**MALAIKA SECONDARY SCHOOL**

**FORM TWO OPENING EXAMINATION**

033/1 BIOLOGY

Time: 2:30 HOURS ,2024. AM

Instructions

1. This paper consists of sections A, B and C with a total of ten (10) questions.
2. Answer all questions in sections A, and B and one (1) question from section C
3. Section A carries fifteen (15) marks, section B seventy (70) marks and section C carries fifteen (15) marks.
4. All writings should be in blue or black pen, except for diagrams that must be drawn in pencil.

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| --- | --- | --- |
| FOR EXAMINER’S USE ONLY | | |
| QUESTION NUMBER | SCORE | EXAMINER’S INITIAL |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |
| 7. |  |  |
| 8. |  |  |
| 9. |  |  |
| 10. |  |  |
| TOTAL |  |  |

**SECTION A (15 MARKS)**

**Answer all questions from this section**

1. For each of the items (i) - (x), choose the most correct answer from among the given alternatives and write its letter in the box provided.
2. Reasons for Ascomycota to be called ascomycetes or sac fungi.
3. They are single-celled organism.
4. The spores can be produced sexually
5. The spores can be transferred by wind
6. Their spores are enclosed in sac-like structures called asci
7. \_\_\_\_\_\_\_\_\_\_\_ Short attacks are simply a nuisance, but if attack is prolonged, it may become worrying, tiring and painful.
8. Hiccups
9. Muscle cramps
10. Vomiting
11. Poisoning
12. In an experiment using a compound microscope, objects under observation were not seen properly due to poor light reflection. Which part of microscope might be affected?
13. Diaphragm
14. Mirror
15. Objective lens
16. Coarse adjustment knob
17. Hamza got injured on the leg when he was trying to ride a bicycle, his friend decided to help him before being taken to hospital. Which of the following can be used to kill germs around Hamza’s injury?
18. Plaster and adhesive bandages
19. Antiseptic
20. Soap
21. Petroleum jelly
22. Why are bryophytes the most primitive plants on the earth?
23. They reproduce asexually and sexually
24. They grow on wet areas
25. They lack vascular bundles
26. They do not produce seeds
27. Caring for PLWHA is important because……………………..
28. The patient gets many visitors
29. It makes the patient depressed
30. It can cure AIDS
31. It gives the patient hope
32. Which of the following is a proper method of disposing plastic bottle?
33. Burying
34. Pit latrine
35. Recycling
36. Landfill
37. Which features are found in both plants and animal cell?
38. Cell wall, chloroplast and vacuole
39. Chloroplast, cell wall and cell membrane
40. Cell membrane, nucleus and cytoplasm
41. Vacuole, cell membrane and cell wall
42. Which apparatuses are used for heating substances in the biology laboratory?
43. Spirit lamp and Bunsen burner
44. Test tube holder and Thermometer
45. Spirit lamp and Test tube rack
46. Test tube holder and Thermometer
47. How plaque is transmitted from one person to another?
48. Though tsetse fly bites from infected to a healthy person
49. By contact with water containing parasitic larvae
50. Through rat fleas bites from infected to a healthy person
51. Though sexual intercourse with an infected person

ANSWER

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| i | Ii | Iii | iv | v | Vi | vii | viii | ix | x |
|  |  |  |  |  |  |  |  |  |  |

1. Match the items in List A with the responses in List B by writing the letter of the correct response beside the item number.

|  |  |
| --- | --- |
| **LIST A** | **LIST B** |
| 1. Male reproductive structures of a moss plant 2. Leaflets of a fern plants 3. Groups of sporangia in a fern plant 4. Sac-like structures which produce ascospores 5. Poisons substance produced by fungi | 1. Stolon 2. Aflatoxins 3. Archegonia 4. Penicillium 5. Sori 6. Pinnae 7. Rhizopus 8. Antheridia 9. Frond 10. Stipe 11. Asci 12. Hyphae |

ANSWER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i | ii | iii | iv | v |
|  |  |  |  |  |

**SECTION B (70 MARKS)**

Answer all questions from this section

1. (a) Differentiate between antibodies and antigens

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(b) How do the following affect the body immunity?

(i) Extreme stress

……………………………………………………………………………………………………………………………………………………………………………………………………

(ii) Genetic disorders

……………………………………………………………………………………………………………………………………………………………………………………………………

(iii) Damage of the skin

……………………………………………………………………………………………………………………………………………………………………………………………………

(iv) Incomplete treatment

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

1. (a) Why is it important to classify organisms? Give four points
2. ……………………………………………………………………………………………………………………………………………………………………………………
3. ….................................................................................................................................................................................................................................................................................
4. ......................................................................................................................................................................................................................................................................................
5. ....................................................................................................................................................................................................................................................................................

(b) You given a chance at your village school to present about the advantages of classification which can be done by everyone, shortly explain three strong points which can be easily understood to every one

1. …………………………………………………………………………………………………………………………………………………………………………………..
2. …………………………………………………………………………………………………………………………………………………………………………………..
3. …………………………………………………………………………………………………………………………………………………………………………………….
4. (a) Euglina is an organism protected by pellicle which surrounds the cytoplasm since they lack cell wall. What are the five characteristics of the organism mentioned above?
5. ……………………………………………………………………………………………………………………………………………………………………
6. ……………………………………………………………………………………………………………………………………………………………………
7. …………………………………………………………………………………………………………………………………………………………………….
8. ……………………………………………………………………………………………………………………………………………………………………
9. …………………………………………………………………………………………………………………………………………………………………….

(b) Draw a well labeled diagram of the Euglina

(c ) What is the role of pellicle

…………………………………………………………………………………………………………………………………………………………………………………

1. A bread was put in a wet cupboard. After few days black thread –like structures which ended up in club – like shape appeared on the bread
2. Write the common name of the organism that grew on the bread surface.

………………………………………………………………………………………

1. Name the kingdom in which the observed organism belongs.

………………………………………………………………………………………

1. Name the phylum in which the observed organism belong.

……………………………………………………………………………………..

1. Outline four advantages of the members of the kingdom you mentioned in (b) above
2. ………………………………………………………………………………………………………………………………………………………………
3. ………………………………………………………………………………………………………………………………………………………………
4. ………………………………………………………………………………………………………………………………………………………………
5. ………………………………………………………………………………………………………………………………………………………………
6. State the three distinctive features of the kingdom plantae
7. ………………………………………………………………………………………………………………………………………………………………
8. ………………………………………………………………………………………………………………………………………………………………
9. ………………………………………………………………………………
10. A middle aged-man is regularly visiting the local traditional healer claiming that he has been bewitched. He has a prolonged cough and emits blood stained sputum whenever he coughs. He cannot eat properly because he has poor appetite and suffers weight loss. He is surprised that he sweats a lot during the night.
11. What would you advice the man to do?

…………………………………………………………………………………

1. Which disease is he likely to be suffering from?

………………………………………………………………………………….

1. What is the cause, and how is the disease mentioned in 7 (ii) above transmitted?
2. …………………………………………………………………………
3. ……………………………………………………………………….
4. What are the prevention measures for the disease mention in 7(ii) above?
5. ………………………………………………………………………
6. ……………………………………………………………………….
7. ……………………………………………………………………….
8. ………………………………………………………………………
9. ………………………………………………………………………
10. Andolelye is 70 kg and 150cm tall
11. What is her BMI?
12. What dangers are facing Andolelye?
13. ……………………………………………………
14. ……………………………………………………
15. ……………………………………………………
16. …………………………………………………….
17. What advise will you give to Andolelye and why?
18. ………………………………………………………………………………………………………………………………………………………………
19. ………………………………………………………………………………………………………………………………………………………………
20. (a) Identify the step of the scientific method in each of the following situations;
21. John is not feeling well; he goes to see a medical doctor at a nearby hospital.

………………………………………………………………………………….

1. The doctor asks John several questions about how he feels.

………………………………………………………………………………….

1. The doctor orders John’s body temperature, blood and urine samples for observation in the laboratory.

…………………………………………………………………………………

1. The laboratory technician diagnoses malaria parasites in John’s blood.

…………………………………………………………………………………

1. The doctor confirms that John has malaria and prescribes medicine for him

…………………………………………………………………………………..

**SECTION C (15 Marks)**

Answer question **ten (10)**

1. The food taken by any organism in the body is normally digested into small particles by enzymes. Giving seven points explain the ways in which enzyme can be affected during their activities upon the food intake.

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