



People's Education Society's
Dr. Ambedkar College of Commerce & Economics, Wadala.



DEPARTMENTAL PROFILE

**DEPARTMENT OF MATHEMATICS
AND STATISTICS**

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DEPARTMENTAL PROFILE

SUBJECT INCHARGE

- Ms. Vidya S. Toraskar (Associate professor)

YEAR OF ESTABLISHMENT

- 1972.

ABOUT THE DEPARTMENT

Mathematics and Statistics is a subject of logic. Learning **Mathematics and Statistics** will help students to grow their problem-solving and logical reasoning skills.

Mathematics and Statistics simply means to learn or to study or gain knowledge.

The theories and concepts given in **Mathematics and Statistics** help us understand and solve various types of problems in academic as well as in real life situations.

VISION, MISSION, AND OBJECTIVES OF DEPARTMENT

- **Vision:**

To develop computational skills, critical thinking, and problem solving skills.

- **Mission:**

To provide an environment where students can learn and become competent users of Mathematics, Statistics, Computer System & Applications.

- **Objectives:**

- ❖ To enable the students to solve Mathematical and Statistical problems of daily life. We have to select the content and methods of teaching so that the students are able to make use of their learning of Mathematics and Statistics in daily life.
- ❖ To develop thinking and reasoning power of the students.
- ❖ To provide graduate students an opportunity to develop a deep understanding and enjoyment of Mathematics and Statistics to become effective teachers and communicators and to prepare themselves for their future careers.

PROGRAMMED / COURSES OFFERED

- UG- B.COM.

SEMESTER WISE SYLLABUS

UNDER CHOICE BASED CREDIT, GRADING AND SEMESTER SYSTEM (CBCGS)

F.Y.B.COM.

Discipline Specific Elective (DSE) Courses

- Mathematical & Statistical Techniques-I
- Mathematical & Statistical Techniques -II
- Computer Programming
- Computer system and Application.

TEACHING PLAN

Course : F.Y.B.COM.

- Subject : Mathematical & Statistical Techniques-I
- Semester : I

MATHEMATICS

Sr. No.	First Term / Months	Topics
1	June-July	SHARES AND MUTUAL FUND
2	August	PERMUTATION & COMBINATION,L.P.P. FORMULATION & GRAPHICAL SOLUTION TO L.P.P.
3	September	REVISION

STATISTICS

Sr. No.	First Term / Months	Topics
1	June-July	MEASURES OF CENTRAL TENDENCY
2	August	MEASURES OF DISPERSION &ELEMENTRYPROBABILITY THEORY
3	September	DECISION THEORY, REVISION.

Course : F.Y.B.COM.

- Semester : II
- Subject : Mathematical & Statistical Techniques -II

MATHEMATICS

Sr. No	Second Term/ Months	Topics
1	November / December	Simple Derivatives (STD FORMS)
2	January	Derivatives continued, Application of Derivatives.
3	February	Interest and Annuity.
4	March	Revision.

STATISTICS

Sr. No	Second Term/ Months	Topics
1	November / December	Correlation & Regression
2	January	Time Series & Index numbers
3	February	Binomial ,Poisson & Normal distribution.
4	March	Revision.

Course : S.Y.B.COM.

- Semester : III
- Subject : Computer Programming

Sr. No	First Term / Months	Topics
1	June-July	Unit I & II (Theoretical Unit)
2	August	Unit III practical unit includes C program practical and Theory.
3	September	Unit IV practical unit includes C program practical and Theory.
4	October	Revision.

Course : S.Y.B.COM.

- Semester : IV
- Subject : Computer Programming.

Sr. No	Second Term/ Months	Topics
1	November	Unit I - Theory communication system.
2	December	Unit II- Theory DBMS.
3	January	Unit III - MS-Access and Practical.
4	February	Unit IV - MS-Access and query Practical.
5	March	Revision.

Course : T.Y.B.COM.

- Semester : V
- Subject : Computer system and Application

Sr. No	First Term / Months	Topics
1	June-July	Unit I (Theoretical Unit)
2	August	Unit II practical unit includes My-SQL practical and Theory.
3	September	Unit III practical unit includes MS-Excel 2007 spreadsheet.
4	October	Revision.

Course : T.Y.B.COM.

- Semester: VI
- Subject: Computer system and Application

Sr. No	Second Term/ Months	Topics
1	November	Unit I – Theory E-Commerce.
2	December	Unit II- Visual Basic 6.0 and Practical
3	January	VB Practical.
4	February	Unit III - MS-Excel spreadsheet.
5	March	Revision.

CURRENTLY WORKING FACULTY PROFILE

Sr. No.	Name	Date of Joining	Qualification	Experience
1.	Ms. Swapnal Shinde	14 November 1984 (Retired on 31 st October 2022)	M.Sc. (Statistics)	37 Years.
2.	Ms. Vidya S. Toraskar.	1 ST August 1987	M.Sc. (Statistics)	36 Years.
3.	Mr. Sandeep V. Kamble.	1 ST July 2008	M.Sc. Mathematics. B.Ed.	14 Years.
4.	Ms. Shital M. Warbhe.	26 October 2021	M.Sc. Mathematics. NET SET Ph.D. Pursuing .	6 Years.
5.	Mr. Sanjay P. Kamble.	12 July 2022.	M.Sc. Computer Science , MMS(Marketing), MA(English))	17 Years.

STUDENTS-TEACHER RATIO (PROGRAMME WISE):

MATHEMATICS AND STATISTICS

Courses	F.Y.B.COM.
2017-18	1 : 280
2018-19	1 : 400
2019-20	1 : 356
2020-21	1 : 224
2021-22	1 : 263
2022-23	1 : 210

COMPUTER

Courses	S.Y.B.COM	T.Y.B.COM
2017-18	1 : 120	1:240
2018-19	1 : 120	1:240
2019-20	1 : 120	1:240
2020-21	1 : 120	1:240
2021-22	1 : 120	1:240
2022-23	1 : 120	1:240

RESEARCH PUBLICATIONS

- Publishing Chapter in Edited Books : 4
- Research Paper Publication in journals : 3

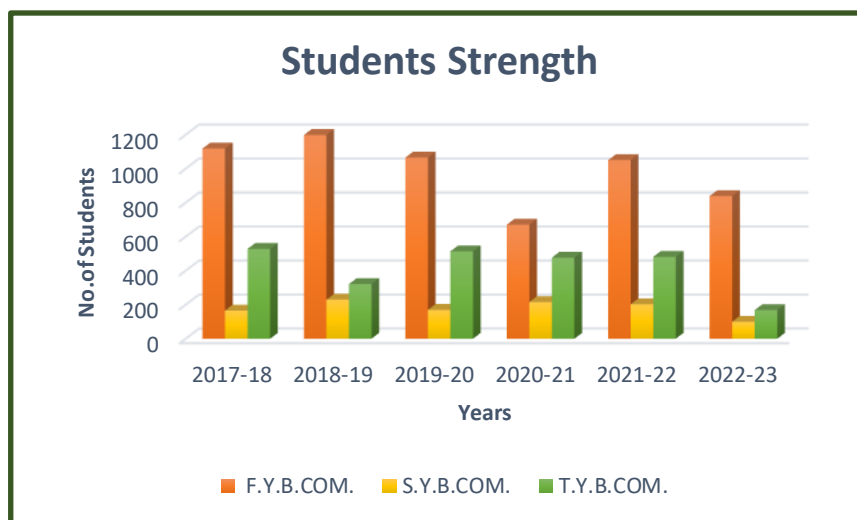
STUDENTS STRENGTH

- B.COM

Year.	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
F.Y.B.COM.	1119	1199	1066	671	1051	839

COMPUTER

Year.	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
S.Y.B.COM.	166	230	170	216	203	100
T.Y.B.COM.	529	322	514	477	482	169



EXAMINATION RESULT

- **Academic Year :** 2017-18
- **Name of Course :** F.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	1198	482	40.23%
II	Mathematical & Statistical Techniques -II	1198	455	37.98%

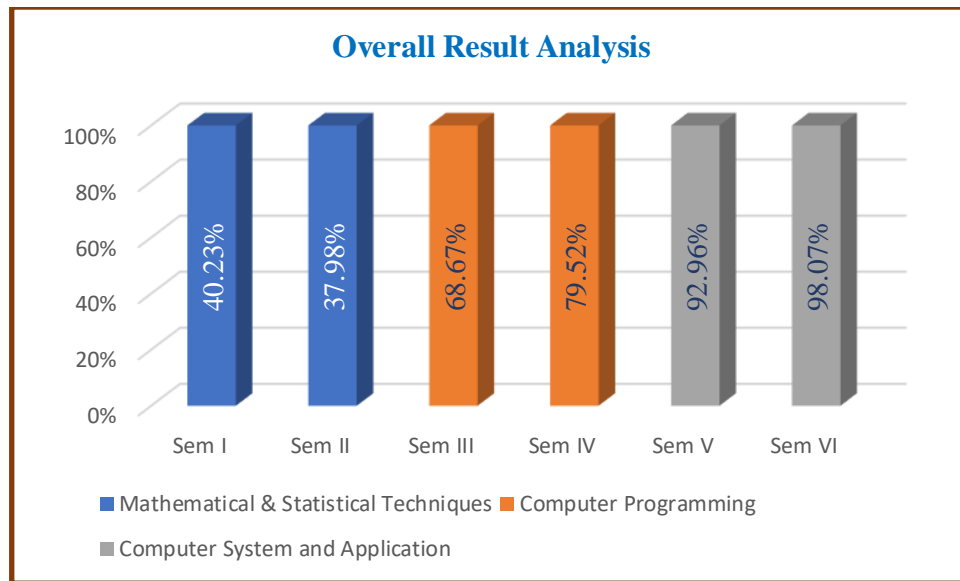
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- **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	83	57	68.67%
IV	Computer Programming	83	66	79.52%

- **Name of Course :** T.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
V	Computer System and Application	270	251	92.96 %
VI	Computer System and Application	259	254	98.06%



- **Name of Course :** F.Y.B.Com.
- **Academic Year :** 2018-19

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	1200	283	23.58%
II	Mathematical & Statistical Techniques -II	1200	528	44%

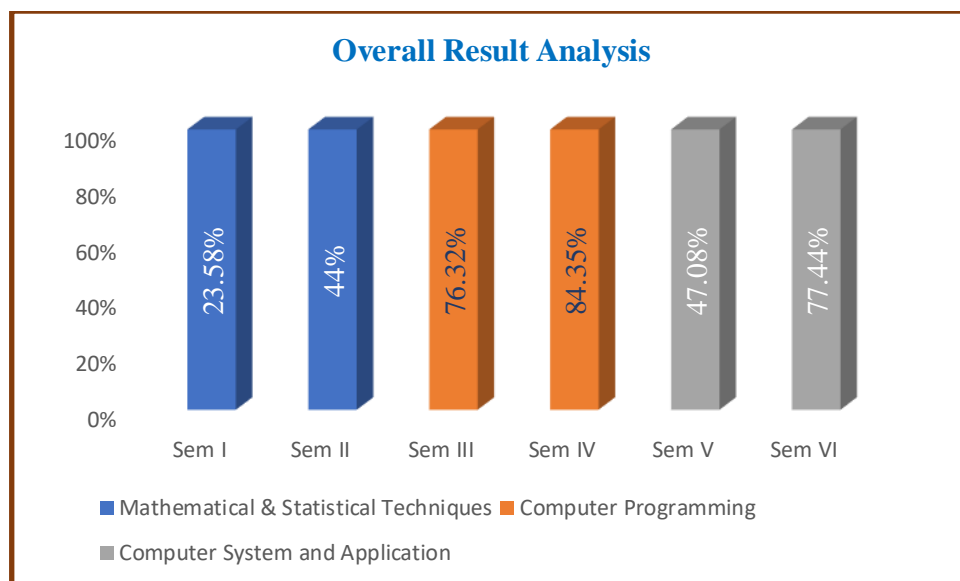
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- **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	115	88	76.32 %
IV	Computer Programming	115	97	84.35 %

- **Name of Course:** T.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
V	Computer System and Application	189	89	47.08 %
VI	Computer System and Application	133	103	77.44 %



- **Academic Year:** 2019-20
- **Name of Course:** F.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	1066	475	44.56%
II	Mathematical & Statistical Techniques -II	1066	819	76.83%

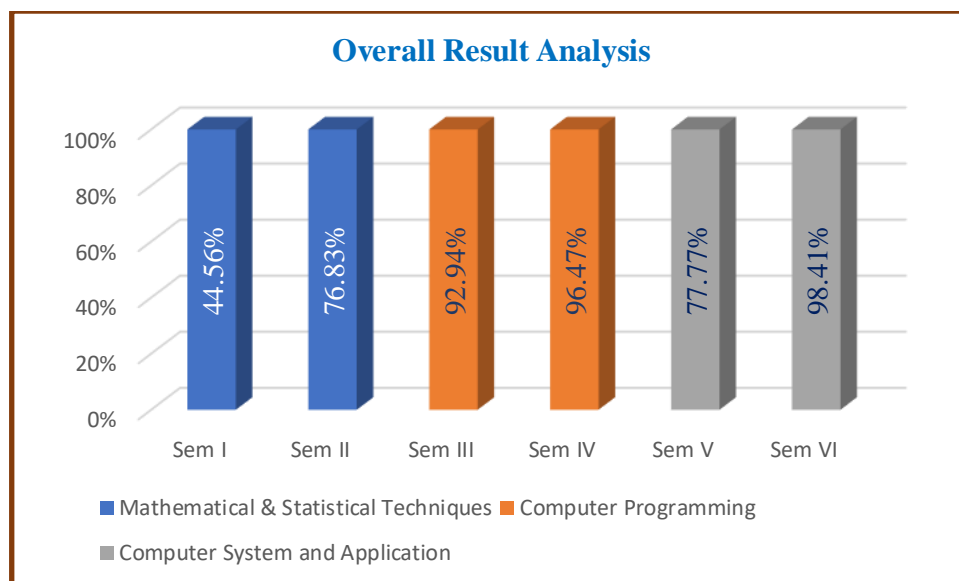
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- **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	85	79	92.94 %
IV	Computer Programming	85	82	96.47 %

- **Name of Course :** T.Y.B.Com

Semester	Subjects	Total Registered	Pass Students	Passing (%)
V	Computer System and Application	261	203	77.77 %
VI	Computer System and Application	253	249	98.41 %



- **Academic Year :** 2020-21
- **Name of Course :** F.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	668	507	75.90%
II	Mathematical & Statistical Techniques -II	671	580	86.44%

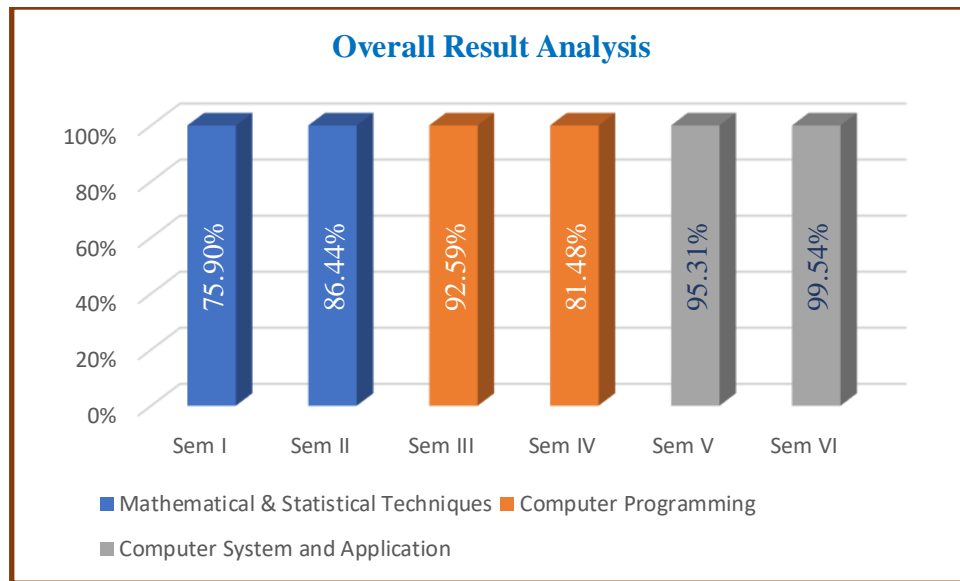
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- **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	108	100	92.59 %
IV	Computer Programming	108	88	81.48 %

- **Name of Course :** T.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
V	Computer System and Application	256	244	95.31%
VI	Computer System and Application	221	220	99.54 %



➤ **Academic Year :** 2021-22

➤ **Name of Course :** F.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	1051	776	73.83%
II	Mathematical & Statistical Techniques -II	1051	826	78.59%

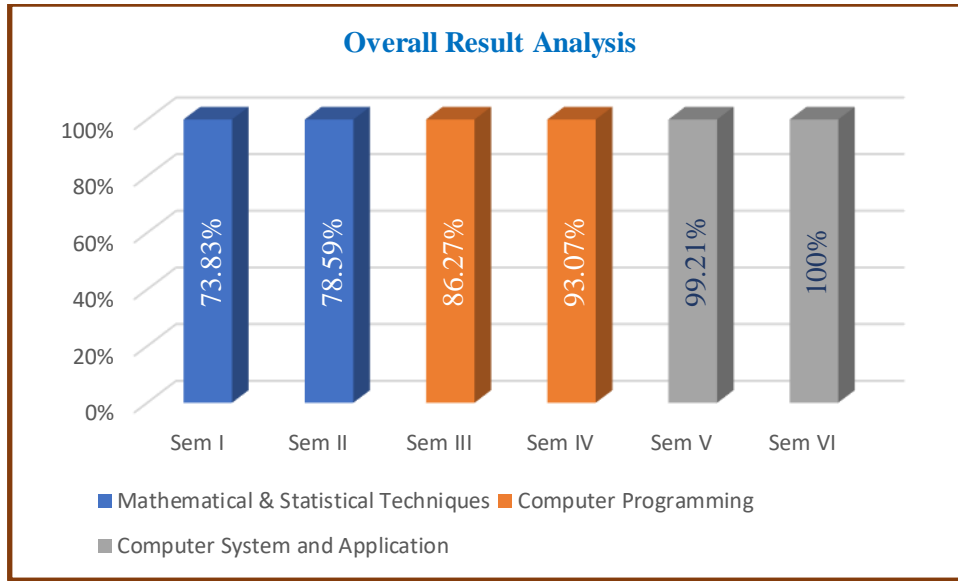
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➤ **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	102	88	86.27 %
IV	Computer Programming	101	94	93.07 %

➤ **Name of Course :** T.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
V	Computer System and Application	254	252	99.21 %
VI	Computer System and Application	228	228	100 %



➤ **Academic Year :** 2022-23

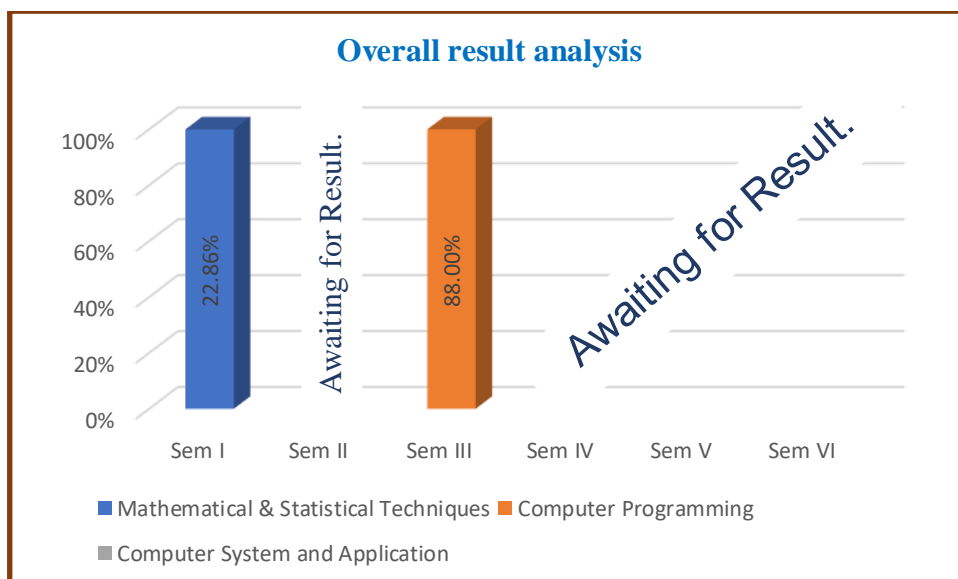
➤ **Name of Course :** F.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
I	Mathematical & Statistical Techniques -I	840	192	22.86%

COMPUTER

➤ **Name of Course :** S.Y.B.Com.

Semester	Subjects	Total Registered	Pass Students	Passing (%)
III	Computer Programming	100	88	88.00 %



DEPARTMENTAL ACTIVITIES

- Bridge Course has conducted in the year 2021-2022.
- Every Year Department has arranged Guidance lecture for F.Y.B.Com. Students.
- Department conducted Guest lectures for T.Y. B.Com. students in the subjects of computer systems and Applications.
- Extra lecture for F.Y.B.Com. students in the subject of Mathematical and Statistical Techniques during holidays.

AWARDS/HONORS RECEIVED BY INDIVIDUAL TEACHERS

Ms. Vidya S. Toraskar

- Best NSS Programme Officer at District level 2012-13.
- Best NSS Programme Officer at University level 2012-13.
- Best NSS Programme Officer at State level 2012-13.
- State level Aadarsha Karyagaurav Samajratna Award 2017.



LEARNING RESOURCES AVAILABLE IN THE DEPARTMENT

- **BOOKS: 1167**



PLAN OF ACTION OF THE DEPARTMENT FOR THE NEXT FIVE YEARS

This Five-year Plan presents a bold vision which will make the department intensely better in all aspects of its mission. In order to meet the needs of students, faculty, administration, and communities served by the Department of Mathematics and Statistics, the faculty has developed the following list of strategies.

- Walk-with-a scholar program for advanced learners in UG level. Remedial coaching for slow learners (evening on working days) NET/SET coaching classes and also Chartered Accountant classes.
- Bridge course for F.Y.B.Com. Students.
- We are planning to give practice of online Mathematical & logical Aptitude test to our F.Y. & S.Y. B.Com. Students during vacation.
- We will try to train our T.Y. Students to develop different software's, related to grade cards & library information which may be used at college level on a large scale.
- To arrange more workshops and seminars.