



- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate the answers with suitable diagrams and examples.

1. Explain the calibration procedure of burette and pipette. 8  
  

**OR**

  - a) Write procedure of calibration of analytical balance. 4
  - b) Write general operating procedure of microscope. 4
  
2. Discuss sampling devices used for sampling of water. 8  
  

**OR**

  - a) Explain sampling method for ambient air. 4
  - b) State tools used to collect soil sample. 4
  
3. Explain ecology of Plankton. 8  
  

**OR**

  - a) Write about bio-indicator. 4
  - b) Discuss preservation method of zooplankton. 4
  
4. Write operating procedure of centrifuge machine. 8  
  

**OR**

  - a) Write operation of conductivity meter. 4
  - b) Explain working components of pH meter. 4
  
5. Answer in brief **any eight**. 8
  - a) Write common rules applicable to every laboratory.
  - b) Mention hygiene practices adopted in a laboratory.
  - c) Explain importance of an analytical balance.
  - d) Mention equipment's used in air sampling.
  - e) Write about preservation of water sample.
  - f) Write about storage of soil sample.
  - g) What is neuston?
  - h) Define periphyton.
  - i) What is macrophyte?
  - j) What is pH meter?
  - k) What are the advantages of turbidimeter?
  - l) What is the use of a centrifuge machine?

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