

MAHARANA PRATAPSIKH SHIKSHAN SANSTHA, MUMBAI'S  
**ANANDIBAI RAORANE ARTS, COMMERCE AND SCIENCE**  
**COLLEGE, VAIBHAVWADI**  
**DEPARTMENT OF MATHEMATICS**



**Notice**

**Date:02/03/2023**

All the Students of are hereby informed that our Department of Mathematics conducting Certificate **course in Business Mathematics** on 7<sup>th</sup> March, 2023 to 28<sup>th</sup> April, 2023. Interested students enroll their name to Mr.V.V. Shinde.

*CSKalkade*  
Principal  
Anandibai Raorane Arts, Commerce & Science  
College, Vaibhavwadi.

MAHARANA PRATAPSIKH SHIKSHAN SANSTHA, MUMBAI'S  
Anandibai Raorane Arts, Commerce and Science College,

Vaibhavwadi

Department of Mathematics

Activity Report (2022-23)



Academic Year	2022-23
Activity Number	Math/2022-23/03
Name of the Activity	Certificate course in Business Mathematics
Date & Time	7 <sup>th</sup> March, 2022 to 28 <sup>th</sup> April, 2022
Venue	Anandibai Raorane Arts, Commerce & Science College, Vaibhavwadi
Organized by	Department of Mathematics
Activity for College/Class/Group	Students
No. of Participants	Students-25
Nature of Activity	Co-Curricular
Objectives of the Activity	<ol style="list-style-type: none"><li>1. Able to solve mathematical problems in Business, and financial.</li><li>2. To enhance and nurture mathematical curiosity.</li><li>3. Able to solve problems using SCILAB and GeoGebra software.</li><li>4. To motivate Students to learn Mathematics easier using Software's</li></ol>
Methodology/Brief Information of the Activity	As per the notice of the course, Syllabus, Schedule has been prepared by Miss.P.M. Manjarekar and Mr.V.V. Shinde of 45 contact hours. Theory and Practical's were conducted. Result and certificates were distributed.
Expected Outcome	<ol style="list-style-type: none"><li>1. After Participating in the course students can able to solve problems in shares, mutual funds, interests.</li><li>2. Students can able to solve mathematical problems using softwares viz SCILAB and Geogebra.</li></ol>
Feedback Analysis	Feedback was taken orally from response of students' course is successful.
Supporting Documents	Notice, Attendance, question papers, report, Marks Chart

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Maharana Pratapsinh Shikshan Sanstha's Mumbai  
Anandibai Raorane Arts, Commerce and Science College  
Vaibhavwadi. Dist.Sindhudurg.



**Department of Mathematics**

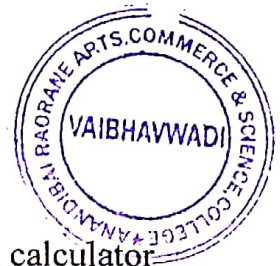
**COURSE NAME:- BUSINESS MATHEMATICS**

**Objectives:**

- 1) Student will apply their mathematical skills to various business problems for optimal solution.
- 2) Solve problems from areas including business and economics, biological and social sciences.
- 3) To increase both their intellectual curiosity and their desire to learn more about value of mathematics.
- 4) The course involves concept understanding, problem formulation and solution, graphing and computer application.

**Syllabus for Certificate Course**

Unit	Topics	Allotted Lectures
1	<b><u>Percentage , Ratio, Simple &amp; Compound Interests:</u></b> Percentage , Application based problems on Percentage, Ratio, Examples on ratio, Simple Interest, Principal amount , rate of interest , Examples on Simple and Compound Interest, Examples on Interest compounded yearly, Half yearly, quarterly and monthly.	15
2	<b><u>Shares, Mutual Fund and Annuity: Shares,</u></b> Face value, Dividend, Brokerage. Types of shares, Bonus shares, Examples on shares, Mutual funds, Types of Mutual funds, Entry load, Exit load, Annuity, Types of Annuity, Present Value, Future Value, EMI, Examples on Annuity.	15
3	<b><u>Matrices, Determinant and System of linear Equations:</u></b> Matrices, Basic operations on Matrices (Addition, Subtraction, Multiplication), Inverse of Square matrices, Determinant of square matrix, Application of Determinant, System of Linear equations.	15



## Practicals:

Do following practicals by using wxMaxima software or Graphing calculator

- 1) Graphs and Lines
- 2) Quadratic Functions
- 3) Matrices Basic operations (addition, subtraction, multiplication) and solve system of linear equation

## Scheme of Examination

### **I. Theory Examination**

There shall be end external Theory Examination of **50 marks** for the certificate course conducted by college.

1. Duration: The examination shall be of 2 Hours duration.
2. Theory Question paper Pattern:(40 Marks)
  - a) There shall be 4 Questions. All the questions shall be compulsory.  
The first question Q1 shall be of objective type for 10 marks based on entire syllabus.  
The next four questions Q2, Q3, Q4 shall be of 10 marks.  
The questions Q2, Q3, Q4 shall be based on units I, II, III respectively.
  - b) The questions Q2, Q3, Q4 may be subdivided into sub-questions and allocation of marks depends on the weightage of the topic.
  - c) The question Q1 may be sub-divided into 5 sub-questions of 2 marks
3. Assignment: 10 marks.

### **II. Practical Examination**

[A] There shall be end Practical Examination of **50 marks** for the course conducted by college.

1. Duration: The examination shall be of 2 Hours duration.
2. Practical Question paper Pattern:(40 Marks)
  - a) There shall be 4 Questions. All the questions shall be compulsory.
  - b) The questions Q1, Q2, Q3, Q4 shall be of 10 marks.



[B] Marks for Journal and Viva:

For the certificate course:

1. Journal: 5 marks

2. Viva: 5 marks

A student must have a certified journal before appearing for the practical examination.



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Anandibai Raorane Arts ,Commerce and Science College Vaibhavwadi

**Academic Year 2022-23**

Certificate Course: Certificate course in Business Mathematics

**Enrollment Student**

Sr.No	Name of the Students	Email	Mobile
1	BAVDANE SWAPNIL TUKARAM	swapnilbavdane2@gmail.com	8698940318
2	DHANAVADE SHRIKANT SHANTARAM	tejasdhanavade1996@gmail.com	8380837328
3	GHADIGAONKAR SIDDHI LALIT LALITA		
4	GURAV SURAJ BALAWANT SHARADA		
5	HUMBE POOJA PANDURANG	rajshreehumbe01@gmail.com	8010986017
6	INDAP JUHI MADHUKAR	juhiindap24@gmail.com	7028179851
7	JETHE PRIYANKA GANESH	priyankajethe07@gmail.com	7030085727
8	KADAM AKSHATA ANKUSH ANITA		
9	KHAMKAR JOTIRAM YASHWANT TAI		
10	MAGDUM SAGAR SANJAY	sagarmagdum7121@gmail.com	9321550656
11	MALIM SHARMIN ABDULGAFUR AKILA		
12	NARKAR SANIKA RAGHOB	sanikanarkar2004@gmail.com	9511719106
13	PATIL NILESH RANGRAO	nileshpatil9021681693@gmail.com	9021681693
14	PATIL TEJASWINI SATYAWAN	tejupatil0208@gmail.com	9130471526
15	RAMDUL FIZA SALIM	fizaramdul13@gmail.com	9309971340
16	RANE MAHESH MANOHAR	leenarane0402@gmail.com	9075816015
17	RAORANE NIDHEE GIRIDHAR	raoranenidhee@gmail.com	9322470910
18	RAORANE SAKSHEE JAYWANT	sakshiraorane98@gmail.com	9322459068
19	SAWANT PRANAY PRAKASH	sawantpranay16122003@gmail.com	8275394648
20	SHELKE VAIBHAVI SATYAWAN SUSHAMA		
21	SHETYE ASHWINI JAGDISH		
22	VICHARE TEJASRI SRIKRUSHNA	rejarivichare2003@gmail.com	9588426797

*C. Sakade*

Principal

Anandibai Raorane Arts, Commerce & Science  
College, Vaibhavwadi.



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Academic Year 2022-23

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**Attendance Sheet**

Sr.No	Name of the Students	1	2	3	4	5	7	8	9	10	11	12	13	14	15
1	BAVDANE SWAPNIL TUKARAM	P	P		P	P		P		P		P	P	P	P
2	DHANAVADE SHRIKANT SHANTARAM	P	P	P		P	P	P		P	P	P	P	P	P
3	GHADIGAONKAR SIDDHI LALIT LALITA	P	P		P	P	P	P		P	P	P	P	P	P
4	GURAV SURAJ BALAWANT SHARADA	P	P			P			P			P	P	P	P
5	HUMBE POOJA PANDURANG	P		P	P		P			P		P		P	
6	INDAP JUHI MADHUKAR	P	P	P		P		P			P		P	P	P
7	JETTE PRIYANKA GANESH	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	KADAM AKSHATA ANKUSH ANITA	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	KHAMKAR JOTIRAM YASHWANT TAI														
10	MAGDUM SAGAR SANJAY	P	P	P	P	P	P	P	P	P	P	P	P		P
11	MALIM SHARMIN ABDULGAFUR AKILA	P	P	P		P	P	P	P	P	P	P	P	P	
12	NARKAR SANIKA RAGHOBA	P	P		P	P		P		P	P		P		P
13	PATIL NILESH RANGRAO		P		P			P	P			P		P	P
14	PATIL TEJASWANI SATYAWAN	P	P	P	P	P	P		P	P	P	P	P	P	P
15	RAMDUL FIZA SALIM	P			P		P		P		P		P	P	
16	RANE MAHESH MANOHAR	P	P	P	P	P	P			P		P		P	
17	RAORANE NIDHEE GIRIDHAR	P		P	P	P	P	P		P					
18	RAORANE SAKSHEE JAYWANT	P	P	P	P	P		P		P	P	P	P	P	
19	SAWANT PRANAY PRAKASH	P		P		P	P	P	P						
20	SHELKE VAIBHAVI SATYAWAN SUSHAMA		P	P	P	P	P	P	P	P	P	P	P	P	P
21	SHETYE ASHWANI JAGDISH	P		P		P		P	P						
22	VICHARE TEJASRI SRIKRUSHNA		P	P	P	P	P	P	P	P		P	P		P



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Academic Year 2022-23

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**Marks Chart**

Sr.No	Name of the Students	Grade
1	BAVDANE SWAPNIL TUKARAM	A
2	DHANAVADE SHRIKANT SHANTARAM	A
3	GHADIGAONKAR SIDDHI LALIT LALITA	O
4	GURAV SURAJ BALAWANT SHARADA	A
5	HUMBE POOJA PANDURANG	A
6	INDAP JUHI MADHUKAR	A
7	JETHE PRIYANKA GANESH	A
8	KADAM AKSHATA ANKUSH ANITA	B
9	KHAMKAR JOTIRAM YASHWANT TAI	B
10	MAGDUM SAGAR SANJAY	A
11	MALIM SHARMIN ABDULGAFUR AKILA	A
12	NARKAR SANIKA RAGHOB	A
13	PATIL NILESH RANGRAO	B
14	PATIL TEJASWINI SATYAWAN	A
15	RAMDUL FIZA SALIM	A
16	RANE MAHESH MANOHAR	A
17	RAORANE NIDHEE GIRIDHAR	B
18	RAORANE SAKSHEE JAYWANT	A
19	SAWANT PRANAY PRAKASH	A
20	SHELKE VAIBHAVI SATYAWAN SUSHAMA	A
21	SHETYE ASHWINI JAGDISH	B
22	VICHARE TEJASRI SRIKRUSHNA	A

*CS Karade*  
Principal

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