

NSANGI SECONDARY SCHOOL

S.2 BIOLOGY

TIME: 2HOURS

NAME:..... STREAM:.....

INSTRUCTIONS

- The paper consists of sections A, B and C.
- For section A, Circle the best alternative. Section B attempt in the spaces provided.
- For section C, its practical section whose answers are attempted with the aid of specimens provided.
- Forward scanned answer sheets to stahiza2020@gmail.com.

SECTION A

Choose the most correct alternative choice

1. Which of these is not a property of an animal cell?
A. A nucleus
B. Cell membrane
C. Cytoplasm
D. Cell wall
2. The animal drawn below belongs to

A. Crustaceans
B. Arachnids
C. Chilopods
D. Diplopods
3. In biology, the term “non-living things” means the things that:-
A. Are dead.
B. Are not alive.
C. Were once and are not living.
D. Have never had life at any time.
4. Which of the following vitamins help to prevent rickets?
A. Vitamin A
B. Vitamin D
C. Vitamin B₂
D. Vitamin C
5. A housefly is classified under order diptera because it has
A. Two pairs of legs.
B. A pair of membranous wings.
C. A pair of hatters.
D. A hard cuticle and jointed legs.

6. Mosquito larvae, present in a pond were to be destroyed. This was done by spraying oil on the water surface and all the larvae died. Which of the following explains why this happened?
 - A. The supply of oxygen was cut off by the oil.
 - B. The oil stopped light entering the water.
 - C. The oil was taken in by the larvae during feeding.
 - D. The larvae were stopped from swimming.
7. In plants, cells which transport water are found in the:-
 - A. Phloem
 - B. Pith
 - C. Cortex
 - D. Vascular bundles
8. At which stage in the life history of a mosquito will it be easiest to kill the greatest number?
 - A. Egg
 - B. Larva
 - C. Pupa
 - D. Adult
9. The butterfly has
 - A. Biting mouth parts.
 - B. Piercing mouth parts.
 - C. Sucking mouth parts.
 - D. Chewing mouth parts.
10. Which of the following comparisons is true of animal cells and plant cells?
 - A. Animal cells have cytoplasm whereas plant cells don't.
 - B. Animal cells lack cell wall but plant cells have a cell wall.
 - C. Plant cells have a cell membrane while animal cells have
11. The organelles concerned with photosynthesis are:-
 - A. Chloroplasts
 - B. Chlorophyll
 - C. Stomata
 - D. Starch granules
12. Which of the following soil type has the best soil retention capacity?
 - A. Loam soil
 - B. Clay soil
 - C. Sand soil
 - D. Silt
13. Which phylum does the tick belong?
 - A. Arthropoda
 - B. Orthoptera
 - C. Mollusca
 - D. Insecta
14. The correct order of increasing complexity in an organism is:-
 - A. Organ → cell → system.
 - B. Tissue → organ → system.
 - C. Cell → organ → tissue.
 - D. System → tissue → cell.
15. In what type of placentation are the seeds arranged in a central placenta?
 - A. Basal
 - C. Parietal

D. Axile

C. Rickets

D. Scurvy

C. Explosive mechanism

D. Wind

D. Act as fertilizers.

C. Plasma membrane

D. Tono plast

D. Yellow fever, malaria and elephantiasis.

C. Wax cuticle

D. Wings

C. Hydra

D. Cockroach

C. Absorb minerals

- B. Absorb air
D. Absorb sunshine
24. The area of a leaf where most photosynthesis occurs is;
A. Mesophyll layer
C. Palisade layer B. Upper epidermis
D. Lower epidermis
25. Which one is not a primary function of roots?
A. Conduct water and mineral salts B. Anchor plant into the soil
C. Store food and water.
D. Absorb water and mineral salt.
26. Which one of the following is an example of Rhizomes?
A. Straw berry
C. Ginger
B. Bryophyllum
D. Cocoyam
27. Controlled feeding on food rich in vitamin A may improve.
A. Calcium deposit
C. Number of Red blood cells
B. Night vision
D. Healing of wounds
28. Which of the following tissues bring about an increase in width of a stem in flowering plants?
A. Xylem
C. Cambium
B. Phloem
D. Cortex
29. Fungi are not classified as plants because they
A. Don't have proper roots.
B. Lack vascular tissue.
C. Lack chlorophyll.
D. Have rigid cell walls.
30. Mosquitoes can be effectively controlled by:
A. Sensitizing community members about dangers of mosquito.
B. Smearing with mosquito repellent body cream every night.
C. Destroying the mosquitoes' breeding grounds.
D. Sleeping under mosquito nets

SECTION B

31.(a)(i) Define seed/fruit dispersal (02marks)

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(ii) Explain why fruit/seed dispersal is important to plants. (03marks)

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(b) Explain how fruits are adapted for dispersal by;

(i) Animals (03marks)

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(ii) Wind (02marks)

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32.(a)(i) Define the term “Caste” as a term used in Apiculture. (02marks)

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(ii) List down any 3 castes in a bee hive.

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(b)(i) Mention 4 roles played by a worker bee in a hive. (04marks)

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(ii) Give a reason why a worker bee dies immediately after stinging an organism.(01mark)

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(c) Table below shows the description of external parts of some of the insects. Use it to answer questions below.

External features					
Specimens	Eyes	Mouth parts	Wings	Thorax	Legs
A	-Two compound eyes -3 Simple eyes	-Proboscis	-One pair of wings -Has hatters	-3 thoracic segments - Has stripes	-3 Pairs of hairy legs
B	-Compound eyes -No simple eyes	-Has mandibles	-2Pairs of wings	-3Thoracic segments	-3Pairs of legs -Has spiracles on legs

C	-No simple eyes - Lack compound eyes	-Has mandibles	-Lack wings	-3Thoracic segments	-3Pairs of jointed legs
D	-Compound eyes	-Has proboscis	-One pair of wings	-Three segments	-Three pairs of jointed legs

(i) Using the table above, construct a dictomous key.

(ii) From the list above, mention any two organisms that fall under one order.

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END