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18BB1457

M. Tech. EXAMINATION, 2020

(Second Semester)

(C Scheme) (Re-appear)

(BIO-TECHNOLOGY)

BT530C

Biodiversity and Bioresource Technology

Time : 2½ *Hours*] [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Four* questions in all. All questions carry equal marks.

1. (a) Enlighten about the origin of evolution and theories related to Evolution.

(b) Discuss Molecular taxonomy and the molecular techniques which help to establish genetic relationship.

2. (a) Define biodiversity and describe types of biodiversity.

(b) How can genetic resources and endangered species be conserved ?

3. (a) Describe the causes and consequences of biodiversity loss, habitual loss and alteration.

(b) Write about *in vitro* conservation.

4. (a) How does biodiversity management work for a particular habitat ?

(b) Differentiate between classical and new approaches for germplasm conservation.

5. Explain the following in context of Biodiversity :

(a) DNA fingerprinting

(b) Data Analysis–Measure of Polymorphism.

6. (a) Discuss PCR and its application for studying biodiversity.

(b) Describe Bioprospecting and the interdependence between plants, microbes and animals.

7. (a) Outline the benefits and ethical issues related to biotechnologically developed products.

(b) Explain Bioprocessing and general aspects related to Quality Control of Bioprocesses.

8. (a) Describe principles of biosafety and levels of biosafety as extra-precautionary measures during working in research labs.

(b) Discuss influence of Intellectual Property Rights for commercialization of Biotechnology products.