



*Rayat Shikshan Sanstha's*  
**DADA PATIL MAHAVIDYALAYA, KARJAT**  
[Dist-Ahmednagar]

DEPARTMENT OF MATHEMATICS

**BRIDGE  
COURSE**

Rayat Shikshan Sanstha's

# Dada Patil Mahavidyalaya, Karjat

Dist-Ahmednagar[M.S.]

NAAC ACREADEATED "A" Grade 3<sup>rd</sup> Cycle

## DEPARTMENT OF MATHEMATICS

Email: [dpmkmaths@gmail.com](mailto:dpmkmaths@gmail.com)

Web: [www.dpcollege.in](http://www.dpcollege.in)

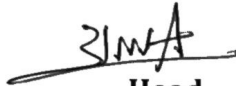
Date: 05/03/2022


### Notice

All the Students of F.Y.B.B.A.(C.A.) are hereby informed that, the Department of Mathematics Dada Patil Mahavidyalaya, Karjat is organizing Bridge Course to improves the mathematical concepts for Computer Programming from 10<sup>th</sup> March 2022.

  
**Coordinator**  
Bridge Course

  
**Head**  
Department of B.B.A.C.A.,  
Dada Patil Mahavidyalaya, Karjat,  
Dist-Ahmednagar

  
**Head**  
Department of Mathematics,  
Dada Patil Mahavidyalaya, Karjat,  
Dist-Ahmednagar

  
**Principal**  
Dada Patil Mahavidyalaya, Karjat,  
Dist-Ahmednagar

*Rayat Shikshan Sanstha's*

# **Dada Patil Mahavidyalaya, Karjat**

**Dist-Ahmednagar[M.S.]**

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*Academic Year 2021-22*

### **'Bridge Course of Mathematics with B.B.A.(C.A.)'**

#### **Introduction**

Education is primarily conceived by students as one simple remembering facts by rote. However, Science education also requires clear understanding of science concepts and a proper logical thinking or a constructive thinking by students. We all know that the students seeking admission in an undergraduate B.B.A.(C.A.) program have passed their 10+2 in all stream but it was felt that a student joining the B.B.A.(C.A.) program after 10+2 require re-enforcement of fundamental mathematics concepts i.e. basic Mathematics.

The course F.Y.B.B.A.(C.A.) contains the subjects which requires knowledge of basic mathematics. To support the students, gain better understanding, Department of Mathematics decided to initiate the task of development of bridge courses of Mathematics in B.B.A.(C.A.). This bridge course aims to accelerate the student's knowledge in the subjects of mathematics acquired at 10+2 level; and also bridge the gap between the school level syllabus and the level needed to understand concepts of

mathematics. This bridge course will help students to study the C-Programming course easily and very well

### **Course Objective**

- To remove the fear of Mathematics from students
- Improve clarity on mathematical concepts
- To understand role and importance of Mathematics in various business situations
- To develop skills related with basic Mathematical technique
- Develop right understanding regarding Set, Number System, Matrices

### **Course Outcome**

- This improves the mathematical concepts for Computer Programming
- It helps students to understand the subjects of their course
- It helps students to learn their subjects easily and very well
- It helps intelligent Guessing
- It reduces burden

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**Name of the course:** Bridge Course in Mathematics for First Year B.B.A.(C.A.)

**Eligibility:** 10+2 Any Stream

**Duration:** 30 Hours

**Medium:** English/Marathi

**Fees:** Free

**Lecture/Practical Timing:** 10:00 am to 12:00 pm, Two Hour

**Assessment:** At the end of the course examination is conducted.

Theory-Objective Type=20 marks

Practical-Oral =20 marks

Average Marks= $20+20=40/2=20$

**Award of Grades:**

- i) 3-4 Marks C Grade
- ii) 5-8 Marks B Grade
- iii) 9-12 Marks B<sup>+</sup> Grade
- iv) 13-16 Marks A Grade
- v) 17-20 Marks A<sup>+</sup> Grade

## **Syllabus**

Total Hours	30
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### Detailed Syllabus

Sr. No.	Name of the Topic	Theory Periods (VTT-01)
1)	<b>Sets</b> <ul style="list-style-type: none"><li>➤ Standard Sets</li><li>➤ Complex Numbers<ul style="list-style-type: none"><li>• Addition and Subtraction</li><li>• Multiplication and Division</li></ul></li><li>➤ Fibonacci Sequence</li></ul>	06
2)	<b>Number System</b> <ul style="list-style-type: none"><li>➤ Even and Odd Numbers</li><li>➤ Prime, Palindrome, Perfect and Armstrong Numbers</li><li>➤ Factors</li><li>➤ Maximum, Minimum Of Numbers</li><li>➤ GCD and LCM</li><li>➤ Binary and Decimal Number System<ul style="list-style-type: none"><li>• Addition and Subtraction of Binary Numbers</li><li>• Conversion</li></ul></li><li>➤ Factorial</li></ul>	10

	<ul style="list-style-type: none"> <li>➤ Permutation and Combination</li> <li>➤ Pascal's Triangle</li> </ul>	
3)	<b>Matrices</b> <ul style="list-style-type: none"> <li>➤ Definition of Matrix</li> <li>➤ Types of Matrices</li> <li>➤ Addition and Subtraction</li> <li>➤ Multiplication and Division</li> <li>➤ Determinant and Inverse of Matrices</li> <li>➤ System of Linear Equations</li> </ul>	08
4)	<b>Geometry</b> <ul style="list-style-type: none"> <li>➤ Geometrical Shapes <ul style="list-style-type: none"> <li>• Circle</li> <li>• Triangle</li> <li>• Rectangle</li> <li>• Square</li> </ul> </li> <li>➤ Area of Geometrical Objects</li> <li>➤ Sine and Cosine Series, Geometrical Series, Fibonacci series</li> </ul>	06
<b>TOTAL HOURS</b>		<b>30</b>

**References:**

1. Basic Math and Pre-Algebra for Dummies, Book by Mark Zegarelli
2. Basic Mathematics: An Introduction Book by Alan Graham
3. Trigonometry: A Complete Introduction, Book by Hugh Neill
4. C-Programming, Dr. Sunita Patil, Salauddin S. Sajjan, Kamil A. Khan

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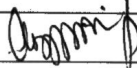
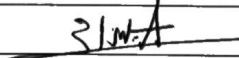
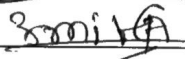

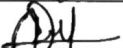
### Syllabus Distribution

Sr. No	Name of Lecturer	Topics	Periods	Signature
1	Dr. A.S. Mhaske	<ul style="list-style-type: none"><li>➤ Standard Sets</li><li>➤ Complex Numbers<ul style="list-style-type: none"><li>• Addition and Subtraction</li><li>• Multiplication and Division</li></ul></li><li>➤ Fibonacci Sequence</li><li>➤ Even and Odd Numbers</li><li>➤ Prime, Palindrome, Perfect and Armstrong Numbers</li></ul>	12	
2	Mr. A.A. Nalavde	<ul style="list-style-type: none"><li>➤ Factors</li><li>➤ Maximum, Minimum Of Numbers</li><li>➤ GCD and LCM</li><li>➤ Binary and Decimal Number System<ul style="list-style-type: none"><li>• Addition and Subtraction of Binary Numbers</li></ul></li></ul>	12	



		<ul style="list-style-type: none"> <li>• Conversion</li> <li>➤ Factorial</li> <li>➤ Permutation and Combination</li> </ul> <p>Pascal's Triangle</p> <ul style="list-style-type: none"> <li>➤ Definition of Matrix</li> <li>➤ Types of Matrices</li> <li>➤ Addition and Subtraction</li> <li>➤ Multiplication and Division</li> </ul>		
3	Mr. S.G. Waghmare	<ul style="list-style-type: none"> <li>➤ Determinant and Inverse of Matrices</li> <li>➤ System of Linear Equations</li> </ul> <p>Equations, Cubic Equations</p> <ul style="list-style-type: none"> <li>➤ Geometrical Shapes:-Circle, Triangle, Rectangle, Square</li> <li>➤ Area of Geometrical Objects</li> </ul> <p>Sine and Cosine Series, Geometrical Series, Fibonacci series</p>	12	

**BOARD OF STUDIES (BOS):**

Sr. No.	Name	Designation	Signature
1	Prin. Dr. Sanjay Nagarkar	Chairman	
2	Dr. Sandeep R. Pai	Coordinator IQAC	
3	Dr. Ashok S. Mhaske	Coordinator	
4	Mr. Amit A. Nalavde	Member	
5	Mr. Sagar G. Waghmare	Member	
6	Dr. Tukaram G. Thange	External Expert	

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### Time Table

'Bridge Course of Mathematics'

(Theory/Practical)

(With effective from 10<sup>th</sup> March 2022 to 31<sup>st</sup> April 2022)

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Theory</b>						
10:00-11:00	ASM		AAN		SGW	
11:00-12:00	ASM		AAN		SGW	

ASM- Dr. Ashok S. Mhaske, AAN- Amit A. Nalavde, SGW- Sagar G. Wagmare



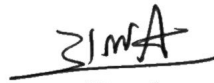
**Coordinator**

Bridge Course



**Head**

Department of B.B.A.C.A,  
Dada Patil Mahavidyalaya, Karjat,  
Dist-Ahmednagar



**Head**

Department of Mathematics,  
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**Principal**

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**'Bridge Course in Mathematics'**

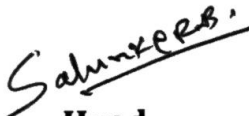
**List of Students**


<b>Roll. No</b>	<b>Name of the Student</b>
1	ASWAR RUSHIKESH SURESH
2	BADE NIKITA NANDU
3	BHISE MAHESH NAMDEV
4	BUDHAWATE PANDURANG CHHAGAN
5	DESHPANDE MANASI MAHESH
6	DHANDE ASHISH ISHWAR
7	DHANDE SHUBHANGI AJINATH
8	DHAVANE PRASHANT MATHURDAS
9	DHUMAL KRUSHNA DEEPAK
10	GORE RUSHIKESH SAMBHAJI
11	GUNJAL AKSHAY SANJAY
12	HOLAY GAYATRI BAPUSAHEB
13	JADHAV APPASAHEB KANTILAL
14	JADHAV GITANJALI RAJENDRA
15	JADHAV LAXMAN BABAB
16	JADHAV TEJAS MARUTI
17	JAGTAP GANESH ADINATH
18	JAWALE REKHA VIJINATH
19	KADAM SHUBHAM DATTATRAY
20	KADAM SNEHA KALYAN
21	KALE ANKITA VIJAY
22	KALE MANSI BIBHISHAN


23	KAMBLE ANIKET ASHOK
24	KATARE AJAY BALU
25	KAZI SANIYA IMRAN
26	KHARADE KRUSHNA SHASHIKANT
27	KHARADE RUTUJA YUVRAJ
28	KHOD MAHADEV ARJUN
29	KSIRSAGAR ANKITA ATUL
30	MORE AMIT SUDAM
31	NADANE NILESH ASHOK
32	NIMBALKAR VISHAL VISHNU
33	PAKHARE OMKAR RAJENDRA
34	PATHADE PRAJAKTA PRAMOD
35	PATIL ACHYUT SHAHURAJ
36	RAUT SAYALI ANKUSH
37	SABALE SANKET BALSHEB
38	SALAVE RUSHIKESH HIRALAL
39	SAYKAR RESHMA NANA
40	SHAIKH MUSKAN JAMIL
41	SHELAR SAURABH ANIL
42	SONAWANE ROHIT NITIN
43	SONAWANE VIVEK CHANDRAKANT
44	SUPEKAR VISHNAVI KURMDAS
45	TAKLE SHWETA MAHADEV
46	TAPKIR JAYA SHARAD
47	THORAT PRATIKSHA BALASAHEB
48	UBALE SHANKAR VITTHAL
49	WAGHMARE SUMIT KISAN
50	YADAV DHANANJAY SUNIL
51	JADHAV PRATIKSHA SATISH
52	HOLE YOGESH SHRIRANG
53	ROKADE DNYANESHWARI KAILAS
54	MANDLIK MANOJ KANIFNATH
55	LAWANDE KESHAV ABASAHEB
56	LAWANDE SHIVAJI DHANANJAY
57	LAD KIRAN DILIP
58	MANE VAIBHAV UTTAM
59	KAMBLE SANDIP RAJENDRA
60	NALAWADE PRATIK SHIVAJI
61	WAGH SHUBHANGI RAJABAPU

62	GALANDE KRUSHNA PRAKASH
63	PUNDE SHRADDHA NITIN
64	MORE SITARAM BIHARAT
65	KENDALE SAURABH TATYA
66	DHAKNE ONKAR SAHADEV
67	POKALE RUTUJA SHIVAJI
68	TAPKIR VITTHAL MAHADEV
69	WAGHMARE ARYA BABASAHEB
70	TANPURE YASHVARDHAN RAVINDRA
71	NAVALE PRATIKSHA SANTOSH
72	ANBHULE PRITESH VIKRAM
73	JADHAV PRIYA UMESH
74	UKANDE SURAJ BHAUSAHEB
75	CHAURE SHUBHAM RAMESH
76	POTARE ABHISHEK PARSHURAM
77	PAWAR SHWETA PRATAP
78	BUDDHIWANT YUKTA GOVIND

  
**Coordinator**  
 Bridge Course

  
**Head**  
 Department of B.B.A.C.A,  
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 Dist-Ahmednagar

  
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### BRIDGE COURSE : ATTENDANCE SHEET of ICT LECTURE

(Department of Mathematics and B.B.A. (Computer Application))

Name of Teacher: Dr. A.S. Mishra			
Designation	Asst. Prof.	Subject	Mathematics
Class	F.Y. B.B.A (CA)	Paper	
Time		Date	10:00 to 11:00
Points Cover Under Topic:			
Matrices, C program to find GCD			

Sr. No	Roll No.	Name of the Student	Signature
1)	6	Dhonde Ashish Ishwar	<u>Ashish I</u>
2]	15	Jadhav Laxman Baban	<u>Jadhav L</u>
3]	11	Gunjal Akshay Sanjay	<u>Gunjal AS</u>
4]	3	Bhise mahesh damodar	<u>m a b</u>
5]	28	Khod Mahadev Arjun	<u>Khod M</u>
6]	49	Waghmare Sumit Kisan	<u>Sumit</u>
7.	23	Kamble Aniket Ashok	<u>Aniket</u>
8.	38	Salave Rurhikesh Hiralal	<u>Salave R.M</u>
9.	24	Kabare Ajay baly	<u>Kabare A.B</u>
10.	30	more Amit Sudam	<u>Amit</u>

11)	33	Parkase omkar Rajendra	<del>Parkase</del>
12)	50	Yadau DHananjay Sunil	Yadau D.S
13)	17	Jagtap Ganesh Adinath	Jagtap.G.A.
14	14	Jadhav Gitanjali Rajendra	<del>Jadhav</del>
15)	63	Punde Shradha Nitin	<del>Punde</del>
16	12	Halay Gayatri Bapusaheb	<del>Halay</del>
17	77	Pawar Shweta Pralap	<del>Pawar</del>
18)	05	Deshpande Monasi Mohesh	<del>Deshpande</del>
19)	51	Jadhav Pratiksha Santosh	P.S. Jadhav
20)	71	Navale Pratiksha Santosh	<del>Navale</del> P.S
21)	22	Kale Mansi Bibhishan	<del>Kale</del> M.S
22)	96	Racet Sayali Ankush	<del>Racet</del>
23)	07	Pokale Rutuja Shiraji	<del>Pokale</del> R.S
24)	69	Waghmare Ansa Babasaheba	<del>Waghmare</del>
25)	61	Wagh Shubhangi Rajabapu	<del>Wagh</del>
26)	07	Dhonde Shubhangi Ajinath	<del>Dhonde</del>
27)	46	Tapkire Jaya Shurad	<del>Tapkire</del>
28)	47	Thakur pratiksha Balasaheb	<del>Thakur</del>
29)	53	Pokade Dnyaneshwari Kavita S.	<del>Pokade</del>
30)	20	Kadam Sneha Kalpan	<del>Kadam</del> S.K

*ZMA*

Signature  
Subject Teacher

*[Signature]*

Principal  
Dada Patil Mahavidyalaya,  
Karjat, Dist-Ahmednagar

Rayat Shikshan Sanstha's

# Dada Patil Mahavidyalaya, Karjat

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### BRIDGE COURSE : ATTENDANCE SHEET of ICT LECTURE

(Department of Mathematics and B.B.A (Computer Application))

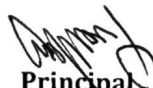
Name of Teacher: Mr. Washmore Sagar G.			
Designation	ASST. PROF.	Subject	MATHEMATICS
Class	F.Y.B.B.A (C.A)	Paper	
Time	10:00 - 12:00	Date	07/04/2022
Points Cover Under Topic:			
Inverse of matrices, Row echelon form, Rank & Nullity.			

Sr. No	Roll No.	Name of the Student	Signature
1	37	Sobale Santket Balasaheb	Sobale
2	76	Potare Abhishek Parshuram	Abhe
3.	62	Galande Krishna Prakash	Prakash
4.	16	Jadhav Tejas manuti	Jadhav
5	41	Shobhe Gaurabh Anil	Shobhe GA
6	72	Anbhule pritesh vikram.	Anbhule
7	70	Tanpure Yash Ravindra.	Tanpure
8)	74	Ukande Suraj Bhausahab	Ukandes B
9)	01	Aswar Rushikesh suresh	Aswar
10)	10	Gore Rushikesh Sambhaji	Rushik

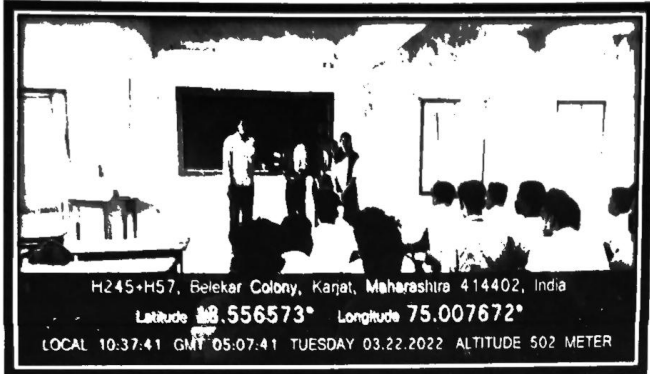


11)	52	Hole Yogesh Shrirang	<del>Hole</del>
12)	66	Dhakne Onkar Shubhadev	<del>Dhakne</del>
13)	4	Buchade pandurang chagan	<del>Buchade</del>
14)	31	Madane Nilesh Ashok	<del>Madane</del>
15)	6	Dhonde Ashish Ishwar	<del>Dhonde</del>
16)	15	Jadhav Laxman Baban	Jadhav L.B.
17)	73	Jadhav Peiya Umesh	Jadhav P.
18)	45	Takle Shweta Mahadev	Takle S.
19)	18	Jawale Rekha Vijinath	Jawale R.V.
20)	20	Kadam Sneha Kalpan	Kadam S.K.
21)	49	Thorat Pratibha Balasheb	Thorat P.
22)	53	Pokale Dnyaneshwari Anil	Pokale D.
23)	07	Dhonde Shubhangi Ajinath	Dhonde S.
24)	46	Tapkie Jayu Shurad	Tapkie J.
25)	69	Waghmare Arya Babasaheb	Waghmare A.
26)	61	Wagh Shubhangi Rajabapu	Wagh S.
27)	67	Pokale Rutuja Shivaji	Pokale R.
28)	36	Raut Sayali Ankush	Raut S.
29)	22	Kale Mansi Bibhishan	Kale M.B.
30)	51	Jadhav Pratiksha Santosh	P.S. Jadhav
31)	71	Navale Pratiksha Santosh	Navale P.S.

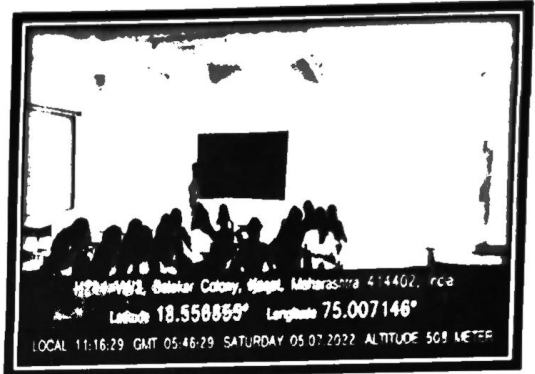
  
Signature  
Subject Teacher

  
Principal  
Dada Patil Mahavidyalaya,  
Karjat, Dist-Ahmednagar

# Photos of the Bridge Course



**Bridge Course Introduction Speech**



**Lecture by Dr. A. S. Mhaske**



**Lecture by Mr A. A. Nalavade**



**Lecture by Mr S. G. Waghmare**

Rayat Shikshan Sanstha's

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### Program Report

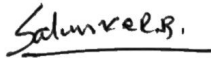
- 1) **Title:** - Bridge Course for First Year B.B.A.(Computer Application)
- 2) **Duration:** - 10<sup>th</sup> March 2022 to 31<sup>st</sup> April 2022
- 3) **Fees:-** Free
- 4) **Name of Coordinator :-** Dr. Ashok Mhaske
- 5) **Aim and Objectives of the Course:-**

- ❖ To remove the fear of Mathematics from students
- ❖ Improve clarity on mathematical concepts
- ❖ To understand role and importance of Mathematics in various business situations
- ❖ To develop skills related with basic Mathematical technique
- ❖ Develop right understanding regarding Set, Number System, Matrices



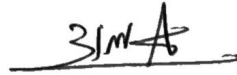
**Coordinator**

Bridge Course



**Head**

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Department of Mathematics,  
Dada Patil Mahavidyalaya, Karjat,  
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