



**A-1703**  
**M. Sc. (Integrated Biotechnology) (Sem. IX)**  
**Examination**  
**March / April – 2015**  
**IBT 901: Biodiversity & Bioresources**

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

(1)

<p>नीचे दशांशिक निशानोंवाणी विगतो उत्तरवडी पर अवश्य लखवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>M. SC. (INTEGRATED BIOTECHNOLOGY) (SEM. IX)</b></p> <p>Name of the Subject : <b>IBT 901: BIODIVERSITY &amp; BIORESOURCES</b></p> <p>Subject Code No. : <b>1 7 0 3</b> Section No. (1, 2,.....): <b>Nil</b></p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; height: 80px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">Student's Signature</div>
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- (2) Figures to the right indicate full marks.  
(3) Draw neat and labelled diagrams wherever necessary.

- 1 Answer Any Two of the following : 18
- (a) What is chemotaxonomy? How it is useful in the study of biodiversity of plants?  
(b) Define various types of biodiversity. Write a note on the diversity observed in Bryophytes and Pteridophytes.  
(c) Describe the Centres of origin of cultivated crops.
- 2 Answer Any Two of the following : 18
- (a) Write a detail note of genetic diversity in animals.  
(b) Explain about the diversity of metabolites among marine invertebrate fauna.  
(c) Write a note on: Project tiger and Project Crocodile.
- 3 Explain Any three of the following: 18
- (a) The role of microbial diversity in Bioremediation.  
(b) Discuss the concepts of species in prokaryotes.  
(c) Write a detailed note on role of microbial diversity in solving global environmental problems.  
(d) The application of microbial diversity in promoting biotechnological industry.

- 4 Explain in detail Any Four of the following: 16
- (a) Diversity using r-RNA sequence.
  - (b) The diversity of heterotrophic metabolism in microbes.
  - (c) Microbial diversity based on Oxygenic Photosynthesis and an oxygenic Photosynthesis.
  - (d) Scales of diversity.
  - (e) Diversity indices.
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