

Name: Stream:

**SEETA HIGH SCHOOLS
END OF TERM II JOINT EXAMINATIONS 2015
S.1 BIOLOGY
TIME: 1 HOUR 10 MINUTES**

Instructions

Attempt all questions

SECTION A (ANSWER SHEET)

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

FOR OFFICIAL USE

	Score
Section A	
Section B	
Total	

SECTION A

- The protoplasm of a cell consists of;
A) cytoplasm alone B) cytoplasm and nucleoplasm
C) nucleoplasm alone D) cytoplasm, nucleoplasm and cell membrane
- A plant tissue consists of rounded cells packed tightly together and which often contains starch between the spaces is the;
A) collenchyma tissue B) epidermal tissue
C) parenchyma tissue D) sclerenchyma tissue
- Which of the following forms part of the shoot system.
A) Flowers. B) Root hairs.
C) Lateral roots. D) Root tip.
- Monocotyledonous and dicotyledonous plants belong to class
A) Algae B) Angiospermae
C) Gymnospermae D) Spermatophyta
- Which one of the following tissues has a protective function in plants?
A) cambium B) epidermis
C) phloem D) xylem
- Which of the following is a modified tap root
A) carrot B) onion bulb
C) cassava D) sweet potato tuber
- Which of the following is a tissue?
A) Muscle. B) Heart.
C) Skeleton. D) Leucocytes.
- Which of the following organisms is unicellular
A) hydra B) euglena
C) mite D) flea
- The function of the condenser on a Compound light microscope is to:
A) reflect light beam B) absorb light beam.
C) concentrate light beam. D) Regulate light beam.
- A rhizome is regarded as a stem by possession of;
A) adventitious roots B) xylem and phloem
C) scale leaves D) root leaves
- What is the main function of the phloem in green plants
A) transporting water B) supporting the plant
C) transporting mineral salts D) transporting food

12. Root hairs arise from the
 A) pericycle
 B) piliferous layer
 C) endodermis
 D) cambium
13. The part of the onion that stores food is the
 A) modified stem
 B) modified branch
 C) fleshy leaf
 D) root tuber modification
14. Which of the following gives rise to lateral roots.
 A) Cambium.
 B) Pericycle.
 C) Piliferous layer.
 D) Cortex.
15. Which of the following is a characteristic of insects only
 A) exoskeleton
 B) jointed legs
 C) three body divisions
 D) two pairs of wings
16. Simple aquatic plants containing chlorophyll, with bodies not differentiated into roots, stems and leaves are
 A) algae
 B) fungi
 C) liverworts
 D) mosses
17. Which of the following is NOT an arthropod?
 A) millipede
 B) earth worm
 C) beetle
 D) cricket
18. The strength of xylem vessels is due to the presence of
 A) lignin
 B) chitin
 C) cellulose
 D) starch
19. Which of the following is not a primary function of leaves to plants
 A) photosynthesis
 B) transpiration
 C) food storage
 D) gaseous exchange
20. Guard cells differ from normal epidermal cells in that
 A) they have no nuclei
 B) they contain chloroplasts
 C) their surface is not covered by cuticle
 D) they do not carry photosynthesis
21. Which of the following is not a property of an animal cell
 A) plasmodesmata
 B) glycogen granules
 C) cell membrane
 D) mitochondria
22. Starch grains is to plant cells as is to animal cells.
 A) starch granules
 B) glycogen granules
 C) oil droplets
 D) chloroplasts

23. The membrane that surrounds the sap vacuole is;
 A) Plasma membrane. B) Nuclear envelope.
 B) Tonoplast. D) Protoplasm.
24. To which one of the following groups do mosses belong
 A) angiosperms B) cycads
 C) bryophytes D) ferns
25. An animal with a moist glandular skin and three chambered heart is most likely to be.
 A) an Amphibian. B) a mammal.
 B) a Fish. D) a reptile.
26. A leaf is identified as compound by;
 A) presence or absence of leaf starch B) number of leaflets
 C) type of venation D) possession of leaflets
27. Mammals are distinguished from amphibians by possession of the following except
 A) four digits B) mammary glands
 C) fur D) external ears
28. Which of the following plant parts offers mechanical strength and support.
 A) Xylem. B) Phloem.
 B) Pith. D) Chlorenchyma.
29. In a cell, the role of the mitochondrion is;
 A) formation of energy B) storage of mineral salts
 C) manufacture of food D) protection of internal cell parts
30. A structural similarity between, fish, bats and reptiles is that;
 A) all have fins B) all have feathers
 C) all have scales D) all have four limbs

SECTION B

Answers should be written in the spaces provided

31.a) Give three differences to support the view that viruses are.

I) living things.

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II) Non living things.

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b) Write down any three common.

I) Viral diseases of man.

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II) Protozoa diseases of man.

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III) Fungal diseases of man.

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32. a) List down two primary functions of roots, stems and leaves to the plant

Roots

i)

ii)

Stem

i)

ii)

Leaves

i)

ii)

b) Some roots are modified to perform secondary functions in certain plants. Write down any two such modifications in each case give one example plus a brief description. Stating how the said stem is modified to perform that particular function.

Root modification	Example	Description of modification
i)		

ii)		

33. Animal X has 4pairs of jointed legs, 2 distinct body parts, and no wings.

a) I) To which phylum does X belong?

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II) To which Class is X likely to belong?

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III) Give a particular example of such an organism as X?

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b) Name three other characteristic features used to identify X.

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c) Give three Classes apart from that of X, belonging to the same Phylum.

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34.a) Draw and label the cross section of a stem of a dicotyledonous plant.

b). Outline the function of any four labelled parts

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c) How is the internal structure of a dicot stem different from that of monocot stem.

Dicot stem.	Monocot stem.

35. a) Explain the importance/significance of the following characteristics of a leaf.

I) upper epidermis with out chloroplasts.

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II) More stomata on the lower leaf surface than upper surface.

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II) Large airspaces in the spongy mesophyll layer

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b) Outline any two differences between a leaf of a dicot plant and a leaf of a monocot plant.

Monocot leaf	Dicot leaf

c) Give any four leaf modifications.

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***** END *****