ದಿನಾಂಕ: 06/05/25

ಇಂದ
ಡಾ.ಶರತ್ಚಂದ್ರ .ಆರ್.ಜಿ
ಅಧ್ಯಕ್ಷರು
Bord of Studys (UG & PG)
ಸ್ನಾತಕೋತ್ತರ ಜೈವಿಕ ತಂತ್ರಜ್ಞಾನ ಅಧ್ಯಯನ ಮತ್ತು ಸಂಶೋಧನಾ ವಿಭಾಗ
ತುಮಕೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

ಇವರಿಗೆ
ಕುಲಸಚಿವರು
ತುಮಕೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ತುಮಕೂರು-572103

ವಿಷಯ:– : BSC Biotechnology ಯ Intership Guideline ಸಲ್ಲಿಸುತ್ತಿರುವ ಕುರಿತು.

ಮಾನ್ಯರೇ,

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ (Board of studies) by circulation ಮುಖಾಂತರ Approval ಪಡೆದು Syllabus & Bos- Biotechnology guidelines ಗಳನ್ನು ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸುತ್ತಿದ್ದೇನೆ.

ವಂದನೆಗಳೊಂದಿಗೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

ತುಮಕೂರು ವಿಶ್ವವಿದ್ಯಾಲಯ ಸಂಖ್ಯೆ 626 ದಿನಾಂಕ 6/5/25 ತುಮಕೂರು.

ಡಾ. ಶರತ್ಚಂದ್ರ ಆರ್.ಜಿ
Dr. R.G. SHARATHCHANDRA
ASSOCIATE PROFESSOR & CHAIRMAN
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TUMKUR UNIVERSITY

GUIDELINES FOR INTERNSHIP IN BIOTECHNOLOGY

FOR BACHELOR OF SCIENCE IN BIOTECHNOLOGY NEP (B.Sc.)

Prepared by

BOS in BIOTECHNOLOGY (UG & PG)

INTERNSHIP program for the B.Sc Students of the VI Semester

Max Marks-100 **4 hrs (3 credits) /week**

Summative Assessment: 60

Internal Assessment:40

The students are required to complete a mini-project and conduct a field visit to a relevant industry or research Institute in Biotechnology

Objectives:

- The objective of the mini project for Biotechnology students is to create profound awareness on the subject matter with practical skills. Project creation helps to evolve creative thinking, develop analytical skills with reasoning ability and render them as competent biotechnologist.
- The objective of field and industrial visits for students is to provide practical exposure to advanced techniques carried out in industries and bridge the gap between industry and academia with innovative learning and enable them as skilled entrepreneurs.

Outcomes:

- Mini projects offer students numerous benefits, primarily focusing on hands-on learning and skill development. They enhance problem-solving abilities, encourage teamwork, and provide opportunities for the practical application of theoretical knowledge. Mini projects also boost confidence and creativity, fostering a deeper understanding of the subject matter.
- Field and industrial visits provide students with valuable experiential learning, practical insights into industry operations, and networking opportunities, ultimately enhancing their employability and career aspirations. These visits bridge the gap between theoretical knowledge and real-world applications, increasing motivation and engagement.

MINI PROJECT at the College/ Industry/ Research institutes

- Mini projects for Biotechnology students are a helpful to apply theoretical knowledge through hands-on learning. It should be relevant to the curriculum. The project should be manageable in scope and time (4-6 weeks of time).
- Students can perform the work individually or work in a group (5- 6 students in a group)

This may include,

1. Carrying out project under the guidance of teachers.
2. Survey of the quality of various food products available in market and qualitof drinking water and analyzing the data.
3. Isolation of plant pathogens from locally cultivated plants and studying their remedial measures (Bio-control agents, organic fertilizers).
4. Bioremediation of environmental pollutants and effluent treatment methods.
5. Study of medicinal plants and their pharmacological analysis and their applications.
6. Study of microflora in humans w.r.t enteobacter and dermatophytes.
7. Fermentation studies w.r.t microbial products(wines,enzymes,organic acids,SCP etc)

• Following project completion, each student or group should submit the project report to the department using the format provided below.

Project report:

- Cover Page / Title Page
- Title of the project
- Declaration by the students and Certificate by the Guide and HOD stating that the work has been carried out by the student under His/Hers guidance.
- Acknowledgements
- Abstract
- Objectives or aim
- Introduction/Background
- Methodology/Experimental Section
- Results and discussion
- Conclusions
- References

Field report

- Background or context of the field visit/study
- Purpose or objectives of the fieldwork
- Observations with photos
- Conclusion

Report Submission for the field visit

The students shall submit a bound copy of the report to the department and it should be maintained by the department for one year. A soft copy of the report should also be submitted by the student to the department.

Evaluation of the Project Report

For the viva voce or oral presentation (PowerPoint), a panel of examiners will consist of one external and one internal member appointed by BoE chair person. These examiners shall also evaluate the project report on the same day of viva voce as per the examination format.

Assessment/ Marks distribution

Credits: 3	**Assessment type**	**Marks**	**TOTAL**
Summative assessment	Project report	40	60
	Viva	20	
Internal assessment	Field visit +Report	20	40
	Marks to be allotted by the guide based on skill, knowledge, involvement in the project. + Seminar	20	
		Maximum marks	**100**

Dr. R.G.Sharathchanda

BoS Chairman

CHAIR MAN
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TUMKUR UNIVERSITY
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