# Oxford Revise & Assess Agriculture

Answers Grade

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## **Answers to sample Assessment Papers**

- 1. (a) Excessive use of artificial fertilisers.
  - Excessive use of agricultural chemicals such as herbicides and pesticides.
  - Unsafe disposal of farm chemical containers.
  - Using contaminated water for crop irrigation.
  - Dumping of plastic waste on the farm.
  - (b) Practice organic farming.
    - Use the correct farm chemicals and fertilisers.
    - Use the recommended amounts of farm chemicals.
    - Proper disposal of used chemical containers and plastic wastes.
- 2. (a) Soil erosion
  - Crop destruction
  - (b) Construct water retention ditches.
    - Construct water retention pits.
- 3. (a) Using fresh local produce.
  - Washing: Wash vegetables with cool (not hot) water before cutting. Reduce soaking and washing time to minimise nutrient loss.
  - Peeling: Most vegetables have nutrients preserved when consumed without peeling hence avoid excessive peeling.
  - Cutting: Most food loses nutrients once cut because of exposure to air.
     It is advisable to store them in an airtight container immediately after cutting.
  - Cooking time: Do not overcook.
    - Cooking food for a long time makes them lose nutrients.
  - Covering: It is advisable to cover food with a lid to help retain some of the soluble vitamins such as vitamins C and B by trapping steam inside the pot.
- 4. Trees act as wind breakers preventing soil erosion.
  - Trees prevent surface runoff, which protects the land from flooding and degradation.
  - Trees shed off their leaves that decay to form humus. This improves soil fertility and water infiltration.
  - Trees provide shade hence reducing the rate of evaporation.
  - Trees protect the soil from heavy raindrops thus reducing splash erosion.

- 5. (a) Honey
  - (b) Wear gloves while performing the task.
    Use clean and safe equipment/containers.
  - (c) Plastic or glass containers.
- 6. (a) Coarse tilth is obtained by first digging while fine tilth requires many rounds of tilling operations.
  - (b) Planting materials suitable for coarse tilth include tubers, suckers and cuttings such as potato tubers and cassava cuttings.
     Planting materials suitable for fine tilth are small seeds like millet or sorghum seeds.
- 7. (a) Earthing up
  - (b) Potatoes, carrots and yams.
- 8. (a) Roasting
  - (b) Nutrients are preserved.
    - Improves the taste.
- 9. (a) Water, soap, disinfectant, broom and a hard brush.
  - (b) Wear protective clothing.
    - Remove the dog from the kennel and put it in a separate holding area.
    - Remove and clean the feeders, waterers and bedding.
    - Remove any animal waste from the floor and dispose of properly.
    - Sanitise the whole kennel with a disinfectant.
    - Sanitise your working tools and equipment after cleaning.
- 10. (a) Rinsing
  - (b) Salt
  - (c) To fix the colour of the article so that it does not run.
- 11. (a) Tool bags, scarf, gloves, mats and table wipers.
  - (b) Work in a well-lit place.
    - Be careful with sharp objects such as the knitting needle and scissors.
    - Keep distance to prevent injury to self and others.
    - Store knitting materials in the toolbox after use.
- 12. (a) Framed suspended garden.
  - (b) Wooden planks, nails and used water bottles.
  - (c) Wearing appropriate protective gear when constructing the structure.
    - Keeping the work area clean and organised.
    - Observing safe distance while using tools.
    - Storing your tools and materials in a safe place away from children after use.

- 13. (a) Cutting tool such as a knife. A grinder or pestle and mortar.
  - (b) Frying
  - (c) Increases the monetary value of the crop produce.
    - Improves the storage life of the crop produce.
    - Reduces post-harvest losses of the crop produce.
    - Improves the quality of the crop produce.
- 14. Hellen and Joseph

- 1. (a) Used chemical containers
  - Plastic wastes
  - (b) Safe disposal of household wastewater.
    - Safe disposal of used chemical containers and plastic wastes.
    - Avoid excessive use of artificial fertilisers.
    - Controlled use of agricultural chemicals.
- 2. (a) Water retention pits
  - (b) Arrow roots
    - Maize
  - (c) It collects surface run-off when it is raining. The collected water can then be used to water growing crops.
- 3. (a) Groups A and D.
  - (b) It preserves nutrients and mineral salts.
- 4. Trees act as water catchment areas.
  - Leaves of trees prevent splash erosion.
  - Roots of trees hold soil particles together and reduce the rate of soil erosion.
  - Trees act as windbreaks thus reducing the rate at which wind erodes soil.
  - Tree leaves provide cover to the soil and reduce the rate at which soil moisture is lost through evaporation.
  - Dead leaves of trees and soft branches decompose, add organic matter to the soil and improve soil fertility.
  - Trees absorb carbon (IV) oxide in the air and use it for photosynthesis. This reduces the amount of greenhouse gases that cause increased temperatures known as global warming.
- 5. (a) Coarse tilth
  - (b) Large-sized planting materials such as cuttings, tubers and suckers.

- 6. (a) Weeding
  - (b) Take care not to damage growing crops.
    - Keep distance while working with tools.
    - To ensure they are in their protective clothing.
  - (c) To reduce the rate at which weeds compete with crops for space, nutrients, moisture and sunlight.
    - To lower the cost of production.
    - To improve crop yield.
- 7. (a) B
  - (b) To avoid spaces in the crates which will cause cracking of eggs when crates are packed.
  - (c) To prevent them from spoiling the good eggs.
- 8. (a) Cleaning feeders and waterers.
  - (b) Makes animals healthy for production of the safe quality products.
    - Prevents domestic animals from contracting diseases.
    - Prevents domestic animals from being infested with parasites.
- 9. (a) Steaming
  - (b) Eggs, vegetables and fish.
  - (c) Care should be taken to ensure that the food being cooked does not come into contact with water.
- 10. (a) To ensure that loose-coloured clothes do not stain other clothes.
  - (b) Minimises colour loss in loose-coloured articles.

    Prevents other clothes from being discoloured by loose-coloured clothes.
- 11. (a) Yarns or threads, knitting needles and a pair of scissors.
  - (b) Purl and knit stitches.
  - (c) Creativity skills, manipulating skills and observation skills.
- 12. (a) Sticks, wooden planks, poles, strings, nails and metal bars.
  - (b) Peas, cucumbers, melons, tomatoes and passion fruit.
  - (c) Makes use of limited space.
    - It requires little amount of water.
- 13. (a) Cassava and maize.
  - (b) Frying Cassava; roasting maize
  - (c) Increases the monetary value of a crop produce.
    - Improves the storage life of a crop produce.
    - Makes products safe for use by consumers.
    - Enables farmers to reduce post-harvest losses.
    - Creates jobs along the process of adding value to a crop produce.

- 14. (a) Ashes and animal fat.
  - (b) Saves money that would have been used to buy industrial soap.
    - It is free from chemicals that may be unsafe for humans.
    - It is cheap as it makes use of locally available materials.

- 1. Posters, messages, leaflets, poems and songs.
- 2. (a) Water retention pits.
  - (b) Napier grass
  - (c) They conserve water Water retention pits store water underground, reducing evaporation and ensuring that more water is available for crops when needed.
    - Improved crop growth Consistent moisture levels in the soil support healthy root development and overall plant growth.
- 3. (a) Fine cutting of kales.
  - Storing kales for a long period.
  - Prolonged cooking of food on slow heat.
  - (b) Washing vegetables whole before cutting them.
    - Cooking vegetables for a shorter duration.
- 4. Seedlings, cuttings and seeds.
- 5. (a) Coarse tilth has larger soil particles than fine tilth.
  - (b) Coarse tilth Cassava cuttings and banana suckers.
    - **Fine tilth** Onion seeds and carrot seeds.
- 6. (a) Thinning
  - (b) After seedlings have emerged and developed their first set of true leaves, but before they become overcrowded.
  - (c) Thinning provides each plant enough room to spread out and grow strong. Thinning helps to keep plants healthy by reducing overcrowding.
- 7. (a) A Wooden stick, B Muslin cloth, C Honeycombs, D Container
  - (b) Straining
  - (c) By using ethically acceptable procedures in the preparation and packaging of honey.
- 8. (a) A grill, charcoal burner, tongs and a wire brush for cleaning.
  - (b) They can improvise a grill using bricks or stones as a base and a wire mesh placed over them to hold the meat.
  - (c) Ensuring meat is properly cooked, maintaining clean cooking surfaces, and washing hands with soap and clean water before and after handling raw meat.

- 9. (a) Regular cleaning of the kennel.
  - Ensuring proper ventilation of the kennel.
  - Cleaning the dog.
  - (b) Preventing the spread of diseases among animals. Ensuring the animals are comfortable and healthy.
- 10. (a) Sorting, washing by kneading and squeezing, drying and ironing.
  - (b) By ensuring they followed the correct procedure for laundering and completing the task within the given time frame.
  - (c) Not to soak loose-coloured clothes.
- 11. (a) Knitting needles
- (b) Yarn/thread (c) Knitting machine
- (b) Bamboo sticks
- 12. (a) Strings, wires, wooden planks, metal bars, plastic pipes and nails.
  - (b) It maximises limited space for gardening in urban or densely populated areas.
    - Increased food security and beautification of the surroundings.
- 13. Adding value increases marketability and profitability for farmers. Value-added products may have longer shelf lives and can fetch higher prices in the market.
- 14. (a) Homemade soap
  - (b) It can be used for personal hygiene such as cleaning. It could serve as a source of income if they decide to sell the excess soap.

- (a) They cause build-up of chemical substances in the soil. This makes the soil harmful to crop production and animal-rearing activities.
  - (b) It would lead to low yield.
  - (c) Plastic waste, excessive use of fertilisers and waste water.
- (a) Water retention ditches and water retention pits.
  - (b) The retention structures collect and hold surface runoff during heavy rainfall.
- 3. (a) Washing, peeling, cutting, reducing cooking time and covering.
  - (b) To always ensure they wash their hands with soap and clean water.
- 4. By caring for the environment.
  - By growing trees.
- 5. (a) Fine tilth
  - (b) Jembe and a rake.
  - (c) To dig the land more than three times then level the soil using a rake.
- 6. (a) Gapping
  - (b) To replace the crops that have failed to grow.
    - To maintain optimum plant spacing.

- 7. (a) Harvesting honey.
  - (b) Honey, beeswax.
  - (c) Crushing and straining.
- 8. (a) Steaming (b) Roasting (c) Roasting and grilling
- 9. (a) Cleaning an animal structure.
  - (b) To prevent the spread of bacteria which may lead to diseases.
    - To enable the animal to feel comfortable.
- 10. (a) To prevent losing too much colour.
  - (b) To ensure the colour does not stain other clothes.
  - (c) To help fix the colour so that it does not run.
  - (d) To avoid damping the article which causes loss of colour.
- 11. (a) Scarf, gloves, tools bag, mats, or table wipers.
  - (b) By being prudent when using materials and equipment when knitting household articles.
  - (c) Be careful when using sharp knitting tools.
- 12. (a) Framed suspended garden.
  - (b) To suspend the plastic containers with soil and seedlings.
  - (c) By tidying up their work surfaces and disposing of waste in the dustbin.
- 13. (a) A Peeling
- B Air-drying
- C Grinding or milling

- (b) Frying
- 14. (a) Ash, salt, water, plant oil and animal fat.
  - (b) Pouring the liquid soap into small containers of different shapes (mould) then allowing them to cool.
  - (c) Be careful when using the knife to cut the bar soap into pieces.
    - To keep distance to prevent injury to self and others.

- 1. (a) Songs and poems, dramatisation, displaying posters.
  - (b) Excess fertiliser not used by crops accumulates in the soil. Over time, the chemical composition of the soil is altered. This results in some crops not getting the minerals needed for proper growth of crops.
- 2. (a) Destruction of property (bananas in a farm).
  - (b) A water retention ditch
  - (c) Surface runoff would collect at the water retention ditch as it rains. The water collected will then be used to water growing crops.
- 3. (a) To prevent the loss of water-soluble vitamins and minerals.
  - (b) Reducing cooking time and covering the vegetables during cooking.

- 4. They increase soil fertility.
  - They help improve water conservation in the soil.
  - They protect crops and animals from destruction during strong winds.
  - They serve as habitats for birds and other animals.
- 5. (a) Coarse tilth. The soil particles are large-sized.
  - (b) Large-sized planting materials such as cuttings and tubers.
- 6. (a) Thinning
  - (b) By uprooting excess plants in the garden.
  - (c) Proper care should be taken to prevent damaging the roots of the remaining plants.
  - (d) It helps to prevent overcrowding of crops.
- 7. Colour of the egg Brown-shelled eggs should be packed separately from white-shelled eggs.
  - **Size of the egg** Eggs should be sorted according to size, for example small-sized, medium-sized and large-sized eggs.
  - Cleanliness of the egg Eggs should be cleaned by wiping with a clean damp piece of cloth.
- 8. (a) A Grilling B Roasting
  - (b) In grilling there is the presence of dark grill marks on the meat.
  - (c) Grilling is a method of cooking food using radiant heat while roasting refers to cooking food over red fire.
- 9. It provides comfort to domestic animals.
  - It prevents the spread of bacteria that can be harmful to animals and humans.
  - It promotes good health and the general well-being of domestic animals.
  - It prevents skin infections in domestic animals.
- 10. (a) Kneading and squeezing method.
  - (b) To prevent staining other clothes.
  - (c) By following the correct procedure to launder his shorts. By using laundry equipment and materials correctly.
- 11. (a) A knitting needle
  - (b) To prevent injury.
  - (c) By smoothening the stick using sandpaper.
  - (d) Be careful when using the knife to avoid cutting yourself.
    - To keep distance to prevent injury to self and others.
- 12. (a) Wooden planks, metal bar nails and plastic bottles or pipes.
  - (b) Through assigning various tasks to members of the class.
- 13. (a) C
- (b) D
- (c) B
- 14. (a) Homemade soap
  - (b) They can sell the soap and earn money.
    - They can use the soap for cleaning purposes.

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