

P640/2
FOODS AND NUTRITION
(With science in the home)
THEORY
PAPER 2
July/August 2024

2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS

Uganda Advanced Certificate of Education

FOODS AND NUTRITION
(With science in the home)

Paper 2

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- *This paper consist of six questions.*
- *Answer any four questions.*
- *Any additional question(s) answered will **not** be marked.*
- *You may work out your answers using any unit but imperial units must **not** be mixed with metric ones.*

1. (a) (i) What is the importance of good ventilation in the kitchen. (04 marks)
(ii) Explain how air is naturally purified. (04 marks)
(iii) How would you prevent air pollution in a home? (04 marks)
- (b) Discuss how you would determine the wattage of an appliance which has no label. (06 marks)
- (c) (i) Explain the procedure of replacing a blown fuse wire in a three core top plug for an appliance (percolator). (04 marks)
(ii) Distinguish between a cartridge/link fuse and re-wirable fuse. (03 marks)
2. (a) Explain the usefulness of the following processes in the house. (03 marks)
(i) Evaporation (03 marks)
(ii) Cooling effect of evaporation (03 marks)
(iii) Melting (03 marks)
- (b) Using a well labeled diagram, explain the principles behind the working of a food flask. (07 marks)
- (c) A thirsty student drinks tap water which tested salty. Giving the causes, describe the problems she could encounter when using the same water for washing her school uniform. (09 marks)
3. (a) What are the qualities of a good drainage system. (04 marks)
- (b) State the advantages and disadvantages of an open drainage system. (06 marks)
- (c) Explain the construction and working mechanism of the following;
(i) Carbondioxide gas fire extinguisher (05 marks)
(ii) Acid base fire extinguisher (05 marks)
(iii) Primus stove (05 marks)
4. (a) What is the importance of the following water treatment process. (03 marks)
(i) Aeration (04 marks)
(ii) Coagulation
- (b) Explain the ways of getting rid of solid wastes from our homes. (06 marks)
- (c) (i) With an illustration, explain the scientific principle and mechanism by which a domestic hot water system works. (07 marks)
(ii) Describe the different types of controls put into heating systems to operate them effectively. (05 marks)

5. (a) Identify the advantages and disadvantages of fluorescent lamps. (08 marks)
- (b) What is condensation damp? And how would you prevent it in a home? (08 marks)
- (c) (i) What is a surface active agent? Explain the factors that affect the performance of soap. (05 marks)
- (ii) Enumerate the qualities of a good laundry soap. (04 marks)
6. (a) (i) Give the advantages of an electronic weighing scale. (04 marks)
- (ii) Mention six types of a weighing scale. (03 marks)
- (b) Which factors will guide a new home maker in the making of right choices of kitchen equipment? (08 marks)
- (c) A dice of 8 cm by 6 cm by 4 cm is to be tossed on to a rectangular glass board of 27 cm by 24 cm. Determine the maximum pressure that can be exerted on to the glass board if the mass of the dice is 50 grams. (10 marks)

END