



# The HIGHWAY EXAMINATIONS

PRIMARY SEVEN QUALITY ASSESSMENT

2025

INTEGRATED SCIENCE

# QUALITY MARKING GUIDE

Read the following instructions carefully:

1. Do not forget to write your **school** and **district name** on this paper.
2. This paper has two sections: A and B.  
Section **A** has **40** questions and Section **B** has **15** questions. This paper has 13 printed pages.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** answers **must** be done using a **blue ballpoint pen** or ink. Any work done in pencil will **not** be marked except drawings and diagram.
5. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks**.
6. Do not fill anything in the table indicated  
"For examiners' use only" and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXR'S No.
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

© 2025 The Highway Examinations 0740888097/ 0783836153

*The printers of the HIGHWAY EXAMINATIONS, Holiday packages, Homework, book covers, Topical questions and Teachers' workshops. Located at Nansana Municipality Kampala*

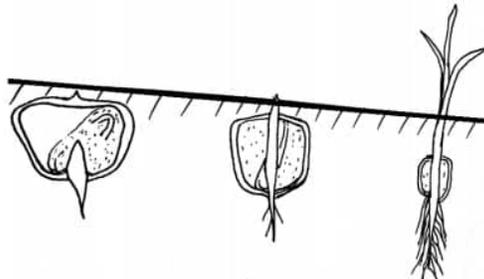
## SECTION A: 40 MARKS

*Answer all questions in this section.*

*Questions 1 to 40 carry two marks each.*

1. Name the component of soil formed when dry grass rots.
  - ✓ Humus
  - Reject: Rock particles
2. Apart from mechanical method, state any **one** other method of storing sound.
  - ✓ Magnetic
  - ✓ Electromagnetic method
  - Reject: Recording and Notation / Writing
3. Mention the source of energy used by plants in the process of photosynthesis.
  - ✓ Sun
4. Name the type of teeth which is missing in the milk set of teeth.
  - ✓ Premolars
  - ✓ Reject: molars
5. State any **one** way of keeping the circulatory system in a good working condition.
  - ✓ Feeding on a balanced diet.
  - ✓ Doing regular physical exercise.
  - ✓ Going for regular medical checkups.
  - ✓ Avoid smoking.
  - ✓ Limit eating only fatty food.

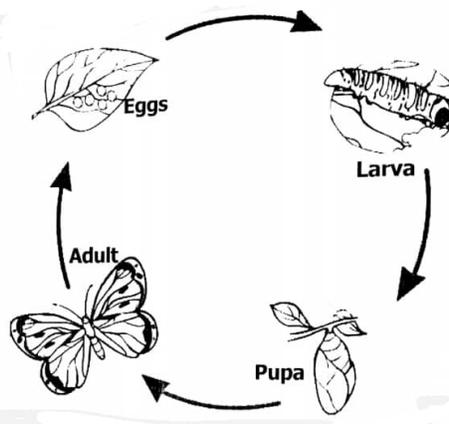
The illustration below shows a germinating maize plant. Study and use it to answer question 6 and 7.



6. Name the type of germination shown above.

- ✓ Hypogeal germination.
7. Name the group of flowering plant to which the above belong.
- ✓ Monocotyledonous plants / Monocots
8. State how canine teeth are able to tear food.
- ✓ They are sharp pointed. Reject: Any answer with feature and function
9. Name any **one** example of root tubers.
- ✓ White yams / sweet potatoes / cassava / carrots / turnips
10. When a pen and a paper is released from the top of the building, the pen reached the ground faster than a paper. Give a reason why a pen reached the ground faster than a paper?
- ✓ A pen has less air resistance than a paper.  
Reject: Due to force of gravity.
11. Give a reason why a boat floats on water.
- ✓ A boat displaces amount of water equal to its weight.
12. Identify the type of mechanical energy possessed by a passenger seated in a moving vehicle.
- ✓ Kinetic energy.      Reject: Potential energy

*The illustration below shows a life cycle; study and use it to answer questions 13 and 14.*



13. Name the type of lifecycle shown above.
- ✓ Complete cycle.
14. Give a reason to support your answer above.
- ✓ The larva stage is completely different from the adult stage in structure and function.
- Reject: It undergoes four stages.
15. State what causes marasmus.
- ✓ Lack of all food values.
  - ✓ Lack of all food nutrient.
- Reject: lack of carbohydrates.
- Note: Marasmus is starvation remember when a person starve you do not lack only one class of food but you will lack all.
16. In which way can a person care for his / her ears.
- ✓ Cleaning using ear cotton swabs.
  - ✓ Listening to music at a low volume.
  - ✓ Going for regular medical checkups.
- Reject: Cleaning using ear buds
17. State any **one** way in which earthworms are important to crop farmers.
- ✓ Improves on soil fertility.
  - ✓ Improves water drainage in the soil.
  - ✓ Helps in the formation of humus.
- Reject: They die to form humus
18. State how hookworms enter the body.
- ✓ By penetrating the bare skin.
- Reject: By walking bare footed.
19. Mention any **one** common accident at home.
- ✓ Burns / scalds / near drowning / drowning / cuts / electric shock / snake bites / falls / knocks
- Reject: Note; that all falls are accidents but not all accidents are falls.

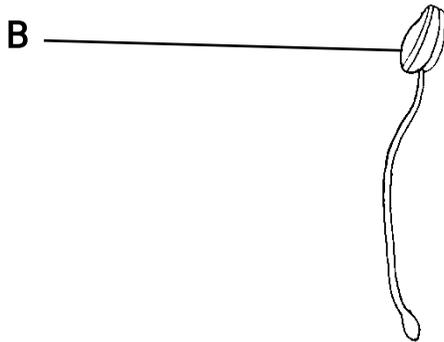
20. Give a reason why farmers carry out docking.
- ✓ To prevent flystrikes
  - ✓ To keep the sheep clean.
- Reject: To ease mating/ To enable the sheep grow fat / To expose the vulva to the ram
21. Mention any **one** type of drugs.
- ✓ Essential drugs
  - ✓ Narcotic drugs
- Reject: Modern / Traditional drugs
22. Name the class of food to which beans belong.
- ✓ Proteins
- Reject: Grow food
23. State the importance of white blood cells to the circulatory system.
- ✓ Defends the body against germs / fight against disease germs.
- Reject: Fight against diseases.
24. State any **one** way feeding on roughages help to prevent constipation.
- ✓ Roughages absorb water from the stool making it soft.
  - ✓ Roughages adds bulk in stool making it easier to pass.
  - ✓ Roughages stimulates intestinal muscle contraction.
25. Mention any **one** material which is made of clay soil.
- ✓ Clay pots / clay tiles / clay cups / clay plates / clay charcoal stove
- Reject: pots / cups / plates / charcoal stove
26. State any **one** way vectors spread germs.
- ✓ By contaminating food
  - ✓ By biting / bites
  - ✓ Through body contact.
- Reject: Through hairy bodies.
27. State the importance of sunlight during photosynthesis.
- ✓ Provides energy needed by plants to make food.
- Reject: Splits water into hydrogen and oxygen.

28. Identify any **one** type of immunity.

- ✓ Natural / Artificial immunity

Reject: Acquired / inherited immunity

*The diagram below shows a reproductive part of a flower. Use it to answer questions 29 and 30.*



29. Name the reproductive part of the flower in the diagram above.

- ✓ Stamen.                      Reject: Male part

30. Use letter B to show the part that produces pollen grains.

31. Write down any **one** by-product of respiration.

- ✓ Carbon dioxide      / Water vapour

32. Give a reason why it is advisable to sneeze in a handkerchief when in public.

- ✓ To control airborne diseases
- ✓ To prevent droplet infection
- ✓ To prevent spreading mucus to nearby people.

33. State any **one** way in which animals can be used as energy resource.

- ✓ Animals provide energy for transport.
- ✓ Animals provide energy for ploughing.
- ✓ Animals provide energy for pulling carts.
- ✓ Animals provide energy for turning machines.

34. State **one** way in which the human skeleton is useful to the circulatory system.

- ✓ It protects the heart.
- ✓ It helps in the production of blood cells.

*The diagram below shows an item used to manage weather. Study and use it to answer questions 35 and 36.*



35. Name the item shown in the diagram above.
- ✓ Umbrella.
36. State the element of weather that requires people to use the above item.
- ✓ Rainfall / Sunshine
37. Give a reason why breast milk is considered to be the best food for babies.
- ✓ Breast milk contains all food values needed by the baby.
- Reject: Breast milk contains almost all food values
- Note: Breast milk contains carbohydrates, proteins, vitamins, lipids and mineral salts
38. Name the element of primary health care which promotes quick recovery of the casualty.
- ✓ First aid
- Reject: Accidents and first aid
- Note: First aid involves giving initial help to accident victim before getting further treatment.
39. State the importance of gills to a mushroom.
- ✓ Produces spores / It produces spores.
  - ✓ Produces and disperse spores.
40. Give any one way in which a blacksmith use heat.
- ✓ For melting metals
  - ✓ For shaping metals
  - ✓ For softening metals.
  - ✓ For bending metals.

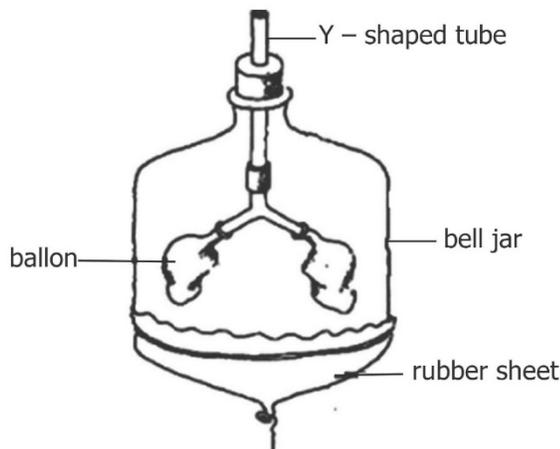
- ✓ For joining metals.
- ✓ For moulding metals.

### SECTION B : 60 MARKS

*Answer **all** questions in this section.*

*Questions 41 to 55 carry four marks each*

41. The diagram below shows a model of the human respiratory system. Study and use it to answer questions that follow.



- (a) What does the straw represent in the above?  
 ✓ Trachea / wind pipe / Bronchi
- (b) State what happens to the balloon when breathing in.  
 ✓ The balloon expands / The balloon will expand  
 ✓ The balloon increase in size / volume.
- (c) Explain how you can demonstrate breathing in in the above experiment.

(2 marks)

- ✓ Pull the rubber sheet downwards to allow air into the balloon.

42. (a) Mention any **two** activities at home that requires the use of filtration method.

- ✓ When separating water from soil.
- ✓ When separating juice from fruits.
- ✓ When separating tea from tea leaves.
- ✓ When preparing local salt.

- (b) State any **two** ways in which filtration method is important at home.

- ✓ It helps in separating tea leaves from tea.
- ✓ It helps in separating fruit juice from seeds.
- ✓ It helps in preparing local salt from plant ash.
- ✓ It helps in separating water from small rocks.

43. (a) Name any **one** example of natural magnet.

- ✓ Lodestone / magnetite / earth

(b) State any one way of preventing magnets from losing magnetism.

- ✓ Painting magnets to prevent rusting.
- ✓ Keeping magnets with iron keepers.
- ✓ Keeping magnets away from heat.
- ✓ Keeping magnets with unlike poles together.
- ✓ Keeping magnets facing North South direction.

(c) Apart from electric bell, mention any **two** other devices that use electro magnets.

- ✓ Electric alarms / sound amplifiers / radio speakers/ electric motors / electric sirens / Generators

44. (a) Mention any **one** vice in a deep litre house.

- ✓ Egg eating / Feather pecking / cannibalism / egg biding
- Mnemonic: FECE
- ✓ Reject: Toe pecking / vent pecking / skin pecking

(b) Give any **one** cause of poultry vice in a deep litres house.

- ✓ Overcrowding of birds.
- ✓ Poor ventilation in a poultry house.
- ✓ Boredom among birds.
- ✓ Shortage of feeds.
- ✓ Lack of proteins in the diet.

(c) State any **two** ways of controlling poultry vices.

- ✓ Hanging green vegetables in the coop.

- ✓ Regular feeding of birds.
  - ✓ Providing enough space for birds.
  - ✓ Proper stocking.
45. (a) Name the group of non – flowering plants where fern belong.
- ✓ Sporing bearing plants.      Reject: Coniferous plants
- (b) State one similarity between pine and cedar in the way they reproduce.
- ✓ Both reproduce by means of seeds.
- (c) Apart from pine and cedar, mention any **two** other plants that reproduce by means of seeds.
- ✓ Fir / cypress / podo / ginkgo / cycad
46. You are provided with the following materials to carry out an experiment to show that soil contains water.
- Dry saucepan, lump of soil, plate
- Describe the steps you would follow.
- (i) Put the lump of soil into the dry saucepan.
  - (ii) Cover the dry saucepan using a plate.
  - (iii) Heat the lump of soil in the dry saucepan for some time.
  - (iv) Remove the plate and check the water droplets.
47. (a) Mention any **one** cattle disease caused by virus.
- ✓ Rinder pest / Foot and mouth disease
- (b) State any **two** ways of controlling viral diseases in cattle.
- ✓ Through regular vaccination.
  - ✓ Through application of quarantine.
  - ✓ Through isolation of infected animals.
- (c) State how isolation of infected animals prevent viral diseases in cattle.
- ✓ It prevents close contact of infected animals with healthy ones.
48. (a) State any **two** dangers of teenage pregnancy to girls.
- ✓ It leads to school dropouts.
  - ✓ It causes birth complications.

- ✓ It may lead to death due to attempted abortion.
- ✓ It leads to forced marriage.
- ✓ It leads to parental reject.
- ✓ It leads to obstructed labour.

(b) Give any **two** ways adolescent girls can avoid teenage pregnancy.

- ✓ Abstaining from pre-marital sex.
- ✓ Avoid bad peer groups.
- ✓ Avoid gifts from strangers.
- ✓ Staying at school.
- ✓ Educating adolescents about body growth and body changes.
- ✓ Reporting cases of rape to concerned people.

49. The information below is designed by young farmers club to start a goat rearing project. Study and use it to answer questions that follow.

Activity	Item	Number	Estimated date
Construction	Shade	2	10/06/2025 up-to-date
Purchasing	Nannies	7	18/07/2025
Vaccination	Nannies	7	19/07/2025
Artificial insemination	Animals on heat	Animals on heat	18/07/2025 up to date

(a) Give the collective name for that above information.

- ✓ Work plan                      Reject: Record keeping / Breeding record

(b) Give a reason why the club has no interest on Billy goats.

- ✓ They are interested in artificial insemination.

(c) State any **one** way in which artificial insemination is important in the above project.

- ✓ Promotes cross breeding.
- ✓ Prevent venereal diseases / hereditary diseases.
- ✓ Control inbreeding.

(d) In which way is the above information important when starting a poultry keeping business?

- ✓ Helps in time management.
- ✓ Helps in effective planning.
- ✓ Helps in budgeting.
- ✓ Helps in allocating resources.

50. (a) Name the germ that causes malaria.

- ✓ Protozoa.                      Reject: Plasmodia / plasmodium

(b) In which way does each of the following help to prevent malaria?

(i) Draining stagnant water:

- ✓ It destroys the breeding places for mosquitoes.

(ii) Sleeping under treated mosquito net:

- ✓ It helps to prevent bites from female anopheles mosquitoes.

(c) Give a reason why male anopheles mosquitoes do not transmit malaria to people.

- ✓ They do not feed on human blood.

51. (a) State what is meant by the term weeds.

- ✓ Weeds are unwanted plants in the garden.
- ✓ Reject: weeds are plants that grow in a place where they are not needed.

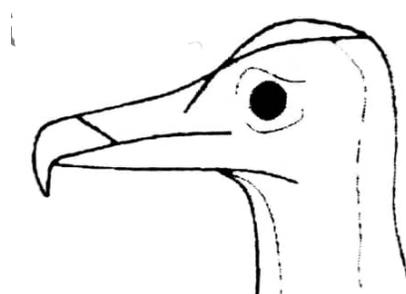
(b) Name the crop growing practice which reduces the weight of the plant.

- ✓ Pruning.

(c) Apart from panga and scateurs, mention two other garden tools used for pruning crops in the garden.

- ✓ Billhook
- ✓ Pruning saw

52. The diagram below shows a beak of the bird study and use it to answer the questions that follow.



- (a) Name the group of birds which have the beak shown above.
- ✓ Scavenger birds.
- (b) Give any **two** examples of birds which have the beak shown above.
- ✓ Vulture
  - ✓ Crow
  - ✓ Marabou stork
- (c) State how the birds with such a beak help to clean the environment.
- ✓ By feeding on leftover flesh / abandoned flesh.

53. (a) Name any one method of harvesting honey.

- ✓ Modern method
- ✓ Traditional method.

(b) State the importance of the following equipment when harvesting honey.

(i) smoker:

- ✓ It is used to produce smoke in order to scare and paralyze bees.
- ✓ It is used to produce smoke which scare bees.

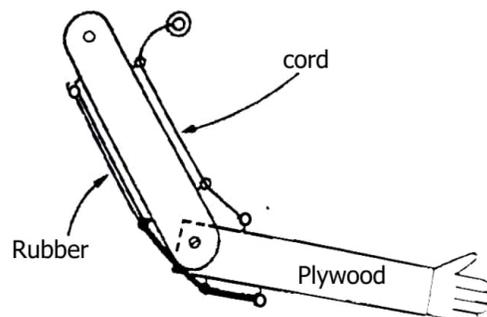
(ii) knife:

- ✓ It is used for cutting combs with honey from the hive.

(c) Mention any one reason why harvesting of honey should not be done using fire.

- ✓ Fire kills bees reducing their population.
- ✓ Smoke from fire contaminates honey.
- ✓ It reduces honey harvesting by killing worker bees.

54. The diagram below shows a model of the human arm. Study and use it to answer the questions that follow.



- (a) Identify the body muscle represented by;
    - (i) The cord:
      - ✓ Biceps
    - (ii) The rubber:
      - ✓ Triceps
  - (b) Name the type of human body muscles represented in the modal above.
    - ✓ Voluntary muscles.
  - (c) State what happens to the cord when the fore plywood is raised.
    - ✓ The cord will contract / The cord contracts
55. (a) State the units for measuring rainfall.
  - ✓ Millimetres (MM)
- (b) Give a reason why rainfall is measured in the above units.
  - ✓ To find how deep rain water has entered the soil.
- (c) Mention any two components of a rain gauge.
  - ✓ Funnel / measuring cylinder / bottle

**END**