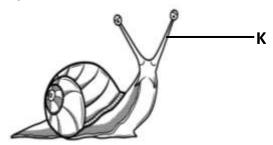
KOLFRAM EDUCATIONAL SERVICES KAMPALA

PRE NATIONAL MOCK SET V SCIENCE EXAMINATIONS

SECTION A

- 1. Plants have network leaf venation, They undergo epigeal germination, They have a tap root system, Their seeds have two cotyledons, Their seeds undergo epigeal germination
- 2. Gill is the respiratory organ for fish
- 3. Horns
- 4. Earthworms, Slugs, Snails, Caterpillars, Star Fish, Jelly Fish, Intestinal worms
- Dental accident, Lip biting, Mouth breathing, Early loss of milk teeth, Finger nail biting, Sucking fingers

10.

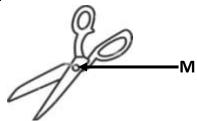


- 11. Sanitation involves the following measures, Provision of good housing, Proper disposal of human wastes, Supply and use of safe water, Vector control, Safe guarding of food against contamination, Prevention of air and water pollution
- 12. Attacks from pests and diseases, Immaturity of the seed embryo, High temperature, Hard seed coats, Depth of planting, Soil moisture contents
- 13. He/she should be quick in giving first aid.
 - He/she should be knowledgeable enough, He/she should have skills
 - He/she should be clean, He should be time saving
- 14. A blue shirt appears blue because it absorbs all other colours and reflects only blue into our eyes.
- 15. They produce opposite movement, They oppose each other's movement
 - When one relaxes the other contracts

- 6. The heart, The blood, Blood vessels
- 7. Due to refraction
- 8. Refraction causes drowning and near drowning in swimming pools.
 - Refraction may lead to accidents on the road.
- For future use, To avoid food contamination, To promote food sanitation, To avoid wastage of food, To strengthen food security, To add food values to food
- 16. By boiling, By treating using chemicals
- 17. Making rough surfaces smooth.
 - Oiling or greasing (lubrication) of moving parts to make them smooth
 - Using ball bearing, Using rollers, By polishing some surfaces to reduce friction, Streamlining the bodies of moving vessels.
- 18. It becomes restless (unsettled), The vulva swells and becomes reddish
 - There is whitish mucus discharge from the vulva
 - It mounts other goats, It stands still when it is being mounted
 - Loss of appetite, Constant tail wagging, It allows other goats to mount her, Increased urination frequency, Bleating for no reasons
- 19. Spore producing plants
- 20. They can naturally be replaced, They can get exhausted, They take millions of years to be formed, They exist in limited quantity
- 21. The lice suck blood, They cause itching, irritation
- They spread / transmit diseases called typhus fever and relapsing fever.
- 22. Switch

23. Conductors help us in cooking, Conductors help us in wiring electricity, Conductors helps us in ironing clothes, Conductors are used to make electric circuits, Conductors are used to make electric wires.

24.



- 25. First class lever
- 26. The air will not be warmed so it can chill or make the lungs very cold.
 - The mouth has no cilia to trap dust and germs.
- 27. Weather disasters like flood, wind and drought.
 - Pests and diseases, Population increase, Laziness, Ignorance
 - Poor good storage, Infertile soils
 - Poor farming methods like mono cropping, over grazing, over cropping
 - Poor preservation of food
- 28. Diverging beam of light
- 29. They cannot be reversed (irreversible), They form new substances, Energy is either absorbed or given off, There is change in the weight of a substance, They produce heat, There is change in mass of an object.

- 30. Through observing proper hygiene of the body and food, Always observe proper sanitation, Having a balanced diet, Ensuring adequate rest and sleep, Ensure good posture, Practicing regular body exercises.
- 31. Provide them with medication, Provide them with protection, Provide them with food, Provide them with guidance and counseling, Modify their environment, Rehabilitate them
- 32. By weathering, By decomposition of organic matter.
- 33. Air exerts pressure
- 34. It helps in proper selection of good seedlings, It gives time to a farmer to prepare the main garden, It helps the farmer to care for seedlings
- Dry maize plants, Dry leaves, Coffee husks, Wood shavings, Dry banana fibres
- 36. Rat guards have slippery surfaces that make rats to slide when entering the granary.
- 37. Absence of chemicals that kill them,
 Presence of certain amount of air,
 Optimum temperature, Presence of food,
 Presence of moisture
- 38. Strong scent, Presence of nectar
- 39. A drenching gun is used to administer liquid drugs to cattle
- 40. To prevent tomatoes from rotting, To make weeding easy

Section B

- 41. (a) They are warm blooded, Their legs are covered with scales, They reproduce by laying eggs, They undergo internal fertilization, They respire by means of lungs.

 - Their bodies are covered with feathers.
 - They take care of their young ones
- (b) They have hollow bones which help to reduce their weight during flight.
 - They have got streamlined bodies which help to reduce viscosity friction during flight, Their forelimbs are modified into wings for flying.

- Their eyes are protected against strong blowing wind by a tough membrane called nictitating membrane.
- They have got strong breast muscles which enable them easily flap their wings, They have no pinna to obstruct the flow of wind during flight, They have got small heads and long necks which make them easily turn quickly, Their bodies are covered with flight feathers which is an insulator of heat, have got hollow air sac starting from the lungs which makes respiration effective during flight.
- (c) Some birds are pests (They spoil farmer's crops), Some birds cause noise pollution in the environment, Some birds kill and eat poultry, Some birds keep vectors like mites, Some birds cause accidents on run ways of aeroplanes, Some birds are birds of prey and predators to poultry
- 42. (a) Name the type of cloud which:
 - (i) Cirrus cloud
 - (ii) Nimbus cloud
- (b) Clouds bring rain, Clouds protect people and animal from direct sunlight, Cloud lowers the temperature of the environment
- (c) Clouds reduce the brightness in our environment, Clouds causes plane crash, Clouds cause thunderstorms

43.

- (a) Maize grain has two scars instead of one.
- (b) (i) A: Plumule
 - (i) B: Radicle
- (c) Endosperm
- 44. (a) It is cheap, It promotes physical exercises, It is environmentally friendly, It saves the fabrics against machine damage, Dirt and stains are eliminated completely, It uses less water and detergents, It helps to maximize proper hand hygiene
- (b) It takes a lot of time, It needs a lot of effort and energy, It fades the fabrics quickly, Some detergents used in washing cause skin infection
- 45. (a) (i) M: Arm sling,
- (ii) J: Splint
- (b) (i) M: M is tied around the neck to support the broken arm.
 - (ii) J: J keeps the broken bones in their correct position
- 46. (a) The penis increases in size.

The testes start producing sperms

Wet dreams start.

(b) The uterus and the ovaries develop

Production of ova begins (Ovulation)., Menstruation period begins.

- 47. (a) Milk teeth (Deciduous teeth) / primary set of teeth
- (b) Molar teeth
- (a) For tearing food, For grinding food, For biting food
- 48. (a) A stem is a slender part of a plant that grows from the plumule.
- (b) It transports water and mineral salts from the roots to the leaves.

 - A stem supports the leaves and branches of a plant.

and sugar cane, Some stems store food for the plants e.g. Irish potatoes, sugar cane.

- (c) Some stems are eaten. E.g. sugarcane and Irish potatoes, Some stems are used for firewood, For herbal medicine, For making timber, For building houses
- 49. (a) Good eating habits refer to the acceptable acts before, during and after eating food.
- (b) Washing hands before eating food, Sitting upright when eating food., Swallowing food after chewing it properly, Chewing food with mouth closed, Putting small lumps of food in the mouth at a time.
- (c) Chewing food well prevents food choking, Washing hands before eating prevents us from eating germs, They avoid constipation, Chewing food well prevents indigestion, Sitting upright while eating food facilitates movement of food in the alimentary canal.
- 50.(a) Earthworms move by contraction of their body muscles.
- (b) Earth worms help in aeration of soil, They decompose organic matters
- Earth worms also soften the soil, Their excreta help in the formation of humus
- (c) The oil will block the oxygen supply onto the moist skin.
- (d) Clitellum secretes a viscid sac in which the eggs are deposited
- 51. (a) Xylophone (b) Through vibration of the skins
 - (c) Sound doesn't travel through a vacuum because it does not have molecules /air/matter
 - (d) Percussion instrument
- 52. (a) Lung cancer, Cancer of the mouth and the throat, Emphysema, Bronchitis
- (b) Lung, Heart
- (c) Some smoke to concentrate on their work, Some smoke to look sophisticated /important, Some smoke to warm their bodies, Some smoke due to peer pressure, Some smoke to feel confident, To appear different from others, To fit in the groups, To pass time, To fit in the groups 53.
- (a) Head lamp
- (b) Number of coils inside it, Speed of rotation, Strength of magnet inside it
- (c) (i) Vehicles: They help in charging the car batteries.
 - (ii) Bicycles: They help to produce light at night
- 54. (a) Bio- luminescent objects are living things that produce light
- (b) Fire flies, Glow worms, Jelly fish, Dragon fish, Some squids
- (c) Both can be reflected, Both are forms of energy.
- (d) Light energy does not require a medium of transmission while sound energy requires a medium of transmission.
- ∠ Light can travel through a vacuum while sound cannot travel through a vacuum. **55.**
 - (a) Bronchus
 - (b) Part marked with letter A is made up of cartilage rings to keep it open all the time
 - (c) (i) They excretes carbon dioxide (by-product of respiration) from the body
 - (ii) They are used in respiration