



Siddaganga Institute of Technology

(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)

B.H. Road, Tumakuru-572 103, Karnataka.

Sl.No. _____

PRACTICAL EXAMINATION ✓ B.E./B.Arch./M.C.A./M.B.A./M.Tech.

Course / Branch: MECHANICAL ENGINEERING

1	S	I	1	8	M	E	0	4	7
UNIVERSITY SEAT NUMBER									

Subject: MINI PROJECT VIVA

Subject Code: 6MEP1

Total number of supplements 1 + _____ = _____

Date:

1	7	0	8	2	0	2	1
D	D	M	M	Y	Y	Y	Y

Saurav

Signature of the Candidate

✂-----
Entries to be made by the Examiners

SCHEME OF AWARDING MARKS

Practical Examination

	Max. Marks	Marks Obtained
a. Procedure & write up	10	
b. Conducting the practicals	20	
c. Analysis of Experimental results & Presentation	10	
d. Oral or Viva-Voce	10	
Total Marks Obtained		

TOTAL MARKS AWARDED IN WORDS :

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Internal Examiner

External Examiner

Name : _____

Signature with Date : _____

Abstract & the Title:-

The Idea behind making this project, "Prototype of Mechanical Footstep Power Generator" is to build a model which can successfully generate clean energy, without causing any harm to the environment & in this way, reducing the global warming levels (little) & our dependency on non-renewable sources of energy.

Proposal for the utilization of waste energy of footpower with human locomotion is very much relevant & important for highly populated countries like ours (India) where mobility of its masses will turn into boon, in generating electricity from its footsteps.

The basic principle of our model is that, we 1st step on the upper plate of the model, which is attached to four individual springs, four cylindrical rods & two racks. Thus, when the force is applied on the upper plate, the plate & its attached parts move in the downward direction, & the racks connected to their pinions (respective), starts rotating, which simultaneously rotates the compound gear & then, in turn rotates the smaller gear which is connected to the output shaft of the generator which produces electricity. The assembly is supported by two supporting walls & a base plate to maintain stability.

We have used mild-steel of thickness 5mm for frame.

On applying a load (maximum) of 640N on plate, we will be able to generate 5.4 watts. Saurav