B.TECH SEMINAR GUIDELINES

1. The seminars should be cantered around a contemporary topic and based on recent publications in reputed journals such as IEEE Transactions, national/international Technical journals, Proceedings of national/international Conferences.

2. Each student has to present the seminar individually for duration of 25 minutes and then 5 minutes is assigned for question and answer session. Each section is assigned a slot of 3 hrs/week for the seminar. The scheduled seminar should be got approved by the faculty, well in advance of the scheduled date of seminar, and before beginning the presentation materials for the seminar.

3. The approval of the student's proposal will be based on the "Quality" of the proposal, which in turn will be assessed on the basis of novelty of the topic, techniques and applications, with emphasis on contemporary relevance.

4. Power Point presentations should be in the form of hierarchy of points describing the main issues to be talked about.

5. They should not have some running text as display and merely read it out as their "presentation".

6. Students are encouraged to select topics, which would be relevant to the projects they are working on, subject to prior approval by the project guide and the seminar instructors.

7. For all seminars a comprehensive Literature Survey is COMPULSORY.

8. Seminars by a set of students on a large topic comprising several sub topics can be given in a sequential manner, with each student presenting one separate section of the large topic in proper sequence for understanding the whole system.

9. The seminar report is to be submitted 2 days prior to the presentation day and should follow the general structure given below:

Seminar Report on

Title of the seminar

Submitted by

Name of the student

Registration number
Semester and Section

Department name

Manipal Institute of Technology
(A constituent institute of MANIPAL UNIVERSITY)

Guidelines to Prepare Seminar Report

COVER PAGE

- As per the specified format.

PAPER

- Use A4 (210 mm X 297 mm) bond un-ruled paper.
- Margin 1" on all 4 sides.

CONTENTS

1. Introduction
2. Background for the topic, which should contain details of related work/technology done earlier, literature survey, with brief descriptions of the contributions in each of the paper referred.
3. Methodology
4. Results and discussion
5. Conclusions and future enhancements, if any
6. Reference(s)

NUMBERING

- Every page in the Report must be accounted for except the cover page
- For Sections, use only Arabic numerals with decimals. Section numbering should be left justified using bold print. Example: **1.1, 1.2, 1.3,** etc.
- For equations, use only Arabic numerals with single decimal. Equation numbers should be right justified using normal print. Example (1.1)

TEXT

- Black print, Times New Roman
- Section Headings (12 pts. and bold print and capitals), Sub section Headings (12 pts., bold print and leading capitals), Regular Text (12 pts. and normal print), Special Text (Italics / Superscript / Subscript / Special symbols etc., as per necessity. Special text may include footnotes, endnotes, physical or chemical symbols, mathematical notations, etc.).
- Use **1.5 spacing** between the lines. Use **double spacing** between paragraphs, and fully justified.

TABLES

- Tables should follow immediately after they are referred to for the first time in the text.
- Each Table has to be numbered (Example Table 1, 2, 3 etc.).
- The Table title should be centered with respect to the Table and must be on the top of the Table.
- The titles must be in the same font as the regular text and should be single- spaced.

FIGURES

- Figures should follow immediately after they are referred to for the first time in the text.
- Each Figure has to be numbered (Example Figure 1, 2 etc.).
- The Figure caption should be centered with respect to the Figure and must be at the bottom of the Figure.
- The titles must be in the same font as the regular text and should be single- spaced.
- Graphs, Photographs are also considered to be Figure.

REFERENCES

- As per IEEE
- If the references are from websites, complete address has to be mentioned.

SUBMISSION

- Copy of report need to be submitted to the concerned staff at least two days before the seminar meeting.

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1. INTRODUCTION

1.1 GENERAL

Diabetes continues to be one of the most common underlying factors associated with lower–extremity amputation in post–industrialised and developing countries (Armstrong *et al*., 1998a). Amputations are perhaps the most feared and well–recognised complication of diabetes by the general public. Ulceration is the most common single precursor to amputation and has been identified as a component in 85% of lower-extremity amputations (Pecoraro *et al*., 1990). Many studies have focused on neuropathy, in conjunction with elevated ground reaction forces, as the principal cause of these ulcerations. It is also hypothesised that at the cellular level, increased rate of tissue deformation may result in elevated intracellular calcium concentration, which may lead to cellular death subsequently causing ulcerations (Landsman *et al.*, 1995). The present study is an effort to understand the pressure distribution patterns under the foot-soles of diabetic subjects at different levels of neuropathy (characterised by different grades of sensation loss) with new foot pressure parameters, possibly indicating the different stages in the progress of neuropathy and hence help to detect the early stages of neuropathy responsible for plantar ulcers.

1.2 DIABETES

Diabetes is a disorder caused by decreased production of insulin, or by decreased ability to use insulin. Insulin is a hormone produced by the pancreas that is necessary for the cells to be able to use blood sugar.

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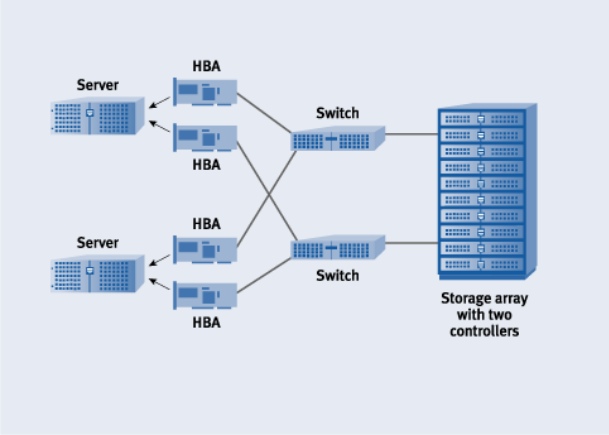

Fig. 5.6 Variation of PR with the levels of sensation, S in the medial heel region (area 1) of 50 feet of diabetic subjects from standing foot pressure image analysis.

Table 5.5 Coefficients of correlation (r) between PR values and levels of sensation (S) and the corresponding regression equations in different areas of the foot in diabetic subjects.

Foot areas	Correlation coefficients (r)	Regression equations
1	0.94	$PR_1 = 3.03 \times S_1 + 15.43$
2	0.96	$PR_2 = 3.45 \times S_2 + 12.94$

REFERENCES

1. **Alexander, I. J.** (1990) The assessment of dynamic foot-to-ground contact forces and plantar pressure distribution: A review of the evolution of current techniques and clinical applications, *Foot and Ankle*, **11**, 152–167.

2. **Tannenbaum A.S. –** "Computer Networks", Edn. 3 , Prentice Hall of India (EE edition), New Delhi, 1998.

3. **Armstrong, D.G., Lavery, L.A.** and **Harkless, L.B.** (1998a) Validation of diabetic wound classification system, *Diabetes Care*, **21**, 855–867.