

Barshi Shikshan Prasarak Mandal's

# Shriman Bhausahab Zadbuke Mahavidyalaya, Barshi

Zadbuke Marg, Latur Road, Barshi, Dist - Solapur, Maharashtra, India - 413401

## Department of Mathematics

### Profile

#### About the Department

The department of Mathematics was started in 1969. The first faculty of the department was Principal S.C. Dhuttargaon. There had been a single Full-time faculty. We as a department run B.Sc. Mathematics as a regular course. Apart from the course we have Active organize different kinds of activities programmes and events at department. The faculty member is actively involved in research, extension and community services.

#### 1) Courses :

	Courses	Duration	Required Qualification
Degree	B.Sc.	3 Years	H.Sc.
Certificate	---	---	---

#### 2) Faculty and Staff :

Sr. No.	Name	Designation	Qualification
1	Mr. S.S. Mule	Head and Assistant Professor	M.Sc., SET
2	Mr. A.D. Pawar	Lab. Attendant	H.Sc.

#### 3) Faculty Development Programmes (FDPs)

Sr. No.	Course	Name of the Institute	Date	Grade
1	Faculty Induction Programme	Indian Institute of Science, Education and Research	30 Oct to 23 Nov. 2019	B
2	Faculty Induction Programme	Indian Institute of Science, Education and Research	Jan to March 2020	B

#### 4) Course Outcomes :

Sr. No.	Course	Outcomes
1	B.Sc. I	At the end of course the students will 1) Understanding the application of matrices 2) Understanding how they can calculate roots of a complex number 3) Calculate the Limit & examine the continuity of a functional point

		<p>4) Explain the properties of three dimensional shapes</p> <p>5) Understand the genesis of ordinary differential equation</p> <p>6) Learn various method of solving first order &amp; first degree differential equation occurring in physics, chemistry &amp; engineering science .</p> <p>7) Learn how to change points equation in Cartesian to polar.</p> <p>8) Understand the geometry of plane &amp; spheres.</p>
2	B.Sc. II	<p>1) To learn the evaluation of Laplace transform of different type of function their derivatives &amp; integration.</p> <p>2) To learn the evaluation of Inverse Laplace transform of function their derivatives &amp; integration and also learn application of convolution theorem.</p> <p>3) To learn to apply Laplace transform to solve ordinary differential equation with constant coefficients.</p> <p>4) To learn fundamental properties &amp; mathematical tools such as closure, identity, inverse &amp; generators.</p> <p>5) To study algebraic structure 'Group' in detail which is useful is study of ring, modules, analysis.</p> <p>6) To enhance abstract thinking of student .</p> <p>7) Understand the concepts of maxima &amp; minima</p> <p>8) Understand the application of tangent &amp; normals</p> <p>9) Calculate the curvature of equations.</p> <p>10) Calculate the Jacobian of a function</p> <p>11) To be able to solve first order &amp; degree higher than the first</p> <p>12) To be able to solve simultaneous &amp; total differential equation</p>

### 5) Syllabus :

Sr. No.	Course	Syllabus Link
1	B.Sc. I	<a href="https://su.digitaluniversity.ac/WebFiles/BSc%20I%20CBCS%20%20Mathematics%20Syllabus%2026072019.pdf">https://su.digitaluniversity.ac/WebFiles/BSc%20I%20CBCS%20%20Mathematics%20Syllabus%2026072019.pdf</a>
2	B.Sc. II	<a href="https://su.digitaluniversity.ac/WebFiles/BSc%20II%20Maths%20Syllabus%2008072020.pdf">https://su.digitaluniversity.ac/WebFiles/BSc%20II%20Maths%20Syllabus%2008072020.pdf</a>
3	B.Sc. III	<a href="https://su.digitaluniversity.ac/WebFiles/B%20Sc%20III%20Mathematics%20Syllabus%202021.pdf">https://su.digitaluniversity.ac/WebFiles/B%20Sc%20III%20Mathematics%20Syllabus%202021.pdf</a>

### 6) Publications

Sr. No.	Research Article/Book
1	R.M. Mohite, S.S. Mule, Controlled Precipitation of Zinc Oxide by Chemical Bath Deposition, ijiset, 10(5), (2021), 4327-4330.

## 7) Meritorious Students

Sr. No.	Name	Course	Year	Percentage
1	Khalde Piyanka Dhananjay	B.Sc. III	2017-18	81.17
2	Lokhande Tejaswini Kalidas	B.Sc. III	2017-18	77.50
3	Adalinge Anand Suresh	B.Sc. III	2017-18	77.12
4	More Amruta Govardhan	B.Sc. III	2018-19	78.15
5	Ukirade Reshma Namdev	B.Sc. III	2018-19	70.84
6	Tambe Mayur Mahadev	B.Sc. III	2020-21	78.60
7	Wadkar Saachi Satyen	B.Sc. III	2020-21	75.60
8	Shinde Pravin Sambhaji	B.Sc. III	2020-21	74.43
9	Jadhavar Suhas Sunil	B.Sc. III	2021-22	77.55
10	Salunke Shivani Kundlik	B.Sc. III	2021-22	74.35
11	Ghodake Mohini Umesh	B.Sc. III	2021-22	73.18

## 12) Result Analysis

Sr. No.	Year	Percentage
1	2017-18	100
2	2018-19	100
3	2019-20	100
4	2020-21	100
5	2021-22	100

## 13) Parenting Policy

The department allocates the students among the faculty members equally. Every faculty member from every entry of the students takes care of the ward for Personal, Academic, Social, Psychological growth and development. It is a well-documented process as a part of IQAC's quality initiative.

### 14. SWOC analysis of the department:

#### a. Strength

1. Use of faculty knowledge of computer for curriculum, interest in new tools, techniques and systems conscious towards students' future, conscious toward social utility of our work.
2. Interested in modern technology
3. Experimenters with teaching methods.

#### b. Weakness

1. No PG department
2. Compromises with inadequate number of faculties.

#### c. Opportunities

1. Although our students come from academically poor backgrounds, we take it as an opportunity to be the messengers of change for them. We consider ourselves the torch bearers for the poor, backward and downtrodden to inculcate values, skill, knowledge, confidence and ambition to climb the ladder of success.

**d. Challenges**

1. The change in social attitude towards traditional values-based courses is a measure challenge.
2. Gap of generation in a traditional education and society need based education in the real challenge.
3. Increasing unemployment in relation with the graduates output is the great challenge as students are loosing trust in talking higher education.

**15) Contact Details**

<b>Sr. No.</b>	<b>Faculty</b>	<b>Contact No</b>	<b>E-mail Id</b>	<b>Twitter/ Face book</b>
1	Mr. S.S. Mule	9890589633	sheshimule001@gmail.com	NIL