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R-4093-94

M. Sc. (Int. Biotechnology) (Sem. IX) Examination

May / June – 2010

IBT-901 : Biodiversity & Bioresources

Time : **3** Hours] [Total Marks : **70**

R-4093

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ M. SC. (INT. BIOTECHNOLOGY) (SEM. 9)

Name of the Subject :

☛ IBT-901 : BIODIVERSITY & BIORESOURCES

☛ Subject Code No. : 4 0 9 3 ☛ Section No. (1, 2,.....) : 1

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks of the question.
(3) Draw neat and labelled diagrams wherever necessary.
(4) Both sections must be written in **separate** answer books.

1 Give a detailed account on genetic diversity in animals. **10**

OR

1 Discuss in detail diversity of metabolites among marine invertebrate fauna. **10**

2 Discuss the significance of study of rare and endangered species of plants. **10**

OR

2 What is Agro-diversity? Discuss the centres of origin of cultivated plants with their importance. **10**

3 Write short notes on any **three** of the foillowing : **15**

(a) Project Crocodile
(b) Components of biodiversity
(c) Rare and endangered species of plants
(d) Meta-population concept
(e) Dolphin

R-4094

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **M. SC. (INT. BIOTECHNOLOGY) (SEM. 9)**

Name of the Subject :

☛ **IBT-901 : BIODIVERSITY & BIORESOURCES**

☛ Subject Code No. : **4 0 9 4** ☛ Section No. (1, 2,.....) : **2**

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks of the question.

(3) Draw neat and labelled diagrams wherever necessary.

(4) Both sections must be written in **separate** answer books.

4 Define "Biomarkers". How lipid biomarkers are useful to assess microbial diversity? **10**

OR

4 Discuss the advantages and limitation of protein profile and lipid marker techniques for assessment of microbial diversity. **10**

5 Discuss the diversity in rRNA-sequences. **10**

OR

5 Enlist various methods for monitoring prokaryotic biodiversity and explain in detail any one molecular method. **10**

6 Write short notes : (any **three**) **15**

(a) Phylogenetic diversity in microbes

(b) Role of microorganisms in methanogenesis

(c) Potentialities of microorganism to revolutionize biotech industries

(d) Polymorphism.
