TUMKUR UNIVERSITY

GUIDELINES FOR INTERNSHIP IN PHYSICS

FOR

BACHELOR OF SCIENCE IN PHYSICS

(B.Sc.)

National Educational Policy

Prepared by

BoS in PHYSICS (UG)

Internship Program for the B.Sc Students of 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 research Institute in Physics like IISc, Bengaluru [Department of Physics, Centre for Nano Science and Engineering (CeNSE), Interdisciplinary Centre for Energy Research (ICER)], Jawaharlal Nehru Planetarium, National Aerospace Laboratories, Bengaluru, India meteorological department, Bengaluru, Physics Research Laboratory, C.N.R. Rao Research Centre, Tumkur University, Tumakuru.

OBJECTIVES:

- The objective of the mini project for College students is to facilitate profound insights on the subject matter with practical knowledge. Project creation helps to evolve creative thinking, analytical skills and reasoning ability.
- The objective of field visits for students is to provide practical experience, bridge the gap between theory and practice and enhance career readiness.

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.
- Field 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/ RESEARCH INSTITUTES

- Mini projects for the students of Physics are a great way to apply theoretical knowledge through hands-on learning. It should be relevant to the curriculum. The project should be manageable in scope and time (1-3 weeks of time).
- Students can perform the work individually or work in a group (maximum 6 students in a group)

- The project topic/ experiment should not be selected from the list of experiments mentioned in the syllabus.

This may include,

1. Carrying the mini-project work under the guidance of teachers.
2. Analysis of the data.
3. Project report writing.

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

PROJECT REPORT FORMAT:

- Cover Page / Title Page
- Title of the project
- Declaration by the students and Certificate by the Guide/ HOD stating that the work has been carried out by the student under His/Her 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 field visit
- 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 REPORT

For the viva voce or oral presentation (Power Point), 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	20	40
	Marks to be allotted by the guide based on skill, knowledge, punctuality, involvement in the project (overall performance)	20	
		Maximum marks	**100**

Signature of BoS members:

1.	Prof. Nagabhushana H	
2.	Prof. B. Eraiah	
3.	Dr. M. N. Kalasad	
4.	Shri. Raju. M. S.	
5.	Smt. Mamatha M	
6.	Shri. Chandrashekharaiah G	
7.	Dr. Veerabhadrayya M	
8.	Shri. Harisha Kumar K	
9.	Dr. Mangalagowri M	

Dr. Nagabhushana H

Professor & BoS Chairman

Chairman
Dept of Studies & Reasearch in Physics
Tumkur University
Tumkur - 572102