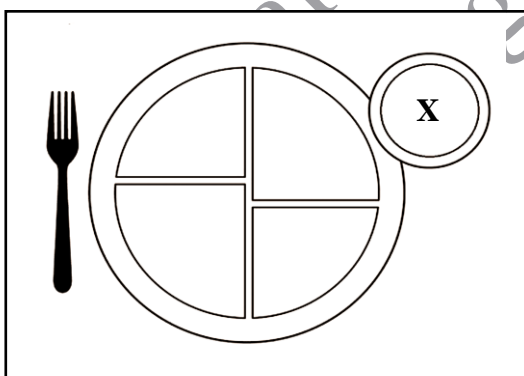
19. Consider the given graph.



Based on the given graph, the body mass index of the clinically obese person would be

- A. less than 20
- B. greater than 35
- C. between 18.5-24.5
- D. between 25.5-29.9

20. The given diagram shows the concept of 'MyPlate'.



The food group represented by X is

- A. dairy products.
- B. vegetables.
- C. grains.
- D. fruits.

21. The purpose of designing food pyramid is to provide information about the
- A. shelf life of food items.
 - B. appropriate serving size of the food.
 - C. intake of nutrients in appropriate amounts.
 - D. nutrient composition of different food groups.
22. Given are the nutrition facts on a food label of soy sauce.

Nutrition Facts	
Serving size: 1 oz. (28 g)	
Servings per container: 3 cups	
Amount Per Serving	
%Daily Value	
Total Fat 14 g	21%
Saturated Fat 3.2 g	16%
Trans Fat 0 g	
Polyunsaturated Fat 2.2 g	
Monounsaturated Fat 7 g	
Cholesterol 0 mg	0%
Sodium 107 mg	4%
Potassium 191 mg	
Total Carbohydrate 9 g	3%
Dietary Fibre 0.9 g	4%
Sugars 1.7 g	
Protein 5 g	10%
Vitamin A 72%	Iron 10%
Calcium 1%	Vitamin B6 5%
Vitamin C 2%	Magnesium 20%

The total number of calories from fat, carbohydrates and protein in the soy sauce is
 (Note: Energy per gram in Fat = 9 kcal/g, Carbohydrate = 4 kcal/g, Protein = 4 kcal/g)

- A. 112 kcal.
- B. 182 kcal.
- C. 198 kcal.
- D. 207 kcal.

23. Hamna is 14-year-old girl and studying in Grade VIII. She is the best tennis player in her school team.

The ideal lunch menu for Hamna should be

Zinger burger Fried chicken A can of fizzy drink An apple	<i>Aloo samosa</i> A can of juice A pack of crackers Two bananas	Baked potatoes A slice of pizza A can of fizzy drink An apple	Boiled rice Mutton <i>Korma</i> A glass of orange juice Two bananas
A	B	C	D

24. Which of the following statements is INCORRECT about the portion size of a food?
- A. It may contain multiple servings.
 - B. It is the food chosen to eat at one time.
 - C. It is completely in control of the consumer.
 - D. It is the amount of food listed on the food label.
25. Which of the following sets of food is a rich source of carbohydrates?
- A. Fish, beef and eggs
 - B. Oil, butter and margarine
 - C. Prawns, cream and cheese
 - D. Vegetables, cereals and fruits
26. Kamal suffers from anaemia. His nutritionist recommends him to increase the intake of fruits along with red meat to maximise the absorption of iron in his blood.
- The fruit that he should MAINLY consume with red meat is
- A. guava.
 - B. orange.
 - C. banana.
 - D. water melon.
27. The vitamin that is found in HIGHEST amount in fresh milk is
- A. vitamin B.
 - B. vitamin C.
 - C. vitamin K.
 - D. vitamin E.

28. All of the following nutrients are found in cheese EXCEPT

- A. fats.
- B. fibres.
- C. sugars.
- D. sodium.

29. As compared to chicken, the chickpeas have more

- A. fat and vitamin B.
- B. fat and vitamin D.
- C. iron and cholesterol.
- D. carbohydrates and fibres.

30. Faiza follows a vegetarian diet.

The food items that she must include in her regular diet to prevent vitamin B deficiency are

- A. citrus fruits.
- B. cheese and yogurt.
- C. carrot and apple juice.
- D. cucumber and capsicum.

31. The nutrient that is NOT present in banana is

- A. carbohydrate.
- B. cholesterol.
- C. potassium.
- D. fibre.

32. People, aged over 40 years are mostly recommended to consume almonds regularly as a snack to prevent inflammation, aging and cancer.

This is because consumption of almonds increases the level of

- A. sugar in the blood.
- B. sodium in the blood.
- C. vitamin E in the blood.
- D. vitamin C in the blood.

33. Haris roasted the meat at an appropriate temperature to make it soft and tender. However, he discarded the extruded meat juice.

Discarding the extruded meat juice will

- A. make the meat darker in colour.
- B. cause the meat to produce a foul odour.
- C. make the meat dry and difficult to digest.
- D. cause the loss of iron and fat-soluble vitamins.

34. In the preparation of cookies from cereals, Tahira added too much baking soda which gave the cookies a cake-like texture rather than a crispy texture.

This happens because excess baking soda causes the cookie's dough to

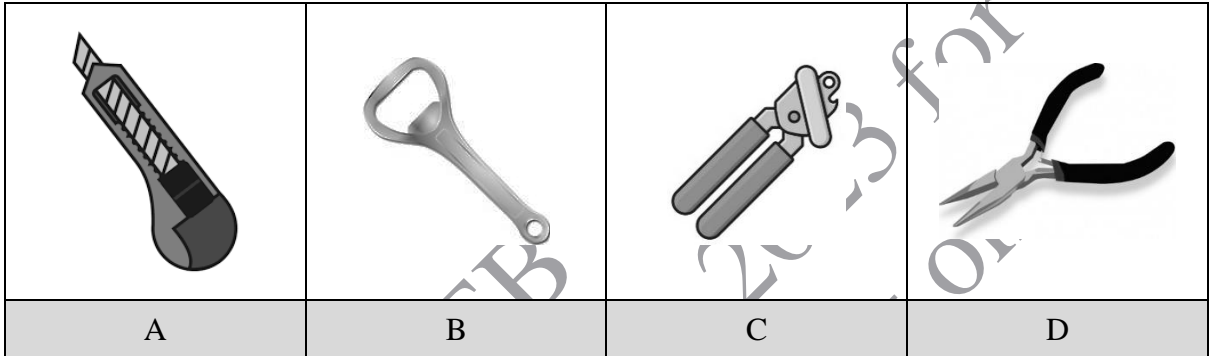
- A. trap more carbon dioxide.
 - B. lose its consistency.
 - C. become greasier.
 - D. bind firmly.
35. Zainab put the shredded spinach into boiling water for a very short time and then she transferred it into cold water.
- The MAIN purpose of this blanching method used by Zainab is to
- A. enhance the colour of spinach.
 - B. make the spinach creamy in texture.
 - C. increase the moisture content of spinach.
 - D. minimise the loss of water soluble vitamins.
36. Anees follows a recipe to make chicken stock, in which 16 pints of water is added to 1 kg chicken. He uses a cup to measure the quantity of water.

To make the chicken stock, the amount of water he will add is equal to

(Note: 1 cup = 0.5 pint)

- A. 4 cups.
 - B. 8 cups.
 - C. 16 cups.
 - D. 32 cups.
37. The PRIMARY purpose of boiling milk before consumption is to
- A. make it fat-free.
 - B. thicken its consistency.
 - C. kill the harmful bacteria.
 - D. separate the creamy topping.
38. A tasty, low fat and low sodium potato dish for children would be
- A. baked potato wedges.
 - B. spicy potato casserole.
 - C. mashed potatoes with sausages.
 - D. potato cutlets stuffed with minced beef.

39. The safe and suitable tool used for opening the given can of packed fruit is labelled as



40. The BEST method to retain the nutritional value of leafy vegetables before cooking is to

- A. wash them thoroughly.
- B. freeze them overnight.
- C. chop them in large pieces.
- D. wrap them in plastic and refrigerate.

Please use this page for rough work

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