Includes

III III

⇒ Latest Solved University Question Papers upto May 2019.



Strictly as per the new Credit System Syllabus (2015 Course) Savitribai Phule Pune University w.e.f. academic year 2018-2019

PRODUCT DESIGN AND DEVELOPMENT

(Elective IV)

callage

(Code: 402050C)

Semester VIII Mechanical Engineering

Same Subject, Same Author with New Publication

Mandar M. Bidwe

Dr. Vithalrao College

Tech Knowledge

ublications

adat

•	Your Success is Our Goal
•	SEMESTER VIII
•	MECHANICAL ENGINEERING
•	ENERGY ENGINEERING
•	B. L. Singhal
•	MECHANICAL SYSTEM DESIGN
•	R. B. Patil
•	TRIBOLOGY (Elective-III)
•	R. B. Patil
•	INDUSTRIAL ENGINEERING (Elective-III)
•	Dr. Anand K. Bewoor
•	ADVANCED MANUFACTURING PROCESSES (Elective-IV
•	Dr. Satish Chinchnikar, Dr. Sagar Dhage, Chittaranjan More
•	PRODUCT DESIGN AND DEVELOPMENT (Elective-IV)
•	Mandar M. Bidwe

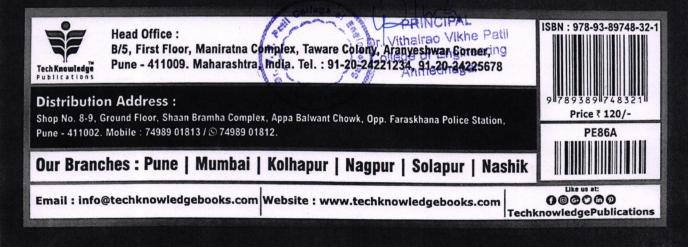
<u>About the Author</u>



Prof. Mandar M. Bidwe

has completed B.E. (Mechanical) from Swami Ramanand Teerth Marathwada, University Nanded and M.Tech. (Product Design and Manufacturing) from RVCE, Bangalore. He is a Hard core teacher with ten years Experience in teaching various subjects like, Product Design & Development, Fluid Mechanics, CAD/CAM & Automation, FEM, Turbo machines etc. He is acclaimed as a distinguish professor in engineering and has taught at various institutes like, Pravara Rural Engineering College, Loni and presently working as Assistant Professor at Dr. Vitthalrao Vikhe patil college of Engineering, Ahmednagar. He has also served as Principal

at YSPS Polytechnic, Tal. Babhalgaon, Dist. Latur. He has to his credit several research papers, Articles, and books. For Any Suggestion & queries:Email : mandarbidwe97@gmail.com, Mo. : 9423720498



Preface

My Dear Students,

I am extremely happy to come out with this edition of Product Design and Development for you, the Mechanical Engineering Students. This text book has been written strictly as per the New Syllabus prescribed by Savitribai Phule Pune University for Final year Mechanical Engineering.

Every kind of care has been taken to write the subject matter of each topic in simple and lucid manner. The subject is divided into small topics within the chapters has been arranged in a proper sequence to ensure smooth flow of the subject.

Each point is explained in depth with the help of neat and self explanatory sketches. So, I am sure that this book will meet all the minute requirements of the subject. Most of general questions that are asked in the university examination are widely covered while writing the book.

We present this book in the loving memory of Late Shri Pradeepji Lunawat, our source of inspiration and a strong foundation of "TechKnowledge Publications". He will always be remembered in our heart and motivate us to achieve our new milestone.

I am thankful to Mr. Shital Bhandari, Shri. Arunoday Kumar and Shri. Chandroday Kumar for the encouragement and support that they have extended. I am also thankful to the staff members of TechKnowledge Publications and others for their efforts to make this book as good as it is.

I have taken every possible effort to eliminate all the errors in this book. However if you find any, please let us know, because that will help me to improve further.

- Prof. Mandar M. Bidwe Email id - mandarbidwe97@gmail.com



PRINCIPAL Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar