**NAME:…………………………………………………… SIGNATURE……….**

**Future Aspiration.………………………………..………………………………….**

HOLYCROSS LAKE VIEW SS

**UGANDA CERTIFICATE OF EDUCATION**

END OF TERM 1I

**S.2 BIOLOGY**

**PAPER 1**

**2hrs and 15minutes**

**INSTRUCTIONS TO STUDENTS;**

* You are advised to make a short, precise but meaningful prayer before you open this booklet.
* Answer **all** the questions in Section **A** and **B without gambling!** Any response proposed on the basis of guess work will not be marked; so you are advised to read the question at least three times, internalize them and make sensible responses.
* Answers to section **A MUST** be confirmed in the grid provided below;
* Answers to Section **B** must be written in the spaces provided. Any response to any question written outside the availed spaces will not be considered on any grounds.
* Additional pages must not be inserted in this booklet

**SECTION A (30 MARKS)**

***(Circle the most correct alternative in this section. Do not gamble please !)***

1. The following are characteristics of living things except.
2. death
3. irritability
4. movement
5. excretion
6. A microscope has eye piece lens magnification of X20 and objective lens magnification of X70. The total magnification is?
7. X3.5
8. X90
9. X100
10. X1400
11. …………………………..Part of the microscope is used to fix the slide firmly on the stage.
12. coarse adjuster C. turret
13. Stage. D.Clips.
14. An animal cell contain the following except
15. cell membrane
16. cell wall
17. cytoplasm
18. cell granules
19. The following are similarities between plant cell and animal cell except………………
20. both have cell membrane
21. both have cell wall
22. both contain nucleus
23. both possess vacuole
24. The following are examples of specialized cells in animals except
25. body cells
26. sperms
27. platelets
28. red blood cells

7. Which one of the following tissues has a protective function in plants?

* 1. Xylem B. Phloem C. Cambium D. Epidermis

1. The first four levels of the classification are ……………………….
2. Kingdom, class, order, genus.
3. Kingdom, phylum, class, order.
4. Kingdom, phylum, family, genus.
5. Kingdom, class, order, species.
6. Study of classification was discovered by……………………………
7. Opinia Fedres,
8. Carl Linnaeus,
9. Carl Mathew,
10. Mark Carl Linnaeus Junior
11. The scientific name of a honey bee is …………………………………………..
12. *Apis mellifera*
13. apismellifera
14. *Melliferaapis*
15. Apis mellifera
16. Bacteria can be classified according to the following shapes except………………………………
17. coccus
18. bacilli
19. vibrio
20. papilus
21. spirillus
22. which one of the following is a member of kingdom protoctista
23. moulds
24. sycon
25. algae
26. clostridium
27. Phyla in kingdom animalia include the following except
28. chordate
29. nematode
30. mollusca
31. amphibia
32. porifera
33. Members of phylum crustacea have distinguishing structure called…………………………
34. head
35. segmented body
36. cephalothorax
37. bring triploblastic
38. Members of class insecta have the following major characteristics except…………………
39. three main body division/parts
40. three thoracic segments
41. pair of wings
42. three pairs of legs
43. which one of the following is not an insect
44. bed bag
45. mosquitoes
46. bristle stars
47. *Papiliodemodocus*
48. A house fly belong to order………………….
49. isoptera
50. diptera
51. orthoptera
52. hymenoptera
53. the following insects undergo a complete metamorphosis except
54. bedbugs
55. tsetse flies
56. house flies
57. butterflies
58. a cockroach belong to order…………………………
59. dipteral
60. orthoptera
61. dictyoptera
62. Lepidoptera

20.A fruit with several sutures along which it splits when ripe is called a

A. Berry

B. Legume

C. Capsule

D. Drupe

21. Find the odd man out

A. yeast B. Penicilium C.Rhizopus D.Hydra.

22. The form of heterotrophic nutrition exhibited among fungi is called.

A. Saprophytic nutrition B. holozoic nutrition.

C. autotrophic nutrition D.Parasitic nutrition.

23. The total body mass of bread mould is called

A. hyphae B.Sporangiophore C.mycelium D. cytoplasm

24. The sperm and ovum are specialized for

A. Sexual reproduction B. Asexual reproduction C. Coordination D. Food storage

25. The following are unicellular organisms except.

A. Euglena B. Plasmodium C.amoeba C. Rhizopus

26. Which of the following features belong to both an arachnida and an insecta?

A. cuticle and two pairs of wings B. six legs and two pairs of wings

C. six legs and antennae D. jointed legs and cuticle

27. Which one of the following combination of words about amoeba are related?

A. pseudopodia, reproduction B. nucleus, movement

C. contractile vacuole, water D. ectoplasm digestion

28. Which of the following cells in the leaf contain the least number of chloroplasts?

A. palisade cells B. guard cells C. Epidermal cells

D. spongy mesophyll cells

29. Which of the following are adaptations of the reptiles for the terrestrial environment?

A. Lungs and shelled eggs

B. Ability to regulate body temperature.

C. Possession of scales.

D. Ability to climb trees and lack of parental

30. Which one of the following modes of feeding is shown by Amoeba?

A.Saprophytism C. Parasitism

B. Phagocytosis D. Symbiosis

**SECTION B (30mks)**

31. The key below classifies specimens M,N,O,P and Q

1.(a) Has 2 wings...............................M,P go to 4.

(b) Has 4 wings.............................. N,O,Q go to 2.

2. (a) Has spines on legs................N,Q go to 3.

(b) Has no spines on legs................O.

3. (a) Has hard outer wings...............Q.

(b) Has no hard outer wings...........N.

4. (a) Has a sting........................................P.

(b) Has no sting......................................M.

a) Outline the characteristics of specimen M. (2mks)

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b). Suggest what specimen M may be. (1 mark).

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c)To which phylum does Q belong?(2mks)

……………………………………………………………………………………………………………………………..

d) Give reasons for the identity in “c” above.(5mks)

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32 a).In the space below draw a well labeled plant cell.(6mks)

1. .State one function of any four parts labeled.(4mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….......................................................................................................................................................

33a) Define placentation (2mks)

……………………………………………………………………………………………………………………………………………………………………………………………............................

b) List four types of placentation in flowering plants.(4mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………........

1. Basing on a pericarp, how does a mango fruit differ from an orange fruit.(4mks)

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**SECTION C** **(30mks**).

34 a) Explain why sometimes seeds fail to germinate even when provided with the necessary

Conditions. (2mks)

b) State the conditions necessary for germination.(3mks)

c) Describe an experiment to show that oxygen is necessary for germination to occur (10mks)

35 (a) How is soil air important to plants? (3 marks)

(b) Describe an experiment to determine the percentage of air in a soi (12 mark)

36a) Distinguish between the characteristics of loam and clay soils. (10 marks)

b) What are the roles of invertebrates in soil improvement? (5 marks)

37. a) What is pollination? (01 mk).

b) How are wind pollinated flowers differ from insect pollinated flowers. (06mks)

c) Describe a series of events that take place in a flower immediately after pollination.(8mks)

END

(**LG** WISHES A HAPPY HOLIDAY)