



- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate your answer with suitable diagram and examples where-ever necessary.

1. Explain the mechanism of biological nitrogen fixation in plants. **16**

**OR**

Write on:

- a) Protein synthesis in eukaryotes. **8**  
b) Absorption of water by root. **8**

2. What is ecological succession? Explain sequential stages of development of plant communities in hydrosere and add a note on climax community. **16**

**OR**

Write on:

- a) Darwinism and Lamarckism. **8**  
b) Ecological adaptations in plants. **8**

3. Give an economical importance of Wood, oils, gum and resin yielding plants with examples. **16**

**OR**

Write on:

- a) Fodder and forage plants. **8**  
b) Importance of spices and condiments. **8**

4. Explain the geological time scale in detail. **16**

**OR**

Write on:

- a) Fossilization and its types. **8**  
b) Changes in organic life through ages. **8**

5. Write short notes on:

- a) Plant movement. **4**  
b) Xenobiotics. **4**  
c) Drugs and Narcotics. **4**  
d) Epoch. **4**

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