



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION : BACHELOR OF HUMAN NUTRITION	
QUALIFICATION CODE: 08BOHN	LEVEL: 6
COURSE NAME: MATERNAL AND EARLY CHILDHOOD NUTRITION	COURSE CODE: MCN621S
SESSION: NOVEMBER 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR:	DR ROSWITHA MAHALIE

INSTRUCTIONS
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS

NONE

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

SECTION A

QUESTION 1

(20 MARKS)

Evaluate the statements in each numbered section and determine whether the statement is true or false. On the answer sheet, fill in the appropriate answer, using T for True, and a F for False statement/phrase **(1 mark)** and the justification for your answer **(1 mark)**.

- 1.1 Low level alcohol units taken during pregnancy can lead to fetal alcohol syndrome.
- 1.2 Acute exercises during pregnancy causes harm to the baby.
- 1.3 Vitamin B12 supplements are required in pregnant women to prevent neural tube defects.
- 1.4 Docosahexaenoic acid (DHA) is not a type of omega-6 fat.
- 1.5 Vitamin A supplements should not be given to pregnant women.
- 1.6 Breast development begins at puberty.
- 1.7 Bilirubinemia cannot be reduced by encouraging early and frequent breastfeeding.
- 1.8 By 6 months, normal infants' birthweight must increase twice and thrice by 12 months.
- 1.9 Adequate carbohydrates, fats, and proteins for breastfeeding mothers consists of 55%, 35% and 15% respectively.
- 1.10 Nipple Shields can improve milk transfer and breast-feeding duration.

QUESTION 2

(5 MARKS)

Evaluate the definitions in each numbered section and select the most appropriate answer or phrase from the given possibilities. Next to the question number, fill in the appropriate letter of the correct answer/phrase. *(Each question carries 1 mark.)*

- 2.1 Occurs around day 7 after fertilization.
- 2.2 Immediately after fertilization the newly developing human life form is called.
- 2.3 This process starts with groove formation, and then tube formation.
- 2.4 This embryonic layer produces the skin and nervous system.
- 2.5 This embryonic layer produces the gastrointestinal tract.

- a. Endoderm
- b. Implantation
- c. Ectoderm
- d. Neurulation
- e. Zygote

QUESTION 3

(5 MARKS)

Evaluate the statements in each numbered section and select the most appropriate answer or phrase from the given possibilities. Next to the question number, fill in the appropriate letter of the correct statement/phrase. *(Each question carries 1 mark.)*

- 3.1 A good supply of this is needed along with phosphorus, magnesium, and Vitamin D for fetal development of bones and teeth, as well as the mother's own body needs. Also aids in the clotting of blood:
- A. Calcium
 - B. Iron
 - C. Iodine
 - D. Folate
- 3.2 The doctor tells Esther that her baby weighs less than 2500 g and needs special care. What do you think the doctor's diagnosis on the baby's weight would be:
- A. Extremely Low Birth Weight
 - B. Very Low Birth Weight
 - C. Low Birth Weight
 - D. Preterm
- 3.3 Protein is the fundamental tissue-building substance of the body and for the first 6 months of life, the protein requirements of an infant are:
- A. 0.8 g/kg
 - B. 1.6 g/kg
 - C. 2.2 g/kg
 - D. None of the above
- 3.4 The hormone responsible for the let-down reflex which is the process of the milk moving from the upper milk-producing cells down to the nipple for infant suckling:
- A. Prolactin
 - B. Oxytocin
 - C. Both a & b
 - D. None of the above

- 3.5 What is recommended proteins allowance during the 6 -12 months of life:
- A. 1.6 g/kg
 - B. 2.2 g/kg
 - C. 0.8 g/kg
 - D. 90 to 110 kcal/g

SECTION B

QUESTION 4

(30 MARKS)

- 4.1 During pregnancy iron is an essential micronutrient. Describe:
- a. Why iron is important during pregnancy? (2)
 - b. What are some examples of iron-rich foods? (2)
 - c. What can the pregnant woman take to increase iron absorption? (2)
- 4.2 What are the risks and benefits of eating fish during pregnancy? (4)
- 4.3 Francina is a 25-year-old pregnant woman, and she asks you how much she should exercise and how she should exercise during pregnancy. Give an outline on how and how much she should exercise during pregnancy? (4)
- 4.4 After Francina delivers her baby, she would like to breastfeed, but likes occasionally drinking alcohol and coffee. How would you advise her? (4)
- 4.5 Discuss the following embryology processes:
- a) Gastrulation (6)
 - b) Neurulation (6)

QUESTION 5

(40 MARKS)

- 5.1. List and describe using examples, five (5) causes of failure to thrive (FTT) in children (10)
- 5.2. Enumerate five (5) important nutrients and good sources for vegetarian school aged children (5)
- 5.3. Outline methods used to identify disabilities in early childhood (5)

- 5.4 Discuss five (5) common nutritional problems and their causes among toddlers and pre-school aged children (5)
- 5.5. State the energy and protein needs in the first 6 months among infants (4)
 - 5.5.1 List five (5) factors affecting the energy needs in the first 6 months among infants (5)
- 5.6. List any two (2) physical, two (2) social and two (2) emotional consequences of obesity among children (6)

!!!!!!!!!!!!END!!!!!!!!!!!!!!