REPUBLIC OF CAMEROON Peace – Work – Fatherland

FAR NORTH REGION

DELEGATION FOR SECONDARY EDUCATION

REGIONAL INSPECTORATE OF PEDAGOGY IN CHARGE OF THE

TEACHING OF SCIENCES

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REPUBLIQUE DU CAMEROUN Paix – Travail – Patrie

REGION DE L'EXTREME-NORD

DELEGATION DES ENSEIGNEMENTS SECONDAIRES

INSPECTION RÉGIONAL DE PÉDAGOGIE CHARGÉE DE L'ENSEIGNEMENT DES SCIENCES BP 1020 MAROUA TEL 222 29 23 27 FAX 222 29 30 55

FAR NORTH REGIONAL MOCK EXAMINATION

BIOLOGY PAPER 1

ORDINARY LEVEL

Centre Number	
Centre Name	
Candidate Identification No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

MULTIPLE CHOICE QUESTION PAPER

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 THROUGHOUT 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 "-- 0510 Biology 1 - Ordinary Level"

4. Fill in the information required in the spaces above.

5. Fill in the information required in the spaces provided on the answer sheet using your HB pencil:

Candidate Name and Number, Centre Number and Name.

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 equal marks,

7. Each question has FOUR suggested answers: A, B, C and D. Decide on which answer is appropriate. Find the number of the question 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 your correct answer, encircle C as shown below: [A] [B] [©] [D]

8. Encircle only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.

9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to that question later.

10. Do all rough work in this booklet using the blank spaces in the question booklet.

11 At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH ANY.

Please Turn over

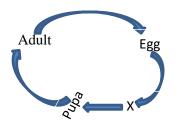
SECTION I

QUESTIONS 1-9

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

- 1. Which of the following atmospheric conditions will increase the rate of water loss in plants?
 - A. Windy, cold and damp
 - B. Windy, hot and dry
 - C. Hot, windy and damp
 - D. Damp, hot and no wind.
- 2. Which of the following best describes a typical reptile ?
 - A. Scaly, warm-blooded and egg laying
 - B. Invertabrate, scaly and cold blooded
 - C. Vertebrate, scaly and cold -b looded
 - D. Hairy, vertebrate and cold-blooded.
- 3. A solution from crushed germinating beans was put into a test tube. Millon's reagent was added and the test tube was heated. Which of the following conclusion is correct?
 - A. A blue colouration
 - B. A purple colouration
 - C. A red colouration
 - D. No colour change
- 4. Which of the following best describes the blood in the pulmonary artery?
 - A. Deoxygenated, poor in food and under high pressure
 - B. Oxygenated, rich in food and under high pressure
 - C. Oxygenated, poor in food and under low pressure
 - D. Deoxygenated, rich in food and under high pressure
- 5. A shoot illuminated on one side will
 - A. Bend to one side
 - B. Bend towards the light source
 - C. Look weak
 - D. Lack chlorophyll
- 6. The pigment melanin that gives the skin its colour is found in
 - A. Malpighian layer
 - B. Granular layer
 - C. Cornified layer

- D. Dermis
- 7. Tyrosine is secreted by the
 - A. Duodenum
 - B. Stomach wall
 - C. Pancreas
 - D. Ileum
- 8. The diagram below is the life cycle of a housefly.

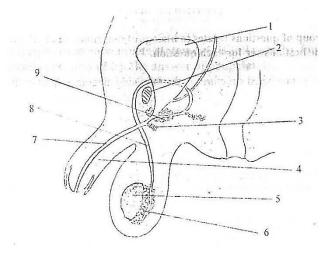


Which of the following is true of stage "X"

- A. It feeds heavily
- B. It is not segmented
- C. It is dormant
- D. It is the cocoon
- 9. Adult insects are covered by?
 - A. Cuticle
 - B. Scales
 - C. Hairy skin
 - D. Epidermal cells

SECTION II

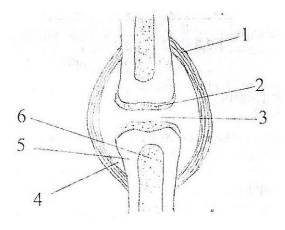
Questions 10-16 refer to the numbered structures in the following diagram of the male urogenital system.



- 10. Where are spermatozoans manufactured?
 - A. 1
 - B. 3
 - C. 5
 - D. 6

- 11. Where are spermatozoans stored?
 - A. 3
 - B. 4
 - C. 5
 - D. 6
- 12. Where is urine stored?
 - A. 1
 - B. 2
 - C. 6
 - D. 5
- 13. Which one of the following contributes to the formation of semen?
 - A. 3
 - B. 4
 - C. 6
 - D. 7
- 14. The prostate gland is the structure labelled.
 - A. 6
 - B. 7
 - C. 8
 - D. 9
- 15. Which structure carries sperm away from the testis?
 - A. 6
 - B. 7
 - C. 8
 - D. 9
- 16. Which structure serves as a passage for both sperms and urine?
 - A. 6
 - B. 7
 - C. 8
 - D. 9

Questions 17-20 refer to the numbered structure of the following diagram of a section through a knee joint.



- 17. Which of the labelled part is the ligament?
 - A. 1
 - B. 3
 - C. 4
 - D. 5
- 18. Which of the parts labelled is a cartilage?
 - A. 2
 - B. 4
 - C. 5
 - D. 6
- 19. The joint above is an example of a
 - A. Ball and socket joint
 - B. Sliding joint
 - C. Pivot joint
 - D. Hinge joint
- 20. The structure which prevents friction is:
 - A. 1
 - B. 2
 - C. 5
 - D. 6

SECTION III

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

- A. If 1.2.3 are correct
- B. If 1 and 2 only are correct
- C. If 2 and 3 are only are correct
- D. If 1 only is correct
- 21. Blood leaving the ileum is
 - 1. Rich in digested food
 - 2. Rich in wasted
 - 3. Rich in oxygen
- 22. The spread of HIV can be prevented
 - 1. Avoid eating with infected persons
 - 2. Correct use of condoms
 - 3. Screening blood for transfusion
- 23. The absence of nitrogen in plants results in
 - 1. Yellowing of leaves
 - 2. Staunted growth
 - 3. Poor root development
- 24. The cytoplasm of an amoeba cell contains
 - 1. Starch granules
 - 2. Contractile vacuoles
 - 3. Food vacuoles

- 25. The central nervous system consists of
 - 1. The brain
 - 2. Spinal cord
 - 3. Spinal nerves
- 26. The placenta in mammals may perform the function of
 - 1. Secretion of progesterone
 - 2. Gaseaous exchange
 - 3. Formation of antibodies
- 27. Filtration is possible in the Bowman's capsule because
 - 1. There is high blood pressure
 - 2. There is a large surface area
 - 3. The walls of the capsule are moist
- 28. Optimum temperature in plants, induce
 - 1. Ripening of fruits
 - 2. Seed germination
 - 3. High glucose production
- 29. High concentration of carbon dioxide in the atmosphere causes
 - 1. Global warming
 - 2. Acid rains
 - 3. Breathing difficulties
- 30. During labor, there is
 - 1. Dilation of the cervix
 - 2. Breakage of the amniotic sac
 - 3. Breakage of the umbilical cord
- 31. Insects are considered very successful because
 - 1. They feed on grass which is everywhere
 - 2. They have an efficient respiratory system
 - 3. They have an exoskeleton to prevent dessication
- 32. Adaptations shown by birds to flight is (are)
 - 1. Sharp Claws for landing
 - 2. hollow bones
 - 3. presence of air sacs

SECTION IV

	Directions			
	First	Second		
	statement	statement		
А	True	False	Second statement is a	
			correct explanation of	
			the first	
В	True	True	Second statement is	
			Not a correct explanation	
			the first	
С	True	False		
D	False	False		

	First	Second
	statement	statement
33.	Mammals are warm-	Mammals have a
	blooded	constant body
		temperature
34.	In dim light, more	The diameter of the
	light enters the eye	pupil widens in
		dim light
35.	Digestion of starch	Absorption of
	starts in the stomach	starch starts in
		the stomach
36.	Germinative layer	Germinative layer
	cells are diploid	Cells are produced by
	are diploid	mitosis
37.	Small organisms have	Small organisms
	Large surface/volume	do not Need a
	ratio	circulatory
		System
38.	Ostrogen controls	At, puberty,
	development of	ostrogen is
	secondary sexual	produced from
	characteristics at	the Pituitary.
	puberty	
39.	During overcooling,	During
	There is reduced	overcooling,
	Sweating	there is v
		vasodilation
40.	In complete	During complete
	Metamorphosis,	metamorphosis,
	the adult does not	there is an
	resemble the larva	appearing resting
		stage

SECTION IV

This group of questions deals with Biological situations, each account is followed by a set of questions. Select the best answer to each question.

Questions 41- 45 refer to the following experiment.

A large trough was filled with water and a small conical shelf put at the bottom. A small gas jar(x) was filled with water and inverted to stand on the conical flask. A long rubber tube was introduced into the inverted gas jar through the conical shelf. After exhaling most of the air from the lungs, a man blew the remaining air into the gas jar through the rubber tube displacing all the water all the water in the gas jar. A glass plate was used to cover the mouth of the gas jar and it was taken out of the water. Another gas jar(y) was left open on the table and the mouth was simply closed with a glass plate. A burning candle was placed in each of the gas jar and the time taken for the flame to go out was recorded.

- 41. Why does the candle flame go out?
- A. Carbondioxide is finished
- B. Nitrogen fished
- C. Oxygen is finished
- D. Insert gases are finished

42. How would the time for the flame to go out vary for the for the two gas jars?

A. Shorter in jar A, longer in jar Y

B. Shorter in jar, longer in jar X

C. Equal in both jar X and Y

D. Only varies in jar Y

43. Jar A has the following approximate gas composition

A. $Co_2 = 0.03\%$, $O_2=21\%$. $N_2=79\%$, Inert gas=1%

- B. $Co_2 = 0.03\%$, $O_2=16\%$. $N_2=79\%$, Inert gas=1%
- C. $Co_2 = 4\%$, $O_2=21\%$. $N_2=79\%$, Inert gas=1%
- D. $Co_2 = 4\%$, $O_2=16\%$. $N_2=79\%$, Inert gas=1%

44. How does the composition of gases in jar A differ from those of jar B?

A. A has more O_2 and less CO_2 than B.

B. A has less O_2 and more CO_2 than B.

- C. A has the same amount of O_2 as B.
- D. A ha the same amount of CO_2 as B.

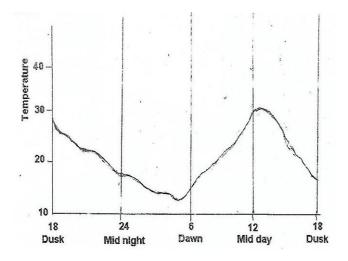
45. Which Biological process in animals accounts for the difference in gas composition between jars A and B?

A. Photosynthesis

B. Excretion

- C. Respiration
- D. Osmosis

Questions 46-48 relate to the graph below showing changes in temperature in the tropical rain forest of the south Cameroon.



46. During which time of the day will cold blooded animals be most active?

A. Mid night

- B. Mid-day
- C. Dusk
- D. Dawn

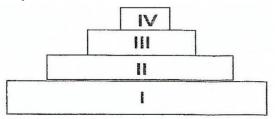
47. During which period of time will forest trees produced the highest amount of sugars?

- A. 18-24 hours
- B. 24-6 hours
- C. 6-12 hours
- D. 12-18 hours

48. How do plants fight the high temperatures of the mid-day?

- A. shed their leaves
- B. close their flowers
- C. roll their leaves
- D. shed flowers

Questions 59 and 60 are concerned with the following representation of biomass in a grass field ecosystem



- 49. What does each block represent?
- A. amount of consumers
- B. amount of producers
- C. amount of energy
- D. amount of wasted
- 50. Organisms found in block II are,
- A. Producers
- B. Herbivores
- C. Carnivores
- D. Decomposers