

**Meghalaya**  
**Class XI**  
**Bio Zoology**  
**Sample Paper-2**

**Time allowed: 1.5 hours**

**Maximum Marks: 35**

**General Instructions:**

- (i) Write all the answers in the Answer Script.
- (ii) Attempt all parts of a question together at one place.
- (iii) All questions are compulsory.
- (iv) This question paper consists of 4 (four) Groups – A, B, C and D.

GROUP 'A' – Consists of **6** (six) Questions (Nos. **1-6**) of 1 (one) mark each; very short answer to be answered in 1 word or 1 sentence each.

GROUP 'B' – Consists of **4** (four) Questions (Nos. **7-10**) of 2 (two) marks each; which one alternative from the same units; short answer, to be answered in 20-30 words each.

GROUP 'C' – Consists of **3** (three) Questions (Nos. **11-13**) of 3(three) marks each; with one alternative, to be answered in 30-40 words each.

GROUP 'D' – Consists of **3** (three) Questions (Nos. **14-16**) of 4 (four) marks each; with one alternative, long answer type, to be answered in 60-70 words each.

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**GROUP – A**

- 1.** Where does the partially digested food pass from the stomach in frogs? **1**
- 2.** State the event which marks the beginning of diakinesis. **1**
- 3.** What is the function of the gastro-oesophageal sphincter? **1**
- 4.** Name the muscles which increase the volume of the thoracic chamber. **1**
- 5.** Name the major proteins of the plasma. **1**

6. State the significance of the occipital condyles. 1

**GROUP - B**

7. What is the source of melatonin? What is the function of melatonin? 2

**Or**

In summer, the urine is more concentrated and thick. Why?

8. What is the importance of pneumatic bones and air sacs in Aves? 2

9. What is the organ of locomotion in motile bacteria? Which is the longest portion of this organ? 1+1=2

10. How does the diaphragm help in inspiration? 1+1=2

**GROUP - C**

11. What is an electrocardiogram? Name the instrument used to measure an electrocardiogram. State the significance of the electrocardiogram. 2+1=3

12. Explain the renin-angiotensin mechanism. 3

**Or**

Explain how the glomerular filtration rate is maintained by the kidneys?

2+1=3

13. Describe the quiescent stage of the cell cycle. 1+2=3

**GROUP - D**

14. Represent diagrammatically the exchange of gases at the alveolar level and the tissue level. 4

**Or**

Oxygen binds to haemoglobin at the lung surface and dissociates at the tissues. Justify.

15. What is uraemia? Name and describe the process used to remove waste substances from individuals suffering from uraemia. 1+3=4

16. Differentiate between mitosis and meiosis. 4