#### HEART BEAT COUNTER

A PROJECT REPORT SUBMITTED TO

SAVITRIBAL PHULE PUNE UNIVERSITY, PUNE



# FOR THE DEGREE OF BACHELOR OF SCIENCE IN PHYSICS

UNDER THE FACULTY OF SCIENCE

BY

### SHRI. SHINDE TUSHAR SAKHARAM

Department of Physics, Arts, Commerce and Science College, Sonai

UNDER THE GUIDANCE OF

# Prof. DUSHING SWATI A.

M.Sc.

DEPARTMENT OF PHYSICS, ARTS, COMMERCE AND SCIENCE COLLEGE, SONAI

**MARCH-2019** 

## **ACKNOWLEDGEMENT**

I wish to thank the Principal **Dr. Shankar Laware** of my college for permitting me to use all the facilities available in the institution for my project work. I would also like thank the Head of the Physics Department **Dr. Sadekar H.K.**, the teaching faculty and all the non-teaching staff of my college for their support in completing the work successfully.

I am grateful to my Guide **Prof. Dushing Sawti A.** for her encouragement, guidance and supervision of my project work during the year. I must acknowledge the financial support given to this project by my parent without which it would have been difficult to complete the work in time.

My classmates have been of great help to me the project work. My ideas were shaped and refined progressively through my discussions with them from time to time. I cannot miss to thank them all. There were some persons like **Prof. Kardile H.J., Prof. Virkar A.A., Shri. Telore S.S.** who were directly but indirectly involved in my preparatory/practical work. I appreciate their contribution and thank them too.

Place: Sonai

C

Date: 20-3-2019.

Shri. Shinde Tushar S. (B.Sc. Physics)

Signature of Research Student

Seat No.	
SAVITRIBAI PHULE PUNE UNIVERSITY	
BONAFIDE CERTIFICATE	
This is to certify that the work incorporated in the project	
report entitled "Heart Beat Counter" submitted to Savitribai	
Phule Pune University, Pune, is benefited work of Shri. Shinde	
Tushar Sakharam of B.Sc. (Physics) during the academic year	
2018-19, who carried out the project work under my supervision	
Prof. Dushing Swati A.  Guide  Department of Physics  Arts, Commerce and Science College, Sonai  Sonai-414105	Dr. Sadekar H.K.  Head  Department of Physics  Arts, Commerce and Science College  Sonai-414105
Internal Examiner	External Examiner