S1 Home Economics Practice Paper: The Six Nutrient Groups and Meal Planning, Food Safety and Handling, Recipe Scaling and Costing, Textile Fibres and Laundry Care, Home Management and Personal Budgeting (100 marks)

S1 | Home Economics | Time: 60 minutes | Total: 100 marks | 24 questions

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Part 1: Food and Nutrients (8 marks)

Answer the following questions on nutrients. Each question carries 2 marks.

1. Name four of the six classes of nutrients. [2]

2. How many kilocalories does one gram of carbohydrate, protein and fat provide respectively? [2]

3. State two functions of dietary fibre in the human body. [2]

4. How much water is recommended for a teenager each day? [2]

Part 2: Meal Planning and Energy Calculation (20 marks)

Calculate from the data given and show your steps. Each question carries 5 marks.

5. A breakfast contains 50 g of carbohydrate, 15 g of protein and 10 g of fat. Find the energy provided by the breakfast. [5]

6. A person needs 1800 kcal a day and breakfast should provide 25 percent of it. If the breakfast above provides only 350 kcal, how many kcal is it short of the recommendation? [5]

7. A person weighs 52 kg and is 1.55 m tall. Find the body mass index and state the category. [5]

8. A person weighs 45 kg and the protein requirement is 1 g per kg of body mass. If each of three meals provides 15 g of protein, is the requirement met? [5]

Part 3: Food Safety and Handling (18 marks)

Answer the following questions, paying attention to temperatures and procedures.

9. What temperature range is the danger zone in food safety, and why should food not be kept in it for long? [4]

10. What temperatures are recommended for the refrigerator compartment and the freezer? [4]

11. A pot of 800 g of cooked rice is portioned into 200 g servings. How many servings are there, and what core temperature should reheating reach? [5]

12. How can cross contamination be avoided when handling raw meat and ready-to-eat food? State two measures. [5]

Part 4: Recipe Scaling and Costing (18 marks)

Scale the recipe quantities and calculate costs, showing your steps.

13. A recipe for 4 people uses 80 g of sugar. How much sugar is needed for 6 people? [4]

14. A recipe for 6 people uses 300 g of flour. How much flour is needed for 9 people? [4]

15. Flour costs 12 dollars per kg, butter 40 dollars per kg and sugar 8 dollars per kg. A batch for 6 people uses 450 g of flour, 150 g of butter and 60 g of sugar. Find the total material cost and the cost per portion. [5]

16. Using the previous question, if each portion sells for 3.50 dollars, find the profit per portion and the profit margin. [5]

Part 5: Textile Fibres and Laundry Care (18 marks)

Answer the questions on fibre properties and laundry care.

17. Name two natural fibres and two man-made fibres. [4]

18. Compare cotton and polyester in terms of moisture absorption and drying speed. [4]

19. A care label shows machine wash at 40 degrees C, do not bleach and cool iron. Explain these three instructions. [5]

20. A washing machine takes 5 kg of laundry per load and each garment weighs about 250 g. How many garments fit in one load? If each load uses 0.8 kWh at 1.2 dollars per kWh, what is the electricity cost per garment? [5]

Part 6: Home Management, Consumer Rights and Personal Budgeting (18 marks)

Answer the following questions and show your steps in the calculations.

21. Which two ordering principles should be followed when cleaning a home? [4]

22. State three basic consumer rights. [4]

23. A person saves 300 dollars a month and deposits the whole amount for one year at 2 percent simple interest. Find the interest and the total amount. [5]

24. A student receives 800 dollars pocket money a month and saves 25 percent. The rest is spent on 250 dollars of activities, 120 dollars of transport and 80 dollars of snacks. How much is left each month? [5]