Sudam Shikshan Prasarak Mandal (Reg.No. F-909/84)

MATOSHRI NANIBAI GHARPHALKAR SCIENCE COLLEGE

BABHULGAON DIST. YAVATMAL - 445101

Affiliated to Sant Gadge Baba Amravati University, Amravati

AQAR 2023 – 2024

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

Sudam Shikshan Prasarak Mandal(Reg.No.F-909/84)

MATOSHRI NANIBAI GHARPHALKAR SCIENCE COLLEGE BABHULGAON
DIST. YAVATMAL - 445101

Affiliated to Sant Gadge Baba Amravati University, Amravati
(NAAC Accredited B+ Grade with CGPA 2.69)
AISHE Code: C - 42866 UGC 2(f) & 2(B) Recognised College Code - 476

Shri. Krushna D. Kadu
President / Secretary
Sudam Shikshan Prasarak Mandal,
Yavatmal

Dr. P. N. Mulkalwar
Principal
Mob: 9028378239
Email: pramodmulkalwar@gmail.com

Date: 05/11/2024

DECLARATION

I hereby declare that the information, reports, and numerical data provided have been thoroughly verified by the Internal Quality Assurance Cell (IQAC) of our college. The IQAC committee has reviewed and validated the accuracy of the data, and it is found to be correct and reliable.

Co-ordinator, IQAC
Matoshri Nanibai Gharphalkar
Science College, Babhulgaon
Dist. Yavatmal

Principal
Matoshri Nanibai Gharphalkar
Science College, Babhulgaon
Dist. Yavatmal

Sudam Shikshan Prasarak Mandal's

MATOSHTRI NANIBAI GHARPHALKAR SCIENCE COLLEGE BABHULGAON

Courses Offered in B.Sc.

1. **Bachelor of Science (Computer Science)**
2. **Bachelor of Science (Physics)**
3. **Bachelor of Science (Botany)**
4. **Bachelor of Science (Chemistry)**
5. **Bachelor of Science (Zoology)**
6. **Bachelor of Science (Electronics)**
7. **Bachelor of Science (Mathematics)**

Course Outcomes (COs)

Bachelor of Science (Physics)

- **CO1:** Develop problem-solving skills in kinetic theory, thermodynamics, and electric current with practical instrumentation knowledge.
- **CO2:**Analyze motion in various frames of reference.
- **CO3:** Apply vector calculus concepts such as divergence, gradient, and curl to physical phenomena.
- **CO4:** Understand and utilize electromagnetic wave properties in theoretical and practical contexts.
- **CO5:** Gain hands-on experience in performing physics experiments independently.

Bachelor of Science (Botany)

- **CO1:** Explore plant diversity, including lower plants and their metabolism.
- **CO2:** Understand Mendel's genetic laws and their implications.
- **CO3:** Gain insights into tissue culture, genetic materials, DNA, and RNA.
- **CO4:**Analyze photosynthesis processes, products, and genetically modified crops.
- **CO5:** Conduct botanical experiments with an emphasis on laboratory techniques and applications.

Bachelor of Science (Chemistry)

- **CO1:** Learn periodic properties, electronic displacement, and the chemistry of aliphatic hydrocarbons in Semester I.
- **CO2:** Study P-block elements, noble gases, and molecular properties in Semester II.
- **CO3:** Understand covalent bonding, VSEPR theory, and electrochemical principles.
- **CO4:** Explore transition elements, crystallinity, and aromatic nitro compounds.
- **CO5:** Delve into CFT, heterocyclic compounds, photochemistry, and molecular spectroscopy.
- **CO6:** Study advanced topics such as nuclear chemistry, NMR spectroscopy, and organometallic chemistry.

Bachelor of Science (Zoology)

- **CO1:** Understand complex interactions among living organisms and their ecosystems.
- **CO2:** Study detailed concepts of cell biology and physiological processes like respiration and reproduction.
- **CO3:** Learn the economic importance of insects, including pest management.
- **CO4:** Acquire hands-on skills in laboratory techniques such as microtomy and slide preparation.
- **CO5:** Conduct zoological experiments to understand fundamental biological processes.

Bachelor of Science (Mathematics)

- **CO1:** Understand limits, continuity, and their applications.
- **CO2:** Acquire knowledge of series, sequences, and convergence criteria.
- **CO3:** Apply Laplace and Fourier transforms to solve mathematical problems.
- **CO4:** Gain a comprehensive understanding of linear algebra, including vector spaces and transformations.
- **CO5:** Construct mathematical models using vectors and matrices for real-world problems.

Bachelor of Science (Electronics)

- **CO1:** Learn about components like inductors, transformers, and rectifiers, along with fabrication techniques.
- **CO2:** Gain skills in fabricating integrated circuits (ICs) and LED lamps.
- **CO3:** Understand sensors, transducers, actuators, and their applications in instrumentation systems.
- **CO4:** Study cascaded amplifiers, hybrid parameters, and transistor applications in various devices.
- **CO5:** Explore the principles and applications of amplifiers and electronic instrumentation.

Bachelor of Science (Computer Science)

- **CO1:** Understand the basic structure of computers, operating systems, and the fundamentals of C programming.
- **CO2:** Gain knowledge of data communication, addressing types, and inheritance concepts in programming.
- **CO3:** Comprehend memory management design issues and algorithms.
- **CO4:** Develop programming skills in C and explore applications of VB.Net and Java.
- **CO5:** Design and implement operating system-level procedures.

Principal
Matoshri Nanibai Gharphalkar
Science College, Babhulgaon
Dist. Yavatmal