



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR  
SECOND YEAR FIRST TRIMESTER**

**SCHOOL OF PURE, APPLIED AND HEALTH  
SCIENCES**

**DIPLOMA IN FOOD, NUTRITION AND DIETETICS**

**COURSE CODE: DND 2103**

**COURSE TITLE: NUTRITION ACROSS THE  
LIFESPAN**

**DATE: 19/4/2023**

**TIME: 0830-1130 HRS**

---

**INSTRUCTION TO CANDIDATES**

Section A: Multiple Choice Questions. Answer ALL Questions

Section B: Short Answer Questions. Answer ALL Questions

Section C: Long Answer Questions. Answer ANY TWO Questions

*This paper consists of 6 printed pages. Please turn over.*

## SECTION A (20 MARKS)

1. The following are common nutrition disorders in women of reproductive age except one?
  - A. Vitamin A deficiency
  - B. Iron deficiency
  - C. Iodine deficiency disorders
  - D. Eczema
  
2. All these are the common eating disorders among the teenagers, except?
  - A. Anorexia nervosa,
  - B. Bulimia nervosa
  - C. Anemia
  - D. Binge eating disorders
  
3. Identify which of the following are carbohydrate food sources.
  - A. Ribose
  - B. Mannose
  - C. Dextrose
  - D. Isoleucine
  
4. The following statements are true except?
  - A. Too much weight gain decreases the risk of having a high-birth weight baby and getting diabetes while pregnant (gestational diabetes).
  - B. Maternal under-nutrition is the major cause of Intra-uterine growth deficiency.
  - C. Micronutrient deficiencies during pregnancy have consequences for the developing foetus. Iodine deficiency disorders may cause foetal brain damage or stillbirth. Folate deficiency may result in neural tube or other birth defects and preterm delivery, and both iron deficiency anaemia and vitamin A deficiency may have significant implications for the future infant's morbidity and mortality risk, vision and cognitive development.
  - D. Burning fats due to inadequate carbohydrate, can release ketones that can be destructive to foetal brain cells and the delicate acid-base balance of the foetal system.
  
5. The following statements are true, except?
  - A. The fatty acid profile of breast milk reflects maternal dietary intake. In addition, the fat content varies within a feed.
  - B. Hind milk contains substantially less fat than foremilk.

- C. Energy, protein, fat and carbohydrate content of breast milk is relatively constant.
  - D. Nutrients whose low maternal intake or stores reduce their content in breast milk and consequently impacting on infant development include Vitamins A, B1, B2, B6 and B12, and Iodine and selenium.
6. Which of the following is NOT important when feeding children aged 6-24 months old.
- A. 2-3 meals per day for infants aged 6-8 months;
  - B. 3-4 meals per day for infants aged 9-11 months and children 12-24 months
  - C. Additional nutritious snacks may be offered 1-2 times a day, as desired.
  - D. Feeding them fried fries and sausages whenever they demand them
7. Identify the FALSE one in the following statements.
- A. Poor dietary intake, absorption, use of some drugs and blood loss are often the causal factors of iron deficiency.
  - B. Adequate iron can be sourced from red meat and non-meat sources daily.
  - C. Absorption of iron is NOT improved by consuming vitamin C-rich foods along with meals, like fruit juice or fresh fruit or vegetables.
  - D. Zinc is important for a healthy immune system and wound healing.
8. A key nutritional need during the 1st trimester of pregnancy is the need for \_\_\_\_\_.
- A. Proteins
  - B. Folate
  - C. Iron
  - D. Calcium
9. What is a good alternative for mothers who are unable to or choose not to breastfeed?
- A. Whole cow's milk
  - B. Soy milk
  - C. Iron fortified infant formula
  - D. Water
10. How can parents address a child's problem with overweight or obesity?
- A. Provide candy or chips for snack
  - B. Make them finish their plate every meal
  - C. Encourage them to watch more TV
  - D. Encourage them to stop eating when full
11. Children should not have cow's milk until age...?
- A. any time

- B. 3 months
  - C. 6 months
  - D. 1 year
12. Jessica is aged 22 and she weighs 66 kg and her stature is 156 cm tall. What is her BMI?
- A. 27 kg/m<sup>2</sup>
  - B. 26 kg/m<sup>2</sup>
  - C. 21 kg/m<sup>2</sup>
  - D. 19 kg/m<sup>2</sup>
13. Which of the following is NOT true about body image during adolescence?
- A. Adolescents are not very self-conscious.
  - B. Some adolescent females feel they are too large.
  - C. Some adolescent males feel they are not muscular enough.
  - D. Unhealthy tactics may be used to try and achieve an unrealistic body shape.
- B. A full term infant's iron stores are usually depleted by:
- C. a) 4 weeks
  - D. b) 3 months
  - E. c) 6 months
  - F. d) 12 months
  - G. e) 15 months
14. A full-term infant's iron stores are usually depleted by:
- A. 4 weeks
  - B. 3 months
  - C. 6 months
  - D. 12 months
15. Children with pot belly is an indicative of which disease?
- A. Kwashiorkor
  - B. Marasmus
  - C. Goitre
  - D. Anaemia
16. Which one of the following is the undigestible portion of our essential to the health of the digestive system.
- A. Carbohydrates
  - B. Proteins
  - C. Roughage
  - D. Fats
17. Beriberi disease/ disorder is caused by the deficiency of which of the following vitamins?1mk

- A. Vitamin B12
  - B. Vitamin B1
  - C. Vitamin B2
  - D. Vitamin B3
18. Diabetes is the body's inability to utilize.....?
- A. Vitamin B12
  - B. Insulin
  - C. Blood glucose
  - D. Carbohydrates, fats and proteins.
19. Which of the following might encourage good eating in a preschool child?
- A. Large portions
  - B. Using grown-up's utensils
  - C. Spicy foods
  - D. Bright colored finger foods.
20. This nutrient is need to prevent a birth defect called Spina Bifida.
- A. Vitamin A
  - B. Vitamin E
  - C. Vitamin A
  - D. Folate

**SECTION B (40 MARKS)**

1. Define the following terms. 4mks.
  - a. Nutrition.
  - b. Food.
  - c. Colostrum.
  - d. Transitional foods.
2. State four (4) consequences of maternal folic acid deficiency. 4mks
3. High vitamin A doses, stress, Alcohol, cigarettes and caffeine should be avoided in the months preceding conception. Justify. 4mks
4. Identify six (6) groups that are at risks for low-birth-weight babies 6mks
5. Describe the hormonal control of lactation. 8mks
6. Identify the deficient nutrient which causes the following deficiency diseases. 6mks.
  - a. Rickets
  - b. Beriberi
  - c. Pellagra
  - d. Scurvy

e. Kwashiorkor

f. Goiter

7. Highlight eight benefits of breast feeding to the mother

8mks

**SECTION C (40 MARKS). ANSWER ANT TWO QUESTIONS.**

1. Pre-pregnancy nutrition is very important for most women in their reproductive age. Discuss five (5) nutrients that increase the chances of conceiving by boosting fertility. 20mks.
2. a. Outline the nutritional recommendations as given in the food pyramid 10mks  
b. Discuss five key nutrients that are required during pregnancy and lactation. 10mks
3. a. Discuss five (5) foods to avoid during adulthood. 10mks  
b. Discuss five nutrition intervention methods used in dealing with nutrition problems and concerns. 10mks.

**//END//**