PES University, Bangalore

(Established under Karnataka Act No. 16 of 2013)

MAY 2020: IN SEMESTER ASSESSMENT (ISA) B.TECH. IV SEMESTER

UE18MA251- LINEAR ALGEBRA

MINI PROJECT (INDIVIDUAL / TEAM) - Guidelines

In line with the notification of the Vice- Chancellor of PESU dated 30th April, 2020 it has been decided to give mini project in the course Linear Algebra (UE18MA251) which will account for ISA with a weightage of 25 marks.

All students of IV Semester B. Tech of the PES University have to compulsorily take a project work in the above mentioned course as part of In Semester Assessment. Projects are opportunities for a student to study a topic and develop skills such as writing reports and giving presentations. By doing a project the students get an opportunity to work as a team, spend a good amount of time in gathering knowledge and get a wider perspective of it which will foster the research ability in them. They would get naturally adapted to doing projects in their higher semester. Doing projects would in due course would lead to decent publications in reputed journals.

Following are the General Guidelines to be followed by the students while carrying out the project:

1. The project can be done individually or in a team not exceeding 3 students. The students as a team will have to give a presentation to the Course Instructor as per the schedule prepared by the Course Instructor.

2. The project shall only be on application of Linear Algebra and the topic shall be decided by the students, ensuring that there is no duplication / plagiarism of the work by students of the same class.

3. The project report may be submitted in the following format.

(i) The report shall be typed / neatly written on white paper. The size of the paper shall be standard A4. The standard font shall be Times New Roman of 12 pts. with 1.5 line spacing.

(ii) The Face Sheet of the project (common for all) will be mailed to the students by the Course Instructor, which will contain the details of the project such as the title, course code, names with SRN of the students etc.

(iii) **Introduction**

It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the project report. It may also highlight the significant contributions from the investigation.

(iv) Review of Literature

This shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. The extent and emphasis shall depend on the nature of the investigation.

(v) Report on the present investigation

The reporting on the investigation shall be presented with appropriate titles. Important derivations/formulae and detailed results in tabular and graphical forms should be presented here.

(vi) Results and Discussions

This shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study.

(vii) Summary and Conclusions

Conclusions derived from the logical analysis presented in the Results and Discussions shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly.

(viii) Bibliography

1. Number all the references.

2. Use a chronological bibliography.

3. Each listed reference in the bibliography must be cited in the text of the report.

4. For a book, give the names of authors, title of book, edition, chapter number, and page numbers, publisher, location and year of publication.

General Instructions :

1. The completed work should reach the Course Instructor on or before Sunday, 17th May 2020. The mode of submission and the schedule for oral presentation of the work will be notified by the Course Instructors.

2. Hard Copy of the project work shall be submitted by the students on the day of reopening of the University.

3. The project will be evaluated by the Course Instructor based on

(a) background and framing of the problem – how mathematical and non-mathematical portions of the topic will fit into the applications of linear algebra and framing of the problem. Detailed explanation has to be given.

(b) approach and solution to the problem have to be explained in detail along with the techniques and mathematical methods used to solve the problem.

(c) references- students have to list out all the references used in the entire work. At least two books and two journal papers have to be cited.

(d) clarity of the concepts used, organization and creativity of the work done.

(e) submission of project report on time, good choice of examples and evidence of hard work in understanding the topic.