

## **Dept. of Biotechnology**

### **Best Practices**

#### **1. Title of the Practice**

Biotechnology Lecture notes prepared as per the syllabus of Osmania University

#### **2. Objectives of the Practice**

The objective is to provide lecture notes to the students as there are no text books available as per the Osmania University syllabus.

#### **3. The Context**

Biotechnology is one of the new subject compare to other subjects like Botany, Zoology, Chemistry etc. There are several publishers who publish the books in these subjects. Only 20-30% of BSc students opt for Biotechnology, hence publishers not interested to as there are less number of students compare to other subjects. The students who opted Biotechnology as one of the subject facing tough problem in passing the university final examinations because they couldn't find any text books in the market as per Osmania University syllabus. The syllabus, which is prescribed for UG Biotechnology is also very exhaustive and 50% of the PG syllabus dumped in UG Syllabus, which is even a tough task to deal all the syllabus within 180 working days of semester. There are no reference books for Biotechnology in the library to draft the notes also. To address this issue I planned to prepare lecture notes (study material) as per the syllabus in precise way so that students.

#### **4. The Practice**

Initially I started preparing notes for my self to teach for each chapter. Being a teacher, teacher much be having well acquainted with the topic. By collecting material from internet sources and reference books and simplifying notes to the level of student capacity is the big task, besides having additional responsibilities in addition to teaching such as UGC Coordinator, Time table Coordinator, AISCHE Coordinator, NIRF Coordinator, TSAT Coordinator, BSc Life Science admissions Coordinator and Virtual Class room Coordinator. I can ask them to read reference books or text books available in the college and in the market. But students has to spend lot of time and most of the students are travelling hours to reach the college. Hence I took it as challenge and drafted notes from scratch. The material, which I prepared in unique as there are no such kind of text books or guides available in the market. The major limitation

is that I am one faculty in Biotechnology department and I shall teach all the papers of Biotechnology to the 1<sup>st</sup> year, 2<sup>nd</sup> year and 3<sup>rd</sup> years besides handling the other college responsibilities without any typist. Since there are no reference books in the library, soft copy of the reference books shared to the students, so that whoever interested in learning in depth they will read these ebooks.

#### **5. Evidence of Success**

Only 52% Students passed in the first semester of 2018-19, when the course was started in the college. I put more efforts in preparing study material and the same shared to the students. In the recent results i.e., II and IV the semester exams, students passed 84% in II semester and 82% in IV semester. It indicates that there is significant improvement in the pass percentage of the students. The material which I prepared in this way helped me a lot in delivering online classes with soft copy of the material during COVID 19 pandemic, when all the educational institutions remain closed for almost one year.

#### **6. Problems Encountered and Resources Required**

The publishers shall take initiation in printing books for rare subjects also like Biotechnology, Microbiology, Applied nutrition and Biochemistry. To address this issue my self approached Telugu Academy Publishers and they readily accepted to publish the material prepared by me. The first semester Biotechnology text book is now already available in the market. The library could also have text books and reference books related to the Biotechnology, as this course was started in 2018-19 academic year. There could be clerks and typists so that the teacher would have more time in preparing class. There could be at least two teachers in the Biotechnology, Microbiology, Applied nutrition and Biochemistry like subjects so that teachers will share papers and it would be much burden on one teacher.

#### **7. Notes (Optional)**

Recently an whatsapp group is created for faculty teaching Biotechnology in other colleges in the city of Hyderabad. This would help in exchanging the ideas and sharing of knowledge and resources.