



REGIONAL MOCK EXAMINATION

GENERAL CERTIFICATE OF EDUCATION

0510 BIOLOGY 1

March 2024

ORDINARY LEVEL

Centre Number	
Centre Name	
Candidate Identification Number	
Candidate Name	

One and a half Hours

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGH OUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins

3. Check that this question booklet is headed 'Ordinary level – 0510 Biology 1'.
4. Insert the information required in the spaces.
5. Insert the information required in the answer sheet using your HB pencil: **Candidate Name, Exam Session, Subject Code, Centre Number** and **Candidate Number**. Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination.

6. Answer **ALL** the **50** questions in this examination. All questions carry the same mark.
7. Each question has FOUR suggested answers A, B, C and D. Decide which answer is correct. Find the question number on the answer sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen. For example if C is the correct answer, mark C as shown below.
[A] [B] [C] [D]
8. Mark only one answer for each question. If you mark more than one answer, you will score zero for that question. If you change your mind about an answer, erase the first mark carefully, and then mark your new answer.
9. Avoid spending too much time on any question. If you find a question difficult, move on to the next question. You can come back to this question later.
10. Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
11. Mobile phones are NOT allowed in the examination room.
12. **You must not take this booklet and answer sheet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.**



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Turn Over

SECTION I

Questions 1-7 (Seven questions)

DIRECTION: Each of these statements or incomplete statements is followed by four suggested answers. Select the best answer in each case and mark appropriately.

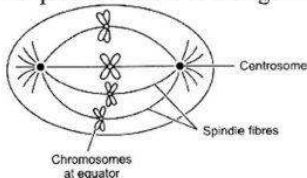
- A feature that indicates that the organism is alive is
 - have a fixed shape.
 - always of the same size.
 - ability to grow.
 - does not respond.
- The dental formula of a 10 years old child is $I=2/2$ $C=1/1$ $PM=2/2$ $M=0/0$.
The mouth of the child contain _____ number of teeth.
 - 10.
 - 18.
 - 20.
 - 24.
- Lack of iodine in a diet will lead to:
 - Anaemia.
 - Goitre.
 - Marasmus.
 - Gout.
- It has been seen that palm birds spend their night in their nest on palm frond. The palm frond is regarded as:
 - Community.
 - Niche.
 - Habitat.
 - Trophic level.
- Bacteria have:
 - Mitochondria for respiration.
 - Flagella for locomotion.
 - Cell wall made up of cellulose.
 - Nucleus surrounded by nuclear membrane.
- The main organism mostly employed in the preparation of puff-puff is:
 - Yeast.
 - Bacteria.
 - Plasmodium.
 - Trypanosoma.
- It is the causative agent of malaria.
 - Anopheles mosquito.
 - Female Anopheles mosquito.
 - plasmodium parasite.
 - Culex mosquito.

SECTION II

Questions 8 to 17 (ten questions)

Directions: This group of questions relates to biological diagrams. Each diagram is followed by a set of questions. Select the best answer for each question.

- This question refers to a stage in nuclear division.



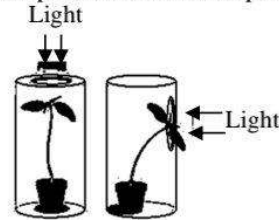
This stage in nuclear division is called:

- Prophase.
- Anaphase.
- Metaphase.
- Telophase.



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- The set up below was used to proof that:

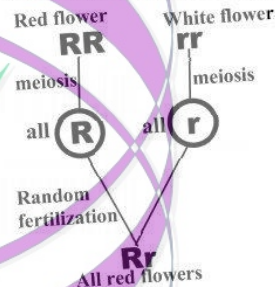


- Shoot of plant are negatively phototropic.
 - Shoot of plant are positively phototropic.
 - Root of plants are negatively geotropic.
 - Roots of plant are positively geotropic.
- A form of natural vegetative propagation seen in the diagram below is called:



- Rhizome.
- Bulbs.
- Corms.
- Suckers.

- Examine the cross below. From the cross it is seen that the red flowers are:

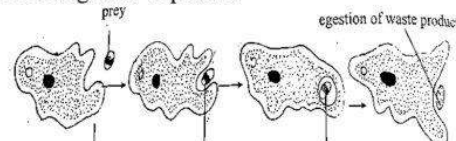


- Dominant.
 - Heterozygous.
 - Recessive.
 - Codominance.
- In the food chain below, the owls represent

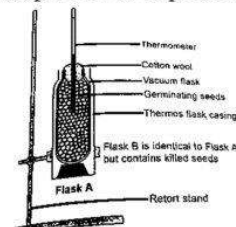


- Primary producers.
- Secondary consumers.
- Primary consumers.
- Tertiary consumers.

- The diagrams represent

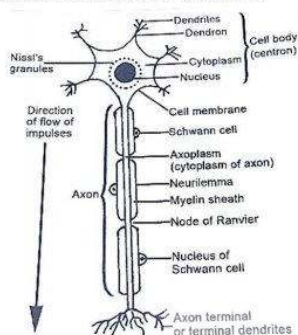


- Amoeba conjugation.
 - Amoeba respiration.
 - Amoeba nutrition.
 - Amoeba excretion.
- The set up below is to proof that



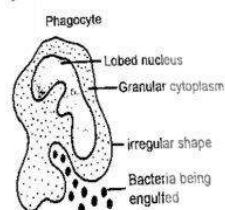
- Heat is produced during respiration.
- Oxygen is used up during respiration.
- Carbon dioxide is given off during respiration.
- A flask is needed for respiration.

15. The role of the neuron below is



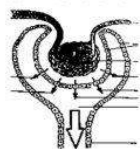
- Transmit impulses to the brain.
- Transmit impulses within the brain.
- Transmit impulses within the spinal cord.
- Transmit impulses to the effector organs.

16. Blood cell below:



- Play a role in clotting.
- Transport respiratory gases.
- Play a role in defense.
- Dissolve substances within.

17. The main role of the structure below is



- Selective reabsorption.
- Direct secretion.
- Tubular secretion.
- Ultrafiltration.

SECTION III

Questions 18 to 27
(ten questions)

Directions: For each of the questions below, one or more of the responses is (are) correct. Decide which of the responses is (are) correct. Then choose:

A.	If 1, 2 and 3 are correct.
B.	if 1 and 2 are correct.
C.	If 2 and 3 are correct.
D.	If 1 only is correct.

DIRECTIONS SUMARIZED			
A	B	C	D
1, 2, 3	1, 2 only	2, 3 only	1 only

18. Loud noise in cities may result to:

- Deafness.
- Difficulties to sleep.
- Growth of population.



19. It is a nutritional requirement for photosynthesis:

- Water.
- Carbon dioxide.
- Nitrogen.

20. The structure that permit transpiration to occur:

- Stomata.
- Lenticel.
- Root hair.

21. The part of the pollen grain that carry out double fertilization is:

- Generative nucleus.
- Tube nucleus.
- Polar nucleus.

22. The term phenotype means:

- Outer appearance of an organism.
- Gene composition of an organism.
- Genetic make-up of an organism.

23. In bread mould:

- The stolon grows horizontally.
- Sporangiophore grows vertically upward.
- Rhizoid play a key role in extra cellular digestion.

24. In the pyramid of number:

- The number of organisms decreases as we move from the lower trophic level to the higher ones.
- The energy increases as we move from the lower trophic level to the higher ones.
- The producers and decomposers level are equal.

25. The hormone oxytocin:

- Play a role in growth.
- Play a role in milk secretion.
- Play a role in labour.

26. The stomach secretes HCl (hydrochloric acid) whose role is:

- to kill bacteria present in food.
- to convert pepsinogen to pepsin.
- to provide an acidic medium for the enzyme to work best.

27. Sebaceous gland:

- secrete sebum.
- cause the body to be oily.
- provide melanin to the skin.

SECTION IV

Questions 28 to 32 (five questions)

Directions: Each of the following questions consists of a statement in the left-hand column followed by a second statement in the right-hand column. Decide whether the first is true or false. Decide whether the second is true or false. Then, on your answer sheet mark.

- If both statements are true and the second statement is a correct explanation of the first.
- If both statements are true but the second is NOT the correct explanation of the first.
- If the first statement is true but the second statement is false.
- If the first statement is false but the second statement is true.

DIRECTIONS SUMMARIZED			
	First statement	Second statement	
A.	True	True	2 nd statement is correct explanation of the first
B.	True	True	2 nd statement is NOT a correct explanation of the first
C.	True	False	
D.	False	True	

S/N	First statement	Second statement
28.	Man is a mammal because they are called man.	Mammals are organisms that breast feed their young with milk from the mammary gland.
29.	Characteristics of wind pollinated flower is that the petal is dull in colour.	Wind pollinated flowers always have light pollen grains.
30.	A food chain always begins with a producers.	Marine food chain always exceed six links.
31.	The Chinese have been practising indiscriminate fishing in the coast of Cameroon.	Indiscriminate fishing may lead to poor harvest in the long run as premature fishes are harvested.
32.	ADH is secreted by the adrenal gland.	ADH causes reabsorption of water in the kidney tubules.

SECTION V

Questions 33 to 43 (eleven questions)

33. The male lizard is attracted to the female by the:
- Tail.
 - Gular fold.
 - Fore limb.
 - Colour of head.
34. An example of a mutualistic bacteria that carry out nitrogen fixation is:
- Azotobacter.
 - Rhizobium.
 - Nitrosomonas.
 - Nitrobacter.
35. It is an organism where gaseous exchange occurs over the entire body:
- Earthworm.
 - Grasshopper.
 - Garden snail.
 - Bahama grass.
36. It is an artery that transport deoxygenated blood:
- Aorta.
 - Hepatic artery.
 - Renal artery.
 - Pulmonary artery.
37. The site where lymphocyte is produce:
- Lymph node.
 - Lymph vessel.
 - Lymph tube.
 - Lymph terminal.
38. It is a social insect.
- House fly.
 - Dragon fly.
 - Honey bee.
 - Butter fly.
39. The vector used to carry gene from human to be clone in bacteria is:
- Bacteriophage.
 - Phage.
 - Restriction enzyme.
 - Plasmid.
40. A metabolic waste produce from worn out red blood cell is:
- Urea.
 - Uric acid.
 - Ammonia.
 - Bile.
41. A leafy shoot is cut under water before the potometer experiment. Why is the leafy shoot cut under water?
- To allow continuous flow of water
 - To permit the leaf to be fresh

- To prevent air bubble from blocking the xylem
 - To Allow the water to represent the root
42. The structure that permits the bird to land on any surface without being electrocuted is:
- Feathers.
 - Beak.
 - Tail.
 - Scale.
43. The negative effects of ozone depletion is:
- Healthy growth of tropical plants.
 - Improve fertility of the soil.
 - Promotion of air pollution.
 - Increase incidence of cancer in man.

SECTION V

Questions 44 to 50 (seven questions)

Directions: This group of questions deals with biological situations. Each situation is followed by a question. Select the best answer for each question

44. In an experiment to proof that oxygen was given off during photosynthesis, a glowing splint was used. What will happen to the glowing splint when it was exposed to the test tube containing oxygen?
- The glowing splint will burst into flame.
 - The glowing splint will reduce in size.
 - The Glowing splint will become black.
 - The glowing splint will remain unchanged.
45. Fresh palm wine gets sour in the course of the day because of
- Fermentation of sugar.
 - Production of oxygen.
 - Presence of alcohol.
 - Release of carbon dioxide.
46. Why is leguminous plants such as cover crop planted in between rubber plants?
- To shade the other plants.
 - To improve on water loss.
 - To improve on the nitrate content of the soil.
 - To withdraw more carbon dioxide from the atmosphere.
47. In an experiment to demonstrate that osmosis occur in living tissues, potato tuber was boiled. What could be the reason for boiling the potato in this experiment?
- To facilitate the process of osmosis.
 - To show that osmosis occur in living tissues.
 - To destroy the selective permeability of the membrane.
 - To increase the size of the pores required for osmosis.
48. A characteristics shown by most mammals is:
- they laid eggs.
 - their body is covered by feathers.
 - they have homodont dentition.
 - they show parental care.
49. It is a fluid that bath the cells and serves as a means of exchanging material with the cells.
- Endolymph.
 - Tissue fluid.
 - Lymph.
 - Perilymph.
50. It is a chemical used to test for the presence of starch in a food sample
- Benedict solution.
 - Fehling solution.
 - Iodine solution.
 - Millon's reagent.



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END

GO BACK AND CHECK YOUR WORK