

## SECTION A(40 MARKS)

1. Molars// Molar teeth// The molar teeth
2. It destroys the hiding places of pests that spread crop diseases// It controls pests that spread crop diseases.
3. Sunshine
4. It helps to remove water from the lungs// it helps to expel water from the lungs.
5. Fish have gills to breathe in water// Fish have streamlined body to reduce viscosity in water// Fish have fins to swim in water.
6. Spraying//Artificial insemination// Castration// Numbering// Collection of semen// Vaccination// Deworming
7. It restricts animal movement// It limits animal movement// It confines animal in one place.
8. Lung// The Lungs// Human lung// Lungs
9. Both feed on already made food// Both feed heterotrophically

( NB, we have mainly two types of feeding/nutrition ie Autotrophic and heterotrophic nutrition. Photosynthesis and chemosynthesis are forms of Autotrophic nutrition while Phagocytosis, saprophytism, holozoic, parasitism, symbiosis/mutualism are forms of heterotrophic feeding.

10. Screen traps and kill houseflies that spread diarrhoeal diseases

11. To chew food well before swallowing// To avoid eating a lot of food once.// To always drink enough fluids after eating// To have good posture when eating

12. Resisting bad peers(peer group)// Joining good social groups// Resisting misleading adverts// Controlling oneself// knowing the dangers of smoking.

13. Aluminum is a good conductor of heat// It does not easily rust// Aluminum is not very heavy

14. Soap dissolves dirt on clothes// Soap dissolves stains on clothes

15. Swamp drainage//Human settlement// Crop growing in the swamps// Road construction.

16. passing out stool(faeces) with worm// Abdominal pain//Diarrhoea
17. M lets in air// M lets in fresh air// M helps the user to remove ash from the stove// M lets out ash
18. Conserves charcoal by retaining heat for a long time // It reduce cutting down of trees for charcoal
19. Poor sanitation// outbreak of diseases// Competition for oxygen// Food contamination
20. It reduces the cutting down of trees for wood fuel// It does not pollute air in the environment.
21. Opaque objects block ligh forming shadow// Shadow
22. For making shoe polish// For making crayons// For making cosmetics//For making Varnish//For making lip burns// For making ball gum(chewing gum)
23. To prevent food wastage// To promote food security// For future use// To sell when the market price is good.
24. Gravity//gravitational force// force of gravity//

Friction//friction force

25. A mask controls the spread of air born diseases//It controls the spread of respiratory diseases//A mass prevent a person from breathing in droplets from infected people.

26. Having scent(nice smell)//Having nectar

27. Painting them//Keeping them in a cool dry place// Washing and drying them after use// greasing their moving parts//Avoid leaving garden tools outside at night// Repair damaged parts on some garden tools

28. Helps the parents to monitor the growth of a child// Helps parents to know the day next dose will be given to the child// Reminds the parents on the age of their children

29. Size of an object//Nature of the material vibrating// Frequency //Size of the strings// Length of the strings.

30. Mouth//Head//Leg//fingernails

31. To lift heavy vehicles//to hold things together tightly//Help us to move upstairs

32. To keep the birds busy// To make birds to do physical exercise// To break boredom in poultry house// To reduce poultry vices

33. Bad smell on food// change in colour of food// growth of mould on food.

34. A plastic pen will attract the small pieces of paper

35. P produces electricity// P produces electrical energy

36. The circuit will not be complete because glass is an insulator of electricity// The circuit will not be complete because glass is not a conductor

37. Wrist//Ankle

38. It reduces competition for sunlight between crops and trees//Reduces diseases spread among crops and trees// Destroys hiding places for pests// Prevents trees from breaking due to heavy branches//Reduces transpiration

39. Fencing water source// Cleaning around the water source// Encouraging pupils to dispose wastes properly//Preventing animals from sharing the water source with people//Advising pupils to avoid Washing clothes near water source

40. HIV/AIDS weakens body immunity//A person suffering from HIV/AIDS have low body immunity// It attacks and destroy white blood cells

### SECTION B(60 MARKS)

41(a) It weakens iron sheets//It makes iron sheets to wear out// It changes colour of iron sheets

(b) painting the iron sheets//Galvanizing iron sheets// Enamelling iron sheets// Alloying metals used to make iron sheets// Avoid spreading harvest on iron sheets to dry

42(a) Health record

(b) Rinderpest// foot and Mouth disease//Nairobi disease// Mastitis

(c) Helps farmers to be taxed fairly//Helps farmers to get loans from the bank// Helps farmers to know losses and profits of the farm// Helps farmers to know the farm's expenditure on health of animals

43(a) Gully// Gully erosion

(b) It leads to soil exhaustion// It leads to water

pollution// It leads to easy spread of weeds//Gullies make transport difficult// Eroded soil buries crops down hill//Lowers the productivity of soil// It leads to environmental degradation

(c) Soil is left bare exposing it to erosion agents// It leaves the soil bare exposing it to agents of soil erosion

44(a) Bud// Axillary bud//Lateral bud// Node containing bud//Node.

(b) Stem cutting// Use of stem cuttings// Planting cut stems

(c) Both X and Y develop into new shoot//Both X and Y grow into new plants Both X and Y sprout into new shoot

(d)Tuber provides food to the growing bud// Tuber provides food to the sprouting bud// Tuber stores food for the growing bud.

45(a) Vulnerable group of people are group of people who need special care and attention// Are group of people that are easily affected by poor feeding//Are people who need special care in terms of feeding

(b) Babies// Pregnant (expectant) mothers//Elderly

people

(c) Washing their clothes// Feeding them on a balanced diet// Taking them to the hospital// Showing them love// Bathing them// Giving them food// Cleaning where they stay// Giving them medicines

46(a) Measuring cylinder

(b) String is used to lower the irregular object gently in the overflow can// String is used to put the irregular object slowly in the overflow can

(c) Moses will lower an irregular object gently in an overflow can having water at the level of the spout. He will collect the displaced water in the measuring cylinder and read the measurement.

47(a) Ovulation starts// growth of pubic hair//

Enlargement of breast// Sweat glands become more active// interest in boys// They move in peers//

Enlargement of vagina and uterus// Menstruation begins// Growth of hair in the armpits// Growth of pubic hair around the vulva// Increase in body size// The voice become sharp and attractive// Face become smooth and nice looking// Rounding and widening of hip

(b) By abstaining from sex// Avoiding gift for sex//



Avoiding bad peers//Saying no to sex//Avoiding watching pornography//Avoiding bad touches// Advising fellow pupils to abstain from sex.

(c) Regular bathing of reproductive organs//Avoid early sex// women should not use objects for sexual satisfaction//Feeding on a balanced diet// Early treatment of reproductive diseases//Avoid wearing wet underwear//Use appropriate family planning method// Avoid prostitution// Avoid fornication// Doing regular physical exercise//Abstain from sex until marriage

48(a) Swimming birds

(b) i)

For swimming in water// It helps it to swim in water//

For paddling in water// It helps it to paddle in water

ii) For sieving food from the mud and in water // For picking up food from mud and in water

(c) Duck//Goose

49 (a)

(i) Prevents malnutrition//prevents deficiency diseases// Boost people's immunity against diseases

(ii) Reduces infant mortality rate//promotes the health of mothers// Reduces maternal death// Prevents still birth// promotes the health of children// Cater for mothers health after birth

(b) Through songs// Through plays// Through health seminar//Through drama//Through posters//through television// Through radio// Through story telling

50 (a) Broadcasting

(b) It reduces competition among crops for nutrients, space and sunlight// Reduces on the spread of diseases in maize garden// It makes weeding easy// It makes spraying easy// It makes harvesting easy//Improves on crop yields

(c) Chemicals leads to soil exhaustion// Chemicals leads to soil pollution//Chemicals kill useful organisms in the soil

51(a)

R- Evaporation

S- Condensation

(b) To prevent alcohol vapour from escaping

(c) Copper tube directs alcohol vapour to the basin of

cold water// Copper tube is a passage of alcohol vapour to the collecting container

52(a) Poor sanitation// Inadequate food supply/food insecurity// Outbreak of common diseases// Antisocial behaviour// Poor water supply

(b) Helps in proper distribution of health services in the community// Helps in the control of common diseases affecting people in the community // Helps to educate people on how to promote good sanitation// Helps the community to drill more water sources// Helps the community to plan for its people

53(a) People get oxygen from plants// People get food from plants// People get wood fuel from plants// people get shade from plants// people get herbal medicines from plants// People get building materials from plants

(b) Watering plants// Using energy saving stove// Afforestation// Controlling pests on plants// Use of alternative energy source apart from wood fuel// Discouraging deforestation// Re-afforestation// Avoid using herbicide on plants  
NB Weeding does not conserve plant but destroys plant lives

54(a) It has proboscis for sucking blood// Its gut favour multiplication of plasmodia//It has wings to easily move from one place to another// It feeds on blood// Its antennae are highly sensitive to human body temperature// It has a strong proboscis for piercing the skin

(b) i) Oil blocks the oxygen supply to the wrigglers( larvae of mosquitoes)//Oil suffocate the wrigglers

(ii) Prevents mosquito bites

55(a) X- White blood cell

(b) W transports oxygen in the body

X fight against disease causing germs in the body//X defend the body against diseases// X produces antibodies against antigens in the body

(c) Malaria// Sickle cell anaemia//Anaemia

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