

B.N.Bandodkar College of Science, Thane  
F.Y.B.Sc. Second Semester Examination 2015  
USBOT202 (Old Course) *Additional/ATKT June 2015*  
Paper II

Duration : 2<sup>1/2</sup> Hrs

Max Marks 75

- N.B. 1. All questions are compulsory.  
2. Figures to the right indicate full marks.  
3. Draw neat labeled diagrams wherever necessary.

- Q.1 a) What are ecosystems. Describe marine ecosystem in detail 10
- OR
- a) Discuss different types of ecosystems. Describe desert ecosystem in detail. 10  
b) With reference to structural aspects of ecosystems, discuss trophic levels and stratification. 10
- OR
- b) Give a detailed account of phytoremediation. 10
- Q.2 a) With reference to genetic engineering, describe the role played by bacteriophage. 10
- OR
- a) Discuss the role played by cosmid in gene cloning. 10  
b) Describe the process of replication as seen in eukaryotes. 10
- OR
- b) Give a detailed account of duplication as seen in prokaryotes. 10
- Q.3 a) What is Aromatherapy? Add note on its applications. 10
- OR
- a) With reference to horticulture, explain Floriculture and Nursery Culture. 10  
b) With reference to forestry explain Gums and Lac. 10
- b) With reference to herbal cosmetics explain Keshya and Twakprasadan. 10
- Q.4 b) Attempt **any three** of the following: 15
1. Explain the process of mycoremediation with the help of suitable examples.
  2. With reference to ecosystem, describe secondary productivity.
  3. Mention the difference between eukaryotic and prokaryotic replication.
  4. Explain the role of DNA ligase in genetic engineering.
  5. Write a note on 'hair' and 'skin' care.
  6. Write a note on Landscape gardening.