

Shri Shivaji Education Society, Amravati's

SCIENCE COLLEGE

Congress Nagar, Nagpur - 440 012 (M.S.) INDIA

'A+' Grade with 3.51 CGPA in 3rd Cycle
College with Potential for Excellence
Recognised Centre for Higher Learning & Research
Institutional Member of APQN
A Mentor College under UGC PARAMARSH Scheme
An ISO 21001:2018 Certified Institution
NIRF 2024 Rank-band: 201-300





4th Cycle

Assessment & Accreditation by NAAC

CRITERIA- III- Research, Innovation & Extension

Metric No.: 3.3.2.1 QnM- Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years



No. Sc.

Shri Shivaji Education Society, Amravati's

SCIENCE COLLEGE

Congress Nagar, Nagpur- 440 012 (M.S.) INDIA

• Tel : +91-712 - 2423432 (O) • Telefax : +91-712 - 2440955 E-mail: shivajiscience_ngp@yahoo.com Web : www.sscnagpur.ac.in

Shri Harshvardhan P. Deshmukh President

Dr. Omraj S. Deshmukh Principal

- 'A+' Grade with 3.51 CGPA (3rd Cycle) Reassessment College by NAAC, Bangalore
- A College with Potential for Excellence identified by UGC, New Delhi
- Member, APQN
 (Asia Pacific Quality Network)
- Recognized Centre for Higher Learning & Research
- Mentor College under 'Paramarsh Scheme' UGC, New Delhi An ISO 21001: 2018 Certified Institution



Dr. Panjabrao alias Bhausaheb Deshmukh Founder President

Date :

Self Declaration

This is to certify that, the information, reports, true copies of the supporting documents, numerical data, and weblinks furnished in this file are verified by IQAC and the head of the institution and found correct.

Dr. A. A. Halder S.S.E.S.A's Science College, Nagpur

Principal S. S. E. S. Amravati's Science College, Nagpur.





Shri Shivaji Education Society, Amravati's

SCIENCE COLLEGE

Congress Nagar, Nagpur- 440 012 (M.S.) INDIA

• Tel: +91-712 - 2423432 (O) • Telefax: +91-712 - 2440955 E-mail: shivajiscience_ngp@yahoo.com Web : www.sscnagpur.ac.in

Shri Harshvardhan P. Deshmukh President

Prof. M. P. Dhore • Mentor College under Principal

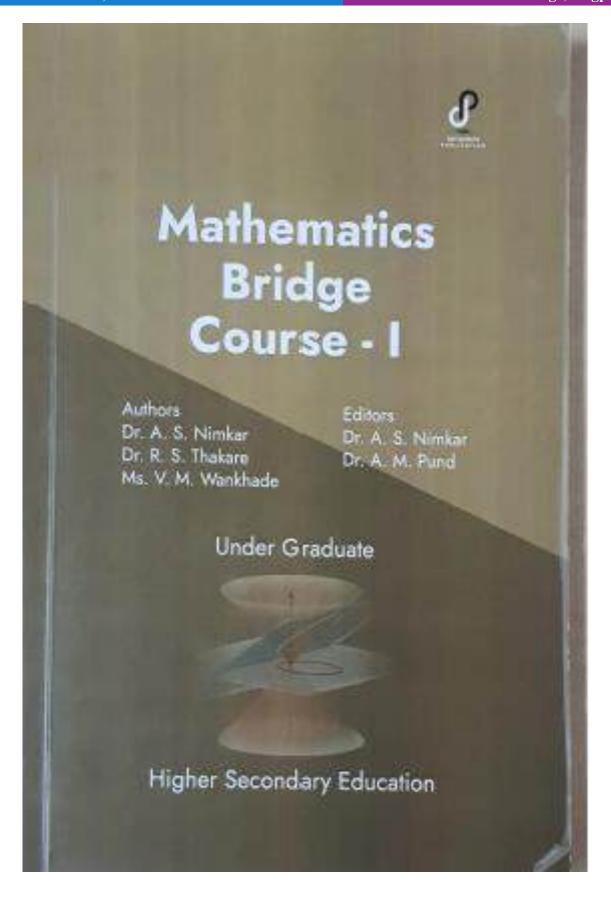
- · 'A+' Grade with 3.51 CGPA (3rd Cycle) Reassessment College by NAAC, Bangalore
- A College with Potential for Excellence identified by UGC, New Delhi
- Member, APQN (Asia Pacific Quality Network)
- · Recognized Centre for Higher Learning & Research
- 'Paramarsh Scheme' UGC, New Delhi



Dr. Panjabrao alias Bhausaheb Deshmukh Founder President

3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five year

| Sr. No. | Name of Author | Title of the Book/Chapter/Proceeding Paper | Page No. |
|---------|-----------------|--|-------------|
| 1 | Dr. A M Pund | Mathematics Bridge Course I | 3 |
| 2 | Dr.S.V.Ghonmode | Animal Physiology | 4 |



Animal Physiology

ABOUT THE BOOK

Physiology is the study of the functions of the body, or how the body works. Animal physiology is the study of the internal physical and chemical functions of animals. Professionals in this field may explore the makeup of animals, including their genetics, their behaviors and their biological structure. Animal Physiology entails the anatomy, histology, and endocrine functioning of the physiological processes of livestock under specific conditions. This also includes the possible manipulation of the reproductive processes by means of accelerated breeding techniques for more efficient livestock and poultry production.

Physiology is the sensible examination of the common limit in living structures. A sub-control of science, it is based on how animals, organ systems, organs, cells, and bio-particles do the blend or physical limits that exist in a living system. The basis of physiology is homeostasis, which is the state of dynamic consistency or maintenance of more or less stable conditions in the internal environment. Dynamic consistency means that physiological parameters, such as body temperature and blood pH, fluctuate around a set point. If any of the parameters were to move too far one way or the other, the organism wouldn't be able to survive. That means homeostasis is vital for survival of individual organisms. The study of physiological processes can encompass a wide array of other disciplines, such as neurophysiology, pharmacology, cell biology, and biochemistry, to name just a few. Physiologists can often be found as members of these other departments, in addition to departments of physiology.

ABOUT THE AUTHOR



Dr. S.V. Ghonmode is serving in S.S.E.S. Amt's Science College, Congress Nagar, Nagpur (M.S.) India, 440012 since 17 years which is a well known and renowned college in Maharashtra. She is working as a Professor. She has completed her Ph.D. under the guidance of Dr. D.B. Tembhare, a renowned personality in academics of University and Education. She has published various research papers and articles in International and National Journals. She has also completed a Minor Research Project funded by UGC. She is a

registered Ph.D. supervisor by R.T.M. Nagpur University, Nagpur.



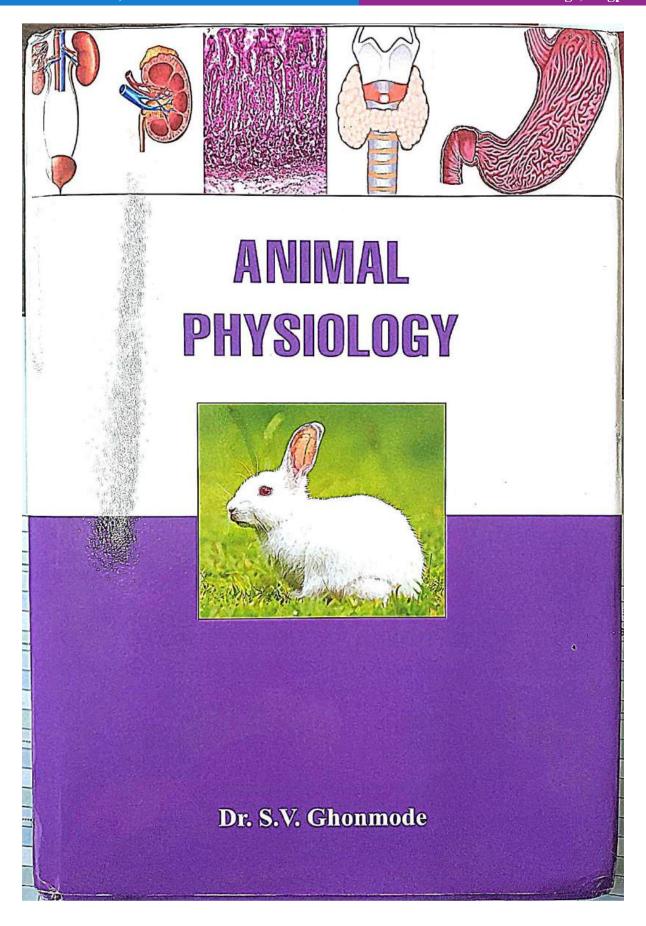
A. K. PUBLICATIONS

B-61/E-1, Gali No.14, Jagatpuri Ext. Shahdra, Delhi-110093 Ph.: 09868320502, 09999157638 akpubs2008@yahoo.com



Contents

| | Preface | τ |
|----|------------------------------|-----|
| 1. | Introduction | 1 |
| 2. | Body Organisation | 18 |
| 3. | Muscle Physiology | 36 |
| 4. | Animal Cardiovascular System | 45 |
| 5. | Animal Respiratory System | 77 |
| 6. | Animal Lymphatic System | 99 |
| 7. | Animal Digestive System | 110 |
| 8. | Animal Urinary System | 135 |
| 9. | Animal Reproductive System | 147 |
| | Bibliography | 177 |
| | | |



Dr. A. A. Halder IQAC Coordinator S.S.E.S.A's Science College, Nagpur Dr. O. S. Deshmukh
Principal
S. S. E. S. Amravati's
Science Cellege, Nagpur.

