

**Meghalaya**  
**Class XI**  
**Bio Zoology**  
**Sample Paper-1**

**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**

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|--|----------|
| <b>1.</b> Can there be mitosis without DNA replication in the 'S' phase?                               | <b>1</b> |
| <b>2.</b> What does the H-zone of a sarcomere in a myofibril contain?                                  | <b>1</b> |
| <b>3.</b> Name an alga which is used in laboratory culture media.                                      | <b>1</b> |
| <b>4.</b> Which stage of cell division will you select to study the morphology of chromosomes and why? | <b>1</b> |
| <b>5.</b> What is the name given to the bulb-like structures at axon terminals?                        | <b>1</b> |

6. What are oothecae? 1

**GROUP - B**

7. Differentiate between chromatin and chromosomes. 2

**Or**

Mention two functions of the following:

- i. Polysaccharides
- ii. Amino acids

8. What is meant by haemocoel? Name the phylum which shows this feature. 2

9. What is the site of fat digestion in humans? Name the enzyme which digests fats. 2  
Mention the end-product of fat digestion.

10. Why the axoplasm of a resting axon is negatively charged? 2

**GROUP - C**

11. What is the significance of meiosis? 2+1=3

12. Describe three disorders of the skeleton and joints. 3

**Or**

What is cretinism? Give any two causes of it.

2+1=3

13. Enumerate three points to show the interaction of cockroach with mankind 1+2=3

**GROUP - D**

14. Oxygen binds to haemoglobin at the lung surface and dissociates at the tissues. 4  
Justify.

**Or**

Write important characteristic features of phylum Porifera.

15. State the criteria which form the basis of classification of the animal kingdom. 1+3=4

16. Describe the formation of haploid spores in fungi. 4