

Answers to K.J.S.E.A Paper ones

K.J.S.E.A Sample Paper I

Section A

1. B
2. B
3. D
4. B
5. B
6. B
7. A
8. A
9. B
10. B
11. A
12. B
13. B
14. B
15. B
16. B
17. B
18. C
19. B
20. C
21. D
22. D
23. B
24. B
25. B
26. C
27. B
28. D
29. D
30. B

Section B

31. Reduces water loss through evaporation; Increases water infiltration and retention in the pit; Reduces runoff; Prevents soil erosion.
32.
 - Improve air quality by absorbing carbon dioxide and releasing oxygen.
 - Prevent soil erosion by binding the soil with their roots.
 - Reduce surface run-off.

- Improve soil fertility through decomposition of fallen leaves.
 - Provide habitat for birds, insects and other wildlife.
 - Increase biodiversity around the school.
 - Provides shade.
 - Act as windbreaks, reducing the speed of strong winds.
 - Reduce dust in the environment.
 - Helps to regulate climate or moderate temperatures.
 - Enhance the beauty of the school compound.
- 33.
- (a) Trash lines.
 - (b) They slow surface run-off and reducing soil erosion.
- 34.
- (a) Bamboo, old timber, old iron sheets, recycled wire.
 - (b) Reduces environmental pollution by reusing waste materials.
- 35.
- (a) Organic gardening.
 - (b) Applying compost manure; Applying farmyard manure; Applying green manure.
36. Plot X requires a fine tilth because carrot seeds are small and need loose, fine soil for good germination.
- 37.
- (a) Thinning to remove overcrowded seedlings. Gapping to fill spaces where seeds failed to germinate.
 - (b) Delaying thinning increases competition for water, nutrients, sunlight and space, therefore reducing crop yield.
38. Easy to refill with water; Minimises water wastage; Easy to construct from locally available materials; Portable; Suitable for the chicks; Reduces contamination of water.
- 39.
- (a) Integrated farming system.
 - (b) Bees pollinate crops, increasing fruit and seed production.
 - (c) Livestock provide manure for crops. Crops provide feed or crop residues for livestock.
 - (d) Processed fish feeds.
- 40.
- (a) Wash vegetables under clean running water; Wash before cutting.
 - (b) Soaking vegetables for a long time causes loss of water-soluble nutrients such as vitamin C and B vitamins.
41. Wear gloves and protective clothing; Wear safety goggles; Work in a well-ventilated area; Avoid direct contact with chemicals.
- 42.
- (a) White or light coloured; Made of cotton or fabric that can withstand prolonged exposure to sunlight.
 - (b) Ultraviolet (UV) rays.

- (c) Dry in direct sunlight; Turn to ensure both sides are exposed to the sun; Dry until completely dry.

K.J.S.E.A Sample Paper 2

Section A

1. A
2. D
3. C
4. B
5. B
6. D
7. B
8. A
9. B
10. B
11. A
12. D
13. C
14. B
15. A
16. A
17. A
18. A
19. D
20. D
21. B
22. C
23. C
24. D
25. B
26. B
27. D
28. A
29. C
30. C

Section B

31. Carrot seeds – fine soil particles because the seeds are small and require finely broken soil for good germination.
Bean seeds – moderately broken soil because the seeds are larger and germinate well in moderately broken soil.

Cassava cuttings – large soil clods because the cuttings are large and do not require fine soil.

32. Gapping to fill the planting holes where seeds failed to germinate to maintain the correct plant population. Thinning to remove excess seedlings growing too close together to reduce competition for water, nutrients, sunlight and space.
33. Pollutes the soil with harmful chemicals. Harmful substances may be absorbed by crops and pose health risks to people who consume them.
34.
 - (a) Lining the pond with a polythene sheet.
 - (b) Irrigating crops, watering livestock, fish farming, domestic cleaning.
35. Obtain locally available materials such as a plastic container/jerrican, basin or bucket, wire/string and a stand. Make a small outlet/opening to allow water to flow into the drinking tray. Fix the container securely above the tray, fill it with water and test to ensure water flows properly.
36.
 - (a) Milking with dirty hands; Using dirty milking equipment; Poor udder hygiene; Delayed cooling after milking.
 - (b) Wash and dry the udder before milking; Use clean, sterilised equipment; Milk with clean hands; Filter and cool the milk immediately after milking; Store milk in clean covered containers.
37.
 - (a) Steaming.
 - (b) Sufficient water in the lower container; A well-fitting lid; The food should not come into contact with the water.
 - (c) Use a sufuria with a perforated tin or metal colander and cover it; Use a metal sieve placed over boiling water and cover with a lid.
38. Age of the guests; Health status; Nutritional requirements; Number of people to be served; Occasion.
39. Blue-plate service. It allows many people to be served quickly and each guest receives a similar portion.
40. Scaling; gutting; wash thoroughly with clean water; trim fins if necessary.
41. Gutting fish, frying fish.
42. Prevents the spread of diseases; Prevents contamination of food; Discourages pests such as flies, cockroaches and rats; Makes the kitchen fresh and safe to work in; Improves food hygiene and safety.

K.J.S.E.A Sample Paper 3

Section A

1. A
2. B
3. A
4. C

5. B
6. C
7. B
8. C
9. C
10. A
11. A
12. B
13. B
14. B
15. B
16. A
17. B
18. B
19. B
20. D
21. C
22. D
23. B
24. C
25. A
26. B
27. A
28. A
29. C
30. C

Section B

31. Provides fresh vegetables for the family; Reduces expenditure on buying vegetables; Makes productive use of the available space; Improves household food security; Surplus vegetables can be sold to generate income.
32.
 - (a) Weeds.
 - (b) Uprooting the weeds by hand.
33.
 - (a) Garlic organic pesticide.
 - (b) Water, vegetable oil, spray bottle, sieve or strainer, mortar and pestle.
 - (c) Peel and crush the garlic; Mix the crushed garlic with water; Allow the mixture to stand overnight; Strain the mixture into a container; Add two spoonfuls of vegetable oil and two cups of water; Mix well; Pour the solution into a spray bottle.
 - (d) Spray all parts of the crop, especially the upper and lower leaf surfaces. Apply in the morning or evening when temperatures are cool.
- 34.

- (a) Grassed waterway.
(b) The vegetation slows the speed of runoff. It traps soil particles and prevents them from being washed away, reducing soil erosion.
35.
(a) Farmers can store a larger quantity of forage. Members can support one another during drought. Reduces individual storage costs.
(b) Keep proper distribution records. Share according to agreed rules or members' needs. Form a management committee to oversee distribution.
36.
(a) The household is wasting rabbit manure instead of utilising it. The vegetable garden is not benefiting from the available organic manure.
(b) Compost or apply the rabbit manure to the vegetable garden. Use the manure to improve soil fertility and crop growth while reducing waste.
37.
(a) Protein. Iron. Calcium. Vitamins.
(b) *Accept any food sources are under the nutrients mentioned.*
 - Protein: milk, eggs, beans, fish, meat.
 - Iron: liver, beans, spinach.
 - Calcium: milk, yoghurt, cheese.
 - Vitamins: carrots, mangoes, pumpkins, oranges, tomatoes, vegetables.
38. Store fruits and vegetables in a cool, dry place or refrigerator where appropriate.
Remove damaged or rotten produce before storage.
Store in clean, well-ventilated containers.
Do not wash before storage.
39. Water, ash, fat or oil, salt, colour, fragrance.
40.
(a) Wrong side (W.S.) is the inside of the fabric that is not normally visible on the finished article.
(b) Right side (R.S.) is the outer side of the fabric that is visible on the finished article.
41.
(a) Suitability of the disinfectant for cotton fabric; Manufacturer's instructions; Type of fabric being disinfected.
(b) To prevent damage, fading or weakening of the fabric while ensuring effective disinfection.
42. During the final rinse after washing and rinsing. Before drying the garment.

K.J.S.E.A Sample Paper 4

Section A

1. C
2. B
3. C
4. A

- 5. A
- 6. C
- 7. A
- 8. C
- 9. C
- 10. A
- 11. C
- 12. B
- 13. D
- 14. A
- 15. D
- 16. D
- 17. C
- 18. B
- 19. B
- 20. D
- 21. C
- 22. B
- 23. C
- 24. B
- 25. C
- 26. C
- 27. D
- 28. C
- 29. D
- 30. A

Section B

- 31. A
- 32.
 - (a) Helps them know the best time for planting or transplanting; Enables farmers to prepare for drought or heavy rainfall.
 - (b) Search by typing weather followed by the name of the county or town.
- 33.
 - (a) Water retention pits; Water retention ditches.
 - (b) Arrowroots, Napier grass, kales, bananas.
- 34.
 - (a) Smoking removes moisture from meat making it difficult for microorganisms to grow. The meat forms a hard outer layer from the smoke that reduces entry of microorganisms.
 - (b) Maintain moderate heat to avoid burning the meat; Use clean, dry hardwood; Protect the meat from contamination; Ensure the meat is properly dried before storage.

- 35.
- (a) Hand pulling/uprooting; Digging out; Slashing.
 - (b) Applying compost manure, farmyard manure, green manuring; Using organic pesticides; Using foliar feed.
 - (c) Improves soil fertility; Produces safer food with fewer chemical residues; Conserves the environment; Encourages biodiversity; Reduces dependence on synthetic chemicals.
36. Graft scions with different flower colours onto the same bougainvillea rootstock. The plant will produce flowers of different colours on one plant, therefore improving the appearance of the homestead.
37. Spread margarine or butter on slices of bread; Cut the leftover beef and reheat; Place the leftover beef evenly on one slice and add tomatoes, lettuce; Cover with the second slice, press gently and cut into suitable portions before serving.
38. Bar soap, liquid soap, powder soap, paste soap, flakes.
39. Scrub the floor with warm soapy water; Clean open drains; Wash walls, windows or shelves; Wash kitchen equipment; Clean refrigerator; Remove spoilt food; Clean food storage cupboard, reline shelves; Clean working surfaces using warm soapy water.
- 40.
- (a) Ensure the articles can withstand boiling.
 - (b) Use tongs or a wooden spoon to remove articles; Avoid overfilling the pot; Keep children away from the boiling water; Switch off the heat before removing the articles.
41. Peel the carrots thinly; Use a clean, sharp peeler or knife; Wash the carrots before peeling.
42. Remove soil, leaves and other debris from the drains regularly; Repair damaged or collapsed sections of the drains; Clear blockages to allow free flow of wastewater; Cut grass and weeds growing inside or along the drains; Maintain the correct slope of the drain to allow smooth water flow.

K.J.S.E.A Sample Paper 5

Section A

- 1. B
- 2. B
- 3. B
- 4. C
- 5. C
- 6. B
- 7. D
- 8. A
- 9. A
- 10. B
- 11. A

12. C
13. B
14. A
15. D
16. A
17. D
18. B
19. D
20. B
21. A
22. B
23. A
24. A
25. C
26. C
27. B
28. C
29. B
30. B

Section B

31.
 - i. Field A: Strip cropping – reduces the speed of runoff and soil erosion on slopes.
 - ii. Field B: Grassed waterway – the area already has a channel. The grass keeps the soil stable and prevents erosion.
 - iii. Field C: Soil bund – reduces speed of runoff and increases water infiltration in semi-arid areas.
 - iv. Field D: Trash line – slows runoff and traps soil using crop residues.
32.
 - (a) Different observations are caused by different pests and diseases. Each pest or disease requires a specific control method for effective management.
 - (b) Tomatoes: Apply natural pesticide to control aphids, removing affected crop parts, uprooting heavily affected crops.
Cabbage: Handpick caterpillars or apply natural pesticide.
Beans: Remove the affected part or uproot the heavily affected crop.
33. iii, ii, i.
34.
 - (a) B. It contains algae and dirt that can harbour disease-causing microorganisms.
 - (b) Cleaning and disinfecting the waterer provides clean drinking water. It reduces disease transmission and keeps poultry healthy.
35.
 - (a) Learner B.

- (b) Dirty eggs reduce product quality and hygiene. Unsorted eggs have poor presentation and are more likely to be damaged during transport.
- 36.
- (a) A- Gunny bag B- Hermetic bag
- (b) Ensure the bags are clean; Dry the bags thoroughly; Inspect and repair any holes or tears; Ensure the bags are free from pests and contaminants before filling.
- 37.
- (a) No. The meal lacks enough body-building foods and protective foods.
- (b) Add beans and oranges.
- 38.
- (a) Reduces cooking time and preserves nutrients; Prevents contamination during cooking.
- (b) Reduces loss of water-soluble vitamins by minimising steam escape; Shortens cooking time, reducing nutrient loss.
- 39.
- (a) Knitting needles and yarn.
- (b) Knitted to form the fabric.
40. Check for expired food items; Check for signs of pests or mould or spoilage.
41. To remove lumps from the flour and baking powder. To mix the ingredients evenly and incorporate air for lighter baked products.
42. It reduces food wastage.

K.J.S.E.A Sample Paper 6

Section A

1. A
2. B
3. D
4. B
5. C
6. B
7. B
8. C
9. A
10. C
11. C
12. D
13. B
14. B
15. B
16. B
17. A
18. C

- 19. B
- 20. C
- 21. B
- 22. C
- 23. B
- 24. A
- 25. B
- 26. A
- 27. A
- 28. B
- 29. C
- 30. B

Section B

- 31.
 - (a) Coarse tilth.
 - (b) Clear the land by removing weeds, stumps, stones and other debris; Dig or plough the land to the recommended depth; Break large soil clods into moderately sized aggregates to obtain a coarse tilth; Level the land and prepare ridges at the recommended spacing for planting the potato tubers.
- 32.
 - (a) To prevent the gullies from becoming deeper and wider during the rainy season. To prevent further loss of fertile topsoil and farmland.
 - (b) Cost of purchasing more fertiliser or manure to restore soil fertility. Cost of rehabilitating the badly eroded land.
- 33.
 - (a) Gapping.
 - (b) To replace seeds or seedlings that failed to germinate or establish; To achieve the correct plant population for optimum yield.
- 34.
 - (a) Tree roots bind the soil, reducing erosion. Trees slow surface runoff and reduce the amount of soil entering the fish pond.
 - (b) Use pond water to irrigate crops or fodder. The crops use the nutrients.
- 35.
 - (a) Simsim/sesame seeds.
 - (b) Roasting.
 - (c) Makes the product more attractive and appealing to consumers; Makes the product easier to package, handle and sell; Increases the market value; Improves marketability; Makes the product convenient for consumption.
- 36.
 - (a) Akinyi: High-quality, dry, nutritious hay with no spoilage. Barasa: Poor-quality hay that is mouldy, wet and has reduced nutritional value.

- (b) Prevents spoilage and nutrient loss. Ensures quality feed is available during the dry season.
- 37.
- (a) To create the first row of stitches on the knitting needle.
- (b) Make a slip knot and place it on the knitting needle. Form additional loops and place them on the needle until the required number of stitches is obtained.
- 38.
- (a) Drying; Smoking.
- (b) Drying: removes moisture, preventing growth of microorganisms. Smoking: removes moisture from meat making it difficult for microorganisms to grow. The meat forms a hard outer layer from the smoke that reduces entry of microorganisms.
- 39.
- (a) Wrong side of the fabric.
- (b) Trimming the seam allowance and using loop stitches to neaten the edges.
40. Boiled egg – Egg salad; Ugali – Deep frying ugali to make ugali cubes.
41. (a) Muffins – Thick batter (b) Doughnuts – Dough (c) Cake – Thick batter
42. During illness, the metabolic rate is low since the person is less active and spends more time resting. They need less energy giving foods. Body building and protective foods for quick healing and repair of worn-out tissues. Take into consideration the doctor's recommendation.

K.J.S.E.A Sample Paper 7

Section A

1. C
2. B
3. B
4. B
5. B
6. C
7. B
8. B
9. A
10. B
11. B
12. A
13. B
14. B
15. D
16. B
17. B
18. B

- 19. B
- 20. B
- 21. B
- 22. B
- 23. D
- 24. A
- 25. A
- 26. D
- 27. D
- 28. B
- 29. A
- 30. B

Section B

- 31.
 - (a) Main crop: maize. Ground cover crops: grass, sweet potato
 - (b) Reduces soil erosion by slowing down surface runoff. Filter out eroded soil in the runoff.
- 32.
 - (a) Drying, frying, processing, roasting, grinding.
 - (b) Increases the market value of the produce; Extends the shelf life/reduces post-harvest losses.
- 33.
 - (a) Mexican sunflower.
 - (b)
 - Chop Mexican sunflower leaves and twigs into small pieces.
 - Put the chopped material in a clean bucket until it is about half or three-quarters full.
 - Add clean water until all plant materials are fully submerged in the water.
 - Cover the bucket loosely and place it under a shade for about 7 days.
 - Stir the mixture daily using a clean stick.
 - Fermentation will cause bubbling and a strong smell. After about 7 days, the mixture becomes dark green and bubbling stops.
 - Strain the liquid into another bucket using a clean piece of cloth.
 - Store the organic foliar feed in a closed container in a cool, dark place.
 - Wash your hands with soap and clean water after preparation.
 - Mix the foliar feed with the recommended amount of water in a sprayer.
 - (c) Spray the upper and lower surface of the leaves thoroughly; Apply early in the morning or late in the evening; Repeat application weekly while observing crop growth; Use the recommended concentration.
- 34.
 - (a) Blanching.

- (b) Destroys disease causing microorganisms; Helps retain the colour and quality of vegetables.
- 35.
- (a) They collect and retain rainwater for crop use; They increase water infiltration and reduce runoff.
- (b) To prevent runoff and soil erosion between the pits.
36. Use rabbit droppings to prepare manure/compost for improving soil fertility. Grow crops on the farm to feed the rabbits.
- 37.
- (a) Grilling.
- (b) Grill rack, tongs.
38. Salt inhibits the growth of microorganisms; Salt helps reduce the spread of disease-causing organisms.
39. Ensures the oil is hot enough for proper cooking; Prevents the mandazi from absorbing too much oil.
- 40.
- | Crop produce | Ways of adding value | Products obtained after value addition |
|---------------------|-----------------------------|---|
| Cassava | Frying | Cassava chips or crisps |
| Groundnuts | Roasting | Peanut butter |
| Sweet potato | Frying | Fried sweet potato |
| Pumpkin | Processing/grinding/milling | Pumpkin flour |
- 41.
- (a) Empty the bin; wash with warm, soapy water; rinse with disinfectant; dry the bin; line the bin.
- (b) To prevent moisture that encourages the growth of microorganisms.
- 42.
- (a) To ensure even cooking on both sides.
- (b) Arrange/spread the vegetables in a single layer with spaces between them.

K.J.S.E.A Sample Paper 8

Section A

1. B
2. B
3. B
4. A
5. C
6. B
7. C
8. B
9. C

- 10. A
- 11. B
- 12. C
- 13. B
- 14. C
- 15. D
- 16. A
- 17. B
- 18. A
- 19. B
- 20. B
- 21. C
- 22. C
- 23. C
- 24. B
- 25. A
- 26. B
- 27. B
- 28. B
- 29. B
- 30. C

Section B

- 31.
 - (a) Hang the waterer/place it on a slightly raised platform to prevent contamination.
 - (b) Waterer B is hung to prevent contamination of the drinking water by dirt, droppings and feed, keeping the water clean.
 - (c) Number and age/size of the birds; Capacity of the waterer; Ease of cleaning and refilling.
- 32.
 - (a) Jembe/hoe; spade; watering can.
 - (b) Dig a hole of the correct size and mix topsoil with manure before planting; Water the seedling immediately after planting and firm the soil around it.
- 33.
 - (a) Soft water or distilled water
 - (b) Aluminium reacts with lye causing corrosion and contaminating the soap.
- 34.
 - (a) Gapping. It replaces seedlings that failed to emerge to maintain the correct plant population for optimum yield.
 - (b) Drip irrigation.
- 35.
 - (a) Reduces soil fertility, leading to poor crop growth; Kills beneficial soil organisms, reducing soil productivity.

- (b) Fertilisers, pesticides.
- 36.
- (a) Water retention ditch. Slows surface runoff and allows more water to infiltrate the soil on sloping land.
 - (b) Mark the area; Use appropriate tools to dig a trench on the upper part of the plot, use the appropriate depth and width; Heap the excavated soil on the lower side of the ditch; Plant grass on the lower side to hold the soil.
- 37.
- (a) Cutting vegetables into very small pieces; Cutting vegetables using a blunt knife; Soaking vegetables in water for a long time.
 - (b) Small pieces expose more surface area, increasing nutrient loss during preparation and cooking; Water-soluble vitamins and minerals dissolve into the soaking water; A blunt knife crushes and bruises the vegetable cells, exposing the nutrients to air, which increases oxidation and destroys vitamins.
38. A. Defeathering.
B. Removal of offals.
C. Cleaning.
D. Packaging.
- 39.
- (a) In a covered container placed inside another vessel containing boiling water.
 - (b) Keep the outer vessel covered with a well-fitting lid throughout steaming.
- 40.
- (a) To allow the meat juices to redistribute, making the meat more tender and juicy.
 - (b) Use oven gloves when removing the meat from the oven.
- 41.
- (a) Food is plated in the kitchen before being served to each person.
 - (b) It is quick and convenient when serving many people.
- 42.
- (a) Plain seam or open seam.
 - (b) Neaten the seam using loop stitches.

K.J.S.E.A Sample Paper 9

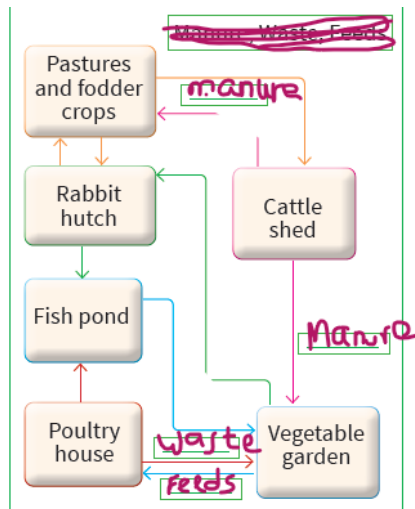
Section A

1. B
2. C
3. B
4. B
5. B
6. D
7. A
8. D
9. B

- 10. D
- 11. B
- 12. A
- 13. B
- 14. C
- 15. B
- 16. A
- 17. C
- 18. A
- 19. B
- 20. A
- 21. A
- 22. C
- 23. C
- 24. C
- 25. C
- 26. A
- 27. C
- 28. C
- 29. D
- 30. A

Section B

- 31.
 - (a) Fertilisers and pesticides.
 - (b) Apply agricultural chemicals at the recommended rates; Dispose of empty chemical containers safely at designated disposal sites; Use organic manure and pesticide.
- 32.
 - (a) Water pond.
 - (b) Rooftops, surface runoff.
 - (c) Irrigating crops, Watering livestock; Domestic purposes; Rearing fish.
- 33.



34.

- (a) Mix wood ash with warm, soft water and allow it to stand, then filter the solution to obtain lye.
- (b) Rubber gloves, safety goggles.

35.

- (a) It provides good ventilation; It protects birds while allowing fresh air and light into the fold.
- (b) Clean feeders and drinkers regularly; Remove droppings and clean the poultry house regularly.

36.

- (a) Grafting.
- (b) Local plant: Rootstock. Improved plant: Scion.
- (c) It combines the strong root system of the local variety with the high-quality fruits of the improved variety.

37. The fruit salad may become contaminated by dust and microorganisms; It may spoil quickly due to bacterial growth.

38.

- (a) Grilling.
- (b) Use pot holders when handling hot equipment; Turn the food using tongs or a long-handled fork to avoid burns; Keep hands and face away from the heat source when turning or removing the food; Place the grill on a stable surface; Do not leave the grill unattended while cooking.

39.

- (a) Knit more loosely to reduce the tension
- (b) Produces a neat, even fabric; Makes the finished article the correct size and shape.

40.

- (a) To prevent colours from running onto other clothes.
- (b) According to colour; According to fabric type.

41.

- (a) Drying or sun-drying.

(b) Extends the shelf life of the vegetables and reduces wastage.

42.

(a) Oven gloves.

(b) They protect the hands from burns when handling hot baking trays.

K.J.S.E.A Sample Paper 10

Section A

1. B
2. A
3. B
4. B
5. A
6. B
7. A
8. A
9. B
10. B
11. B
12. C
13. B
14. D
15. C
16. C
17. A
18. B
19. B
20. B
21. B
22. B
23. D
24. A
25. B
26. A
27. B
28. A
29. B
30. B

Section B

31.

(a) Water retention ditch.

- (b) It collects and stores water around the banana roots; It increases water infiltration and reduces runoff, ensuring moisture is available during dry periods.
- 32.
 - (a) To produce a fine tilth suitable for seed germination; To remove weeds and other unwanted materials from the field.
 - (b) Free from pests, diseases and damage.
- 33.
 - (a) Mix wood ash with warm, soft water; Allow it to settle and filter the solution to obtain lye.
 - (b) Rubber gloves and safety goggles.
- 34.
 - (a) Weeds compete with crops for water, nutrients and light; Weeds harbour pests and diseases.
 - (b) It prevents weeds from producing seeds that would increase future weed infestation.
- 35.
 - (a) Soil pollution.
 - (b) Return the empty containers to an approved collection or disposal centre; Dispose of them according to the manufacturer's instructions.
 - (c) Chemical residues may contaminate the soil and reduce crop growth; Crops may absorb harmful chemicals, making them unsafe for consumption.
- 36.
 - (a) To hold the scion and rootstock firmly together; To prevent the graft union from drying out.
 - (b) Grafting wax seals the graft union, preventing moisture loss and entry of pathogens.
- 37.
 - (a) Steam vegetables instead of boiling them; Cook them for the shortest time possible.
 - (b) Overcooking destroys vitamins and minerals, reducing the nutritional value of the vegetables.
- 38.
 - (a) Boil the milk; cool it before use or storage.
 - (b) Boiling destroys harmful microorganisms; Cooling prevents rapid spoilage and maintains milk quality.
- 39.
 - (a) Wash coloured garments separately from white clothes; Test the colour fastness before washing.
 - (b) The colour may run and stain the white garments.
- 40. To prevent the growth of microorganisms; To prevent attracting pests such as flies and cockroaches; To maintain a clean and hygienic food preparation area.
- 41.
 - (a) Knitting with very tight tension.
 - (b) Knit with even, looser tension.
- 42. Wear protective gear; Add lye to water slowly, never water to lye; Avoid skin and eye contact with the lye solution.

K.J.S.E.A Sample Paper I I

Section A

1. B
2. D
3. A
4. B
5. B
6. C
7. C
8. B
9. D
10. B
11. B
12. C
13. B
14. C
15. A
16. A
17. B
18. A
19. B
20. C
21. B
22. D
23. C
24. B
25. A
26. C
27. A
28. C
29. B
30. A

Section B

31.
 - (a) Well-fixed gutters; pipe, storage tank.
 - (b) Clean the gutters and storage tank regularly to remove dirt and debris.
32.
 - (a) Thinning.

- (b) Reduces competition for nutrients, water and light; Promotes healthy crop growth; Produces larger and better-quality vegetables.
- 33.
 - (a) They eat poultry feed, increasing production costs; They eat or damage eggs and may spread diseases to poultry.
 - (b) Set rat traps; Seal holes and openings in the poultry house.
- 34.
 - (a) Yellowing and curling of leaves.
 - (b) Remove and destroy infected plants; Apply organic pesticide.
- 35.
 - (a) Extends shelf life; Reduces spoilage and wastage; Increases its value.
 - (b) Clean equipment prevents contamination by harmful microorganisms, ensuring safe milk products.
- 36.
 - (a) Stable and cannot tip over easily; It is not easily contaminated; Appropriate size; Easy to clean and refill.
 - (b) Clean drinking water keeps animals healthy and improves production.
- 37.
 - (a) Beans – protein; Rice – carbohydrates.
 - (b) They provide vitamins and minerals that promote good health.
- 38.
 - (a) To prevent accidents; The equipment will last long when kept in good condition.
 - (b) Unlabelled containers may lead to misuse or accidental poisoning.
- 39.
 - (a) Preheat the oven to the required temperature; Meat should not be removed from the refrigerator and put straight in the oven; Use a wide roasting pan to get the food to cook evenly; Cook as indicated in the recipe; Do not cut the roasted meat for at least 10 to 15 minutes after removing from the heat; Use oven gloves to handle hot pans; Do not overload the tray; Do not open oven doors too quickly to avoid burns from steam; Be careful when removing food from the oven to avoid oil splashes; Be careful when basting to avoid hot fat or oil splashing.
 - (b) Roasting enhances the flavour of the meat due to the browning effect on the surface of the food.
- 40. Prepare a beef curry; Make beef sandwiches; Fry the beef with vegetables; Make pilau.
- 41.
 - (a) Detergent.
 - (b) It prevents the growth of microorganisms and keeps the kitchen hygienic.
- 42. Use the correct proportions of ingredients; Sieve the flour and baking powder mixture; Mix the ingredients thoroughly to obtain a smooth batter.

K.J.S.E.A Sample Paper 12

Section A

1. A
2. B
3. B
4. B
5. A
6. A
7. B
8. B
9. B
10. A
11. B
12. B
13. B
14. B
15. B
16. D
17. C
18. A
19. A
20. D
21. B
22. A
23. B
24. B
25. D
26. B
27. A
28. A
29. B
30. A

Section B

31.
 - (a) Stored the hay before it was completely dry; Stored the hay in a damp or poorly ventilated place.
 - (b) It may cause illness or poisoning in livestock; It reduces feed intake and animal productivity.
32.
 - (a) Integrated farming.

- (b) Efficient recycling of farm resources; Reduces the cost of purchasing fertilisers and feeds; Improves soil fertility and farm productivity.
- 33.
 - (a) Uprooting by hand, digging out using a hoe, slashing.
 - (b) Herbicides are avoided because organic gardening does not use synthetic chemicals that may pollute the environment or leave harmful residues.
- 34. Reduces soil fertility; Contaminates the soil with harmful chemicals; Poor crop growth and reduced yields; Crops may become unsafe for human consumption.
- 35.
 - (a) Covered with a transparent polythene sheet; Has a wire mesh or raised drying tray for the vegetables; Has vents to allow air to enter and moist air to leave the dryer; Has a black polythene base to absorb heat; It is raised above the ground.
 - (b) Protects vegetables from dust, insects and animals; Dries vegetables faster and more hygienically than open sun drying.
- 36.
 - (a) Small, fairly uniform soil aggregates; Well-aerated with good drainage.
 - (b) *Accept crops that are planted from tubers, cuttings, suckers.*
- 37.
 - (a) Mixing the batter for too long; Leaving the pancakes to overcook; Cooking the pancakes in very low heat; Using too little liquid or too much flour.
 - (b) Mix the correct ingredients measurement.
- 38.
 - (a) Cool the stew before refrigerating; Store it in a clean, covered container.
 - (b) Thorough reheating destroys harmful microorganisms that may have multiplied during storage.
- 39.
 - (a) Wash gently using kneading and squeezing; Dry flat under a shade after reshaping the article.
 - (b) Hanging a wet knitted article causes it to stretch and lose its shape.
- 40. Use clean equipment and containers; Wash hands thoroughly before handling the milk; Keep the milk covered to prevent contamination.
- 41.
 - (a) Washing with unsuitable detergent; Washing vigorously.
 - (b) Wash using the kneading and squeezing method and wash using the correct detergent.
- 42. Prevents blockage and allows wastewater to flow freely; Prevents breeding of mosquitoes and other disease vectors; Reduces bad odours and maintains a clean environment.

K.J.S.E.A Sample Paper I 3

Section A

1. B
2. B
3. B
4. B
5. D
6. A
7. A
8. A
9. B
10. A
11. D
12. B
13. A
14. C
15. C
16. B
17. B
18. A
19. D
20. A
21. A
22. B
23. A
24. D
25. C
26. C
27. C
28. A
29. A
30. A

Section B

31.
 - (a) Dry the maize to the recommended moisture content; Clean and sort the grains before storage.
 - (b) Dust/fumigate the storage area with a recommended storage pesticide to kill pests; Store the maize in airtight containers or bags to prevent pest infestation.
32.
 - (a) Thinning.

- (b) Reduces overcrowding; Reduces competition for water, nutrients and sunlight; Promotes healthy growth and higher yields.
- 33.
- (a) Water pan; water pond; Water tank.
- (b) Line the structure with polythene, concrete or clay.
- 34.
- (a) Grass is dry; Leaves remain attached to the stems; Stems break easily when bent.
- (b) To allow air circulation, preventing mould growth and rotting.
- 35.
- (a) Organic farming.
- (b) Use compost, farmyard manure or green manure; Practise crop rotation; Control weeds using mechanical methods; Mulching; Use of organic pesticides, foliar feeds.
- 36.
- (a) Neem oil, water, vegetable oil.
- (b) Wear protective clothing; Wash your hands with soap and clean water after preparing and applying the pesticide; Avoid spraying during windy conditions; Cover the entire plant when you spray the pesticide; Reapply regularly to prevent infestation.
- 37.
- (a) Holds food pieces together during cooking; Makes the kebabs easy to turn and handle while grilling.
- (b) It is used to brush or spread fat, oil or marinade evenly to keep the food moist.
- 38.
- (a) Blue-plate service; Family service.
- (b) Blue-plated service, food is served on individual plates before serving whereas in family service, food is placed in serving dishes and shared at the table.
- 39.
- (a) Pressing/ironing; Trimming loose threads.
- (b) Improves the appearance and durability of the bag.
40. Ensure the grains are thoroughly dry before storage; Use clean, dry, airtight containers; Store the containers in a cool, dry place off the floor.
- 41.
- (a) Use warm water; Wash using the kneading and squeezing method; Do not wring or twist the knitted article.
- (b) To prevent stretching and help it retain its original shape.
- 42.

Direct steaming	Indirect steaming
Food is placed directly above boiling water or steam.	Food is placed in a covered container or dish, which is then placed in steam or water.
Steam comes into direct contact with the food.	Steam does not come into direct contact with the food.

K.J.S.E.A Sample Paper I 4

Section A

1. B
2. A
3. D
4. B
5. C
6. A
7. B
8. A
9. D
10. C
11. D
12. A
13. A
14. B
15. D
16. A
17. B
18. D
19. A
20. C
21. A
22. B
23. A
24. D
25. A
26. C
27. D
28. D
29. D
30. A

Section B

31.
 - (a) Wash the vegetables; Cut/slice them into suitable pieces; Blanch the vegetables.
 - (b) Protects the food from dust, insects and other contaminants while drying.
32.
 - (a) Strain the honey; Package the honey in clean containers.
 - (b) Removes wax particles and other impurities; Produces clean, attractive honey with better quality.
- 33.

- (a) Slaughter and let it bleed out; Scald and pluck the feathers; Remove offal; Wash
 - (b) Removes blood, dirt and other impurities; Reduces contamination by microorganisms before cooking.
- 34.
- (a) Spread the cut grass thinly; Turn the grass regularly during drying; Collect and store the dried hay in a well-ventilated shed.
 - (b) Ensures even drying and prevents mould formation.
- 35.
- (a) Leaves curl; Crops become stunted; Aphids transmit plant diseases.
 - (b) Spray with a recommended pesticide or organic pesticide, uproot the infested plant parts.
- 36.
- (a) Clean the waterer regularly; Repair leaks or damaged parts.
 - (b) Prevents the spread of diseases.
- 37.
- (a) Scaling; gutting; washing; salting.
 - (b) Gills may contain dirt and microorganisms that can contaminate the fish and affect its quality.
- 38.
- (a) Age of the family members; Nutritional needs; Health status; Gender.
 - (b) Ensures the meal meets the nutritional requirements of those eating it.
- 39.
- (a) Clean the knitting needles/tools after use; Store them properly in a safe place.
 - (b) Prolongs the life of the knitting tools and keeps them in good working condition.
40. Prevents contamination of food; Prevents multiplication of harmful microorganisms; Keeps the kitchen clean and prevents pest infestation.
- 41.
- (a) To prevent staining of white clothes.
 - (b) White clothes may become stained or discoloured by dyes from coloured clothes.
42. Wear gloves when handling the disinfectant; Follow the manufacturer's instructions to use the correct concentration; Ensure the area is well ventilated to avoid inhaling the fumes; Do not mix different disinfectants.

K.J.S.E.A Sample Paper I 5

Section A

- 1. C
- 2. C
- 3. A
- 4. C
- 5. C
- 6. A

7. B
8. B
9. B
10. C
11. B
12. C
13. B
14. A
15. A
16. B
17. B
18. C
19. B
20. A
21. D
22. D
23. A
24. B
25. A
26. C
27. C
28. A
29. B
30. C

Section B

31.
 - (a) Clean the roof catchment surface and gutters regularly; Remove leaves and debris from gutters; Repair leaks and damaged parts of the system.
 - (b) Ensures a continuous supply of clean water and prolongs the life of the system.
32.
 - (a) Expectant mother and elderly person.
 - (b) Age, nutritional requirements, health status, level of physical activity.
- 33.

Activity observed	Crop management practice	Purpose
Removing excess maize seedlings	Thinning	Reduces overcrowding and competition for nutrients, water and light.
Replacing bean seedlings that failed to germinate	Gapping	Maintains the recommended plant population.

Cutting weeds close to the ground using a slasher	Weeding	Reduces competition from weeds.
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34. Removes damaged, diseased or infested French beans; Ensures only good-quality beans are stored, improving storage life and market value.
- 35.
- (a) Adequate moisture; Good aeration; Proper mixture of green and dry materials.
 - (b) Improves aeration and speeds up decomposition.
- 36.
- (a) Mexican marigold leaves; Water, Mild soap.
 - (b) Apply by spraying the pesticide on all leaves of the growing crops; It should be used withing the first few days after preparation; Apply early morning or late evening.
- 37.
- (a) Flour, liquid (milk or water, eggs.
 - (b) Protects the food from drying out and produces a crisp golden coating.
38. Boiling destroys harmful microorganisms, making the milk safe for consumption.
- 39.
- (a) Tape measure and chalk.
 - (b) Ensures accurate cutting and a well-fitting finished article.
40. (d), (c), (f), (g), (b), (a), (e).
41. The main dish should be a carbohydrate in higher proportions to supply them with energy. The protein should be a lot to build muscles and other body tissues. Vitamin C is essential to aid in absorption of iron in adolescent girls. Fluid intake should be enough to keep their bodies hydrated. (*Check the menus and proportions*).
- 42.
- (a) Daily cleaning - done every day. Example: Washing utensils after meals.
 - (b) Weekly cleaning - done once every week. Example: Cleaning cupboards or shelves.
 - (c) Special routine cleaning - thorough cleaning carried out occasionally on areas not cleaned regularly. Example: Cleaning behind and underneath kitchen cabinets or appliances.
- (*Accept any other correct cleaning done daily, weekly and on special routine cleaning.*)

K.J.S.E.A Sample Paper 16

Section A

1. B
2. C
3. B
4. C
5. B
6. D

7. D
8. B
9. A
10. B
11. B
12. C
13. B
14. D
15. A
16. D
17. B
18. B
19. A
20. B
21. B
22. B
23. C
24. C
25. D
26. C
27. B
28. B
29. C
30. C

Section B

31. Seeds, cuttings, seedlings.
32. Remove droppings and soiled bedding regularly; Wash feeding and watering equipment with clean water; Disinfect the house and equipment regularly; Replace old bedding with clean, dry bedding.
33.
 - (d) It repels or kills pests.
 - (d) Cut worms.
 - (d) Aphids.
 - (d) Handpicking, uprooting the infected parts, spraying organic pesticide.

34.

Edible	Inedible
1. Gizzard	1. Lungs
2. Liver	2. Intestines

35. The scion and rootstock will not join properly; The graft is likely to fail and the scion may dry up or die.
36.
 - (c) Strip cropping.

- (c) On steep slopes and areas prone to erosion.
- (c) Slows surface runoff; traps soil and reduces soil erosion.
- 37. A knit stitch (B) forms a smooth "V"-shaped pattern on the front of the fabric, while a purl stitch (A) form raised bumps.
- 38. It leaves a visible trail when you draw on it.
- 39. To kill harmful microorganisms that remain after washing; To prevent bad odours and reduce the risk of contamination and disease.
- 40. Wash hands before handling food; Use oven gloves or pot holders when handling hot trays or pans.
- 41.
 - (b) Food particles blocking the drain; Grease or fat build-up in the pipe.
 - (b) Remove visible debris from the drain; Use a plunger to clear the blockage; Pour hot water down the drain.

39.

Food	Suitable preservation method
Milk	Boiling, cooling, fermenting, refrigeration
Meat	Smoking, drying, salting, freezing
Fish	Salting, frying, smoking
Leftover cooked food	Refrigeration