

REPUBLIC OF CAMEROON  
Peace – Work – Fatherland  
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FAR NORTH REGION  
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DELEGATION FOR SECONDARY EDUCATION  
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REGIONAL INSPECTORATE OF PEDAGOGY IN CHARGE OF THE  
TEACHING OF SCIENCES  
PO BOX 1020 MAROUA PH 222 29 23 27  
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REPUBLIQUE DU CAMEROUN  
Paix – Travail – Patrie  
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REGION DE L'EXTREME-NORD  
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DELEGATION DES ENSEIGNEMENTS SECONDAIRES  
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INSPECTION RÉGIONALE DE PÉDAGOGIE CHARGÉE DE  
L'ENSEIGNEMENT DES SCIENCES  
BP 1020 MAROUA TEL 222 29 23 27 FAX 222 29 30 55  
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## FAR NORTH REGIONAL MOCK EXAMINATION

**BIOLOGY**

**ORDINARY LEVEL**

<b>Subject title: BIOLOGY</b>	
<b>Paper No: 2</b>	
<b>Subject code: 510</b>	
<b>Duration: Two hours</b>	

*Answer Five Questions, ALL THREE from SECTION A and ANY TWO from SECTION B. Each question carry 20 marks.*

*Give labelled diagrams where necessary*

*Answers should be written in good English and orderly presented*

## SECTION A

1. (a) Explain how the following organisms are adapted to life in their habitats  
(i) Insects (ii) Fresh water amoeba  
(b) Explain the following biological facts  
i) Fish would suffocate on land with much oxygen supply  
ii) Amoeba lacks a circulatory system? (12, 8 marks)
2. (a) What are the differences between respiration and photosynthesis?  
(b) How would you demonstrate that carbon dioxide is produced during respiration in a small mammal?  
(c) Describe urine formation at the kidneys? (4, 8, 8 marks)
3. (a) Describe the process by which nitrogen is removed from the atmosphere and soil?  
(b) How is nitrogen fixation important  
(c) What are effects of the following human activities on the environment?  
(i) Deforestation (ii) Combustion fuel? (10, 5, 5 marks)

## SECTION B

4. (a) Make a large labelled diagram of the male reproductive system  
(b) State the function of the following in mammals' reproduction?  
(i) Vagina (ii) Uterus (iii) Breast  
(c) Describe the birth process in humans? (5, 6, 9 marks)
5. A poultry farmer crossed pure-breed white fowls with pure-breed black fowls all offspring were blue. When two of these blue fowls were crossed, it was observed that out of the 492 F<sub>2</sub> fowls produced, 121 were black, 125 were white and 246 were blue  
(a) Using diagrams and appropriate symbols, explain the genetics of the crosses  
(b) What would you expect in a cross between a blue and a black fowl?  
(c) Define the terms mutation and variation. Name any four agents that cause mutation (10, 4, 6 marks)
6. (a) How does sexual reproduction differ from asexual reproduction?  
(b) Describe the process of sexual reproduction in a NAMED insect-pollinated flowering plant. In your answer, refer to pollination, fertilization, seed and fruit formation  
(c) Describe the functioning of the eye in image formation (5, 10, 5 marks)
7. (a) Explain the function of the mammalian brain?  
(b) With the aid of an illustrated diagram, explain how your nervous system will react when you accidentally touch a hot iron  
(c) Explain how the skin functions as a homeostatic organ in mammals? (5, 8, 7 marks)