This exam paper consists of two sections: Section A (3 pages and 100 marks) and Section B (11 pages and 50 marks). Please check that you have all the pages and please answer both sections. Section A must be answered in the exam answer booklet. Section B consists of multiple choice questions, calculations and short questions and must be answered in the booklet provided.

PLEASE WRITE LEGIBLY AND ANSWER ALL QUESTIONS IN INK.
ANSWERS WRITTEN IN PENCIL WILL NOT BE MARKED.

SECTION A
100 MARKS

Please answer all of the questions below.

QUESTION ONE

“The Recommended Dietary Allowances (RDA) were first published in 1943 and have now been replaced by the Dietary Reference Intakes (DRIs)”.

1.1 Explain why the DRIs have replaced the original RDAs. [5]

1.2 Explain what the DRIs are and give a detailed explanation of each of the nutrient based reference values that make up the DRIs. [15]

TOTAL MARKS = 20
QUESTION TWO

2.1 Keeping cold food cold is a key factor in the prevention of food-borne illness. Explain how this can be achieved. [5]

2.2 You have been asked to give advice to a group of students on how to spend less money when buying protein-rich foods. What would you advise the students? [8]

2.3 Which groups of people are especially at risk for food borne illnesses? [½ X 8 = 4]

2.4 Explain the South African Food Labelling Laws with regards to pictorial representations. [3]

TOTAL MARKS = 20

QUESTION THREE

3.1 Explain how factors related to the characteristics of the household can contribute to household food insecurity. [15]

3.2 Why was the Code of Marketing of Breast Milk Substitutes developed and what does the code apply to? [5]

TOTAL MARKS = 20

QUESTION FOUR

4.1 Discuss the characteristics of successful dietary guidelines. [6]

4.2 Discuss the limitations of using the Food Composition Tables. [12]

4.3 Explain how the Food Quantities Manuals are used. [2]

TOTAL MARKS = 20
QUESTION FIVE

5.1 Explain how the type of work a person does can influence their eating habits. [20]

TOTAL MARKS = 20

END OF SECTION A
SECTION B: MULTIPLE CHOICE, CALCULATIONS AND SHORT QUESTIONS

50 MARKS

QUESTION ONE [1 X 20 = 20 MARKS]

MULTIPLE CHOICE QUESTIONS

Please indicate your answer by clearly placing a circle around the letter that corresponds to your answer.

NEGATIVE MARKING APPLIES

1 mark for each correct answer

Minus ½ mark for each incorrect answer

0 marks for no answer

INTRODUCTION TO NUTRITION AND OVERVIEW OF NUTRIENTS (1X4)

1. In which year was the term “vitamine” coined?

   A. 1913
   B. 1915
   C. 1912
   D. 1920

2. Which of the following is not an example of over nutrition?

   A. Obesity
   B. Stunting
   C. Overweight
   D. Vitamin A toxicity

3. Which one of the following is required in amounts of >100 mg/day?

   A. Sulfur
   B. Selenium
   C. Copper
   D. Iron
4. Identify the correct statement on minerals:

A. Minerals are energy-yielding nutrients
B. Minerals are required in amounts of grams/day
C. Minerals are organic
D. Minerals are not easily destroyed during storage, processing and cooking of food

PROCURING AND USING FOOD (1 X 4)

5. According to research on 2005 Household Expenditure, LSM group 6 spent ____ of their budget on food.

A. 71%
B. 11%
C. 24%
D. 8%

6. Which of the following statements would not be prohibited on a food label?

A. “Serving suggestion”
B. “Recommended by Doctors”
C. “Health giving properties”
D. “Helps to lose weight”

7. Which statement on food purchasing is false?

A. Processing increases the cost of a food
B. A speciality store usually charges higher prices than a supermarket
C. 80% of domestic purchases occur on a Thursday, Friday and Saturday
D. Home brands are always cheaper
8. Which of the following bacteria produce heat-resistant spores?

A. *Staphylococcus aureus*
B. *Clostridium perfringens*
C. *Clostridium botulinum*
D. *Salmonella*

**PUBLIC HEALTH NUTRITION (1 X 4)**

9. Which of the following is a short term strategy to cope with malnutrition?

A. Fortification
B. Nutrition Education
C. Health facilities based food programme
D. Primary Health Care Services

10. Which of the following is not a common belief on breastfeeding?

A. Throw colostrum away and give sugar water instead
B. Breast milk has high satiety value for babies
C. Not to breastfeed if previous child has died
D. Breast milk is too thin

11. According to the National Food Consumption Survey (NFCS) of 1999 _____ households were at risk for hunger

A. 1 in 5
B. 2 in 4
C. 1 in 4
D. 2 in 5

A. 1 in 5  
B. 1 in 3  
C. 1 in 4  
D. 1 in 2

**PLANNING A HEALTHY DIET (1 X 4)**

13. According to the Food and Agriculture Organization (FAO) and World Health Organization (WHO) the recommendation for total dietary fibre is _____.

A. 25-35 g/day  
B. 25-30 g/day  
C. 27-40 g/day  
D. 27-45 g/day

14. Which of the following is the best example of a meal that encompasses the 5 food groups?

A. Yoghurt; Rice; Margarine; Apple; Butter  
B. Milk; Fish; Carrots; Rice; Margarine  
C. Butternut; Pasta; Cooking oil; Orange; Rice  
D. Dried beans; Banana; Samp; Pear; Carrots

15. In the MyPyramid nutrition education tool which of the following indicates gradual improvement?

A. A person climbing steps  
B. The slogan “MyPyramid”  
C. Narrow slivers of colour at the top of pyramid  
D. The slogan “Steps to a healthier you”
16. Which of the following nutrient composition data is not found in the Food Composition Tables?

A. Moisture
B. Amino acids
C. Ash
D. Energy

FACTORS INFLUENCING EATING BEHAVIOUR (1 X 4)

17. *Navarathri* is observed in ____:

A. Islam
B. Judaism
C. Hinduism
D. Christianity

18. According to Judaism which of the following are regarded as being unclean?

A. Goat
B. Shellfish
C. Sheep
D. Cow

19. In which form of Christianity is a lacto-ovo vegetarian diet recommended?

A. Roman Catholics
B. Mormons (Latter Day Saints)
C. Seventh Day Adventists
D. Eastern Orthodox Christians
20. Which religious group prepares a dish called *Magerista*?

A. Hindus
B. Roman Catholics
C. Seventh Day Adventists
D. Eastern Orthodox Christians

END OF QUESTION ONE: MULTIPLE CHOICE QUESTIONS
2.1 A jam doughnut weighs 55 g and contains the following macronutrients:

- 27 g carbohydrate
- 3 g protein
- 8 g fat

2.1.1 Calculate the energy content of the jam doughnut in kilocalories. [4]

2.1.2 Calculate the percentage contribution of each macronutrient to total energy in the jam doughnut. [3]
2.2 A 150 g portion of macaroni and cheese contains the following macronutrients, given as percentage contribution to total energy:

Energy = 1074 kJ
Carbohydrate = 38%
Fat = 33%
Protein = 29%

Calculate the amounts of each macronutrient found in the portion of macaroni and cheese. [3]
QUESTION THREE

SHORT QUESTIONS 20 MARKS

3.1 In which year was vitamin A isolated? [1]

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3.2 What is the alternative name for vitamin B2? [1]

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3.3 Explain the difference between infection and intoxication. [2]

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3.4 What is the temperature danger zone? [1]

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3.5 List the WHO five (5) keys to safer food. [½ X 5 = 2½]

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3.6 What does SANHANES stand for? [2]

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3.7 According to the National Food Consumption Survey Fortification Baseline (2005) how many children were stunted? [1]

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3.8 Which three (3) growth charts are found in the Road to Health Booklets? [½ X 3 = 1½]

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3.9 List the South African Prudent Dietary Guideline for:

3.9.1 Fat [2]

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3.9.2 Carbohydrates [2]

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3.10 There are four (4) age groups proposed in the South African Paediatric Food based Dietary Guidelines. List the four (4) age groups. \[ \frac{1}{2} \times 4 = 2 \]

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3.11 In which religion is \textit{Yom Kippur} observed? \[ 1 \]

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3.12 Name the dish that is prepared by Eastern Orthodox Christians on the death of a loved one? \[ 1 \]

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END OF QUESTION THREE: SHORT QUESTIONS