



MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiagangadharmahavidyalaya.ac.in

**Report
On
ICT / computing Skill Development Programme
Organized by
Department of Mathematics
Mugberia Gangadhar Mahavidyalaya**


ICT skills are abilities that help you understand and operate a wide range of technology software. This can include helping users with tasks on computers, such as making video calls, searching on the internet or using a mobile device like a tablet or phone.

List of the Programme

1. Five Days workshop for capacity building of the students on “How to you present a power point as a student?” 29 November to 3rd December 2022.
2. MATLAB Practical Test for PG SEM I on 14.03.2023
3. A hand on practice on computation skill through MATLAB is held on 25th February 2023 at 10.30a.m to 2.00p.m in Mathematics department Lab.
4. “A Computational Methods using C Programme” 26 February 2021
5. “A Computational Methods using MATLAB ” 19 February 2021
6. “Introduction to Excel ” 17 February 2022

MATLAB Practical Test for PG SEM I on 14.03.2023
Organized by The Department of Mathematics
Mugberia Gangadhar Mahavidyalaya

NOTICE

 **MUGBERIA GANGADHAR MAHAVIDYALAYA**
ESTD.—1964
P. O.—BHUPATINAGAR Dist.—PURBA MEDINIPUR
S. T. D. Code—03220 Ph. No.—270236, Pin.—721425 (W. B.)

Ref. No.—M. G. M. / / / Dated.....10/03/2023

From : The Principal / Secretary.

Department of Mathematics

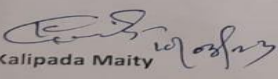
Students are hereby informed that the Practical Examination on Paper MTM-197(MATLAB PRACTICAL) of 1ST Semester M.Sc in Mathematics will be held on 14th March 2023 as per following schedule. Students are directed to note the details as follows and attend the same positively.

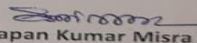
Date of Examination: 14.03.2023 at 11.00 AM

Venue: Computer Lab, Dept of Mathematics

Internal Examiner: Subham Maity, Contractual Teacher

External Examiner : Dr. Shyamal Kumar Mandal, Professor,
Dept of Applied Mathematics, Vidyasagar University.


Dr. Kalipada Maity
Head, Department of Mathematics
Mugberia Gangadhar Mahavidyalaya


Dr. Swapan Kumar Misra
Principal
Mugberia Gangadhar Mahavidyalaya

The examination on MATLAB Lab paper MTM-197 is held on 14th March 2023 at 11.00 a.m to 2.00 p.m in Mathematics department Lab. In this program all the students

List of presented students is given below

[illegible]

The questions paper of this examination :

Total Pages -02 MGM/PG/IS/MTM/197/22

M.Sc 1st Semester Examination, 2022

Department of Mathematics, Mugberia Gangadhar Mahavidyalaya

(Lab1: Computational Methods: Using MATLAB)

Paper: MTM-197

FULL MARKS :25 :: Time : 2 Hours

Select one question from each group on lottery basis

Group-A

Select one question on lottery basis **6 × 1**

- Write a script in MATLAB to generate the Fibonacci sequence.
- Write a script in MATLAB to find the prime numbers between two specified numbers.
- Write a script in MATLAB to generate Pascal triangle.
- Write a script in MATLAB to find the roots of an equation by iteration method.
- Write a script in MATLAB to find the prime factors of a positive Integer.
- Write a script in MATLAB to calculate the roots of the quadratic equation $2x^2 + 5x - 3 = 0$.
- Write a script in MATLAB to find the product of diagonal elements of a square matrix.
- Write a script in MATLAB to test a number is palindrome or not.
- Write a script in MATLAB to find the mean for a set of discrete data.
- Write a script in MATLAB to calculate the nC_r .
- Write a user defined function in MATLAB to test a number is divisible by another number or not and using this conclude for the numbers 7777 and 11.
- Write a script in MATLAB to find the inverse of a square matrix.

Group-B

Select one question on lottery basis **8 × 1**

- Write a script in MATLAB to calculate correlation coefficient of the following data: $X = (1, 2, 3, 4, 5, 6, 7)$ and $Y = (9, 8, 15, 12, 17, 13, 14)$.
- Write a script in MATLAB to find the value of $\int_a^b f(x) dx$ by Simpson's 1/3 rd rule and using this find the value of the integral $\int_0^1 \frac{1}{1+x^2} dx$ by dividing 100 sub-intervals.
- Write a script in MATLAB to find the real root of the equation $f(x) = 0$ by Regula-Falsi method and using this find a real root of the equation $\sin x + 5x + 1 = 0$.
- Write a script in MATLAB to find the real root of the equation $f(x) = 0$ by bisection method and using this find a real root of the equation $\cos x - 3x + 1 = 0$.

1

Dr. Kalipada Maity
Associate Professor of Mathematics
Mugberia Gangadhar Mahavidyalaya

Total Pages -02 MGM/PG/IS/MTM/197/22

5. Write a script in MATLAB to find the median and mode for discrete distribution. Test using following data:

x_i	1	2	3	4	5	6	7	8	9
f_i	8	10	11	16	2	5	17	13	4

6. Write a script in MATLAB to find the standard deviation for discrete distribution. Test using above data (Question no. 5)

7. Write a script in MATLAB to find the median of the following numbers: 7, 8, 9, 6, 3, 9, 8, 5, 7, 11.

8. Write a script in MATLAB to find the standard deviation of the following numbers: 7, 8, 9, 6, 3, 9, 8, 5, 7, 11.

9. Write a script in MATLAB to find the value of $\int_a^b f(x) dx$ by Trapezoidal rule and using this find the value of the integral $\int_0^1 \frac{1}{1+x^2} dx$ by dividing 1000 sub-intervals.

10. Write a script in MATLAB to find the roots of the equation $3\sin x + \cos x - 5 = 0$ by N-R method.

Group-C

Select one question on lottery basis **6 × 1**

- Write a script in MATLAB to draw a histogram for the following set of data. {2 8 6 5 7 3}
- Write a script in MATLAB to draw $\sin t$ and $\cos t$ in the interval $[-\pi, \pi]$ in the same figure with different line specifications.
- Write a script in MATLAB to find the pie diagram of a M.Sc. 1st semester students of the following marks: 27, 42, 35, 36, 38, 45, 62.
- Write a script in MATLAB to draw $y = |x|$ in the interval $[-4, 4]$ with mentioning title, axes and axes limits.
- Write a script in MATLAB to plot $y = 5x^2 - 2x + 7$ in the interval $[-3, 3]$.
- Write a script in MATLAB to plot $y = |x|$ and $z = \ln x$ in a same figure.
- Write a script in MATLAB to draw the following function in the interval $[-\pi, \pi]$

$$f(x) = \begin{cases} \sin x, & -\pi \leq x < 0 \\ 0, & x = 0 \\ \tan x, & x > 0 \end{cases}$$
- Write a script in MATLAB to draw surface of the equation $z = xe^{-x^2-y^2}$ in the range $-3 \leq x \leq 3$ and $-3 \leq y \leq 3$.
- Write a script in MATLAB to display three dimensional surface plot.
- Write a script in MATLAB to draw $\sin t$ and $\sin 4t$ in the interval $[0, 4\pi]$ with mentioning title, axes and different line specifications.


[Note book and viva : 05 marks]

2

Dr. Kalipada Maity
Associate Professor of Mathematics
Mugberia Gangadhar Mahavidyalaya

The answer script of this examination

Serial No.- M-1 3922


মুগবেড়িয়া গঙ্গাধর মহাবিদ্যালয়
MUGBERIA GANGADHAR MAHAVIDYALAYA
AFFILIATED TO VIDYASAGAR UNIVERSITY

উদ্দেশ্যপূর্তায় মুদ্রিত নির্দেশাবলী পরীক্ষার্থীকে অবশ্যই পালন করিতে হইবে।
Candidate must follow all instructions printed on reverse.

মুগবেড়িয়া প্রতিপাদনে প্রতিদ্বন্দ্বিতা
Countersigned on verification

পরীক্ষাকেন্দ্রের অধিকর্তার স্বাক্ষর
Signature of the Officer-in-Charge

পরীক্ষার্থীকে পূরণ করিতে হইবে।
To be filled in by the candidate

পরীক্ষা: ২০..... Examination: M.Sc 1st Semester ২০ 22

পরীক্ষার্থীর রোল..... Candidate's Roll: PM/VUE/32/MT/MS No. 8026

বৎসরসহ রেজিস্ট্রেশন নং..... Regn. No. with year: 101253 of 2019-2020


বিষয়..... Subject: mathematics

পত্র..... Paper: MTM-197

ভাগ..... Half: 1st

প্রশ্নের অধিক সংখ্যা Question No.	1	2	3	4	5	6	7	8	9	10	মোট প্রাপ্ত নম্বর Total Marks Obtained
প্রাপ্ত নম্বর Marks Obtained	6	8	6	4							24
পর্যালোচনা Review Mark (if any)											

প্রধান পরীক্ষক
Head Examiner
সহপ্রাচ্যক্ষণকারী
Co-ordinator
সহায়ক পরীক্ষক
Scrutineer


Examiner

3922

Group-A

৫) write a script in MATLAB to find the prime factors of a positive integers.

$n = \text{input}(\text{'Enter the number: \n'});$
 $\text{fprintf}(\text{'The prime factors of \%d are: '}, n);$

```

for j = 2:n
    if rem(n,j) == 0
        i = 2;
        while rem(j,i) == 0
            i = i + 1;
        end
        if (j == i)
            fprintf('1 + \%d', j);
        end
        end
end
end
fprintf(' \n');
    
```

3. mark
Run X

Input/output:-
 Enter the numbers:
 51
 the prime factors of 51 are: 3 17

group-B

3) write a script in MATLAB to find the real root of the equation $f(x)=0$ by Regular Falsi method and using this find a real root of the equation $\sin x + 5x + 1 = 0$.

```
a=input('Enter the initial interval: \n');
b=input(' ');
while abs(b-a)>0.0001
    fa=sin(a)+5*a+1;
    fb=sin(b)+5*b+1;
    xn=(a*fb-b*fa)/(fb-fa);
    fxn=sin(xn)+5*xn+1;
    if fa*fxn<0
        b=xn;
    else
        a=xn;
    end
end
fprintf('The root of the equation is %f \n', xn);
```

Input/output:-

Enter the initial interval

0
1

a =

-0.1668

the root of the equation is -0.166795

Run
Simulink

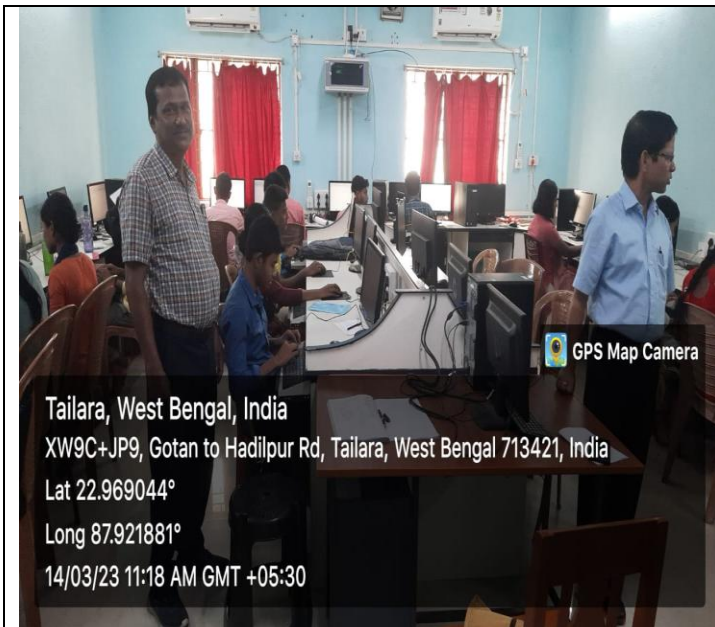
3922

group-c

9) write a script in MATLAB to display three dimensional surface plot.

```
a=input('Enter the value of a: ');
z=peaks(a);
surf(z);
colormap(hsv);
```

Run
z








Date: 30/01/23

71. Sniparna Mondal
72. Prajna Paromita Maity
73. Biya Jana
74. Arpita Bera.
75. Sankari Maity
76. Moumita Jana
77. Suttyodip Babix
78. Dipak Paria.
79. Palash Das
80. Soumitra Das
81. Mohan Kumar Paria
82. Mahabasi Jana.
83. Subom Patra
84. Shikrisha Mondal.
85. Shreya Bhunia
86. Sudipa Jana
87. Lalita Patra
88. Sulekha Rani Maity
89. Soumitra Das
90. Manoj Maity
91. Shubhashree Bishal.
92. Atasi Manna
93. Parbati Pradhan
94. Dolan Roy
95. Shishendu Mondal
96. Prashanta Rana
97. Bitika Khata
- 98

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30-01-23
Principal
Mishra Gangadhar Mahavidyalaya

30/01/23

29/01/2023

Date: 29/01/23
Page: 1

69. Roni Mandal
70. Sankari Jana
71. Supriya Maity
72. Bularni Bera.
73. Smiparna Mondal
74. Amindita Maiti
75. Shreya Bhunia
76. Aropi Bera.
77. Prajna Paramita Maity
78. Sohini Karan
79. Sneha Maity.
80. Resita Gole
81. Amisha Makur.
82. Monisha Geve
83. Jayashree Portia
84. Moumita Mandal.
85. Ashalata Gini
86. Mehadi Achakur.
87. Rebari Bera Maity
88. Siuli Panda.
89. Sufarna Pradhan.
90. Payer Prathan.
91. Priyanka Sahoo.

Saharson
29.01.23
Principal
Mugheria Gangadhar Mahavidyalaya

① 29/01/23

Report
of
Five days workshop for capacity building of the students
on
“How do you present a power point as a student ?”

Course period: **From 29th November– 3rd December, 2022**



**Organized
by**

Department of Mathematics (UG & PG)

(In collaboration with DBT STAR College strengthening Scheme (Govt. of India))

Mugberia Gangadhar Mahavidyalaya

Bhupatinagar, Purba Medinipur- 721425

ACCREDITED BY NAAC WITH GRADE *B⁺*

Affiliated to

Vidyasagar University

Department of Mathematics
Mugberia Gangadhar Mahavidyalaya
NOTICE

Dated: 18/11/2022

Minutes of the Departmental meeting held on 18.11.2022

Members present:

- (1) Dr. Kalipada Maity, HOD, Associate Prof. (**Coordinator**)
- (2) Dr. Manoranjan De, Assistant Prof.
- (3) Mr. Suman Giri, Sact.
- (4) Mr. Debraj Manna, Sact.
- (5) Mr. Bikash Panda, Sact.
- (6) Mr. Hiranmoy Manna, Sact.
- (7) Mr. Goutam Mandal, Contractual teacher(**Joint Coordinator**)
- (8) Mr. Santu Hati, Contractual teacher.

A short meeting was arranged at 3:15 pm regarding the implementation of short term course on Hands on workshop on power point for educational professional in our Department. All teachers of the department joined the meeting in time. Dr. Kalipada Maity (HOD) chaired the meeting.

Decisions taken in the meeting are:

- (1) It is decided that Mr. Goutam Mandal will be the joint coordinator of this program and Dr. Kalipada Maity (HOD) will be program coordinator and rest teachers of the department will be the recourse persons of the program. .
- (2) The course period will be scheduled from 29 November, 2022 to 3 December. 2022
- (3) The participation students will be UG-5th sem, PG-1st sem and PG-3rd sem.
- (3) Course content for the said program is scheduled as
 - (i) Create a presentation including all the areas of the application.
 - (ii) Slide Master.
 - (iii) Work with text and image.
 - (iv) Animate a presentation.
 - (v) Narrate a presentation.
 - (vi) Creating live polls, Quizzes and Q&A.

It is decided that the course will be delivered by lecture, interaction and ppt presentation along with a hands on practical. Available seat to register the program is 100. There is no course access fee for the student. Last date of registration for this program is 27th November 2022. Hod will forward the matter for approval of this program from Academic Sub-committee. Teachers are requested to prepare a routine for smooth running of course.

The meeting comes to end with a vote of thanks.



MUGBERIA GANGADHAR MAHAVIDYALAYA

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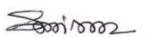
DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

NOTICE

Dated: 21/11/2022

This is to hereby notify all the students that the dept. of Mathematics, Mugberia Gangadhar Mahavidyalaya is going to organize a workshop on “**Five days workshop for capacity building of the students ?**” from 29th November, 2022 to 3rd December 2022 in our department through offline mode. The program will be delivered by lecture, interaction and ppt presentation along with a hands on practical. Available seat to register the program is 90. There is no course access fee for the student. Last date of registration for this program is 27th November 2022. All the students of our college especially of our dept. are requested to be present in this course.

 21.11.2022
Dr. Swapan Kumar Misra

Principal

Mugberia Gangadhar Mahavidyalaya



Principal
Mugberia Gangadhar Mahavidyalaya

Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 25.11.2022

Departmental announcement



Announcement
Five Days Workshop for Capacity Building of the students
on
How Do You Present a Power Point as a Student?
(For UG-V & PG students)
Organized by
Department of Mathematics(UG & PG)
Mugberia Gangadhar Mahavidyalaya
In collaboration with OJAS, Tamluk, Purba Medinipur WB
Date: 29th November to 3rd December 2022



Under DBT STAR
COLLEGE
Strengthening
Scheme (Govt. of
India)

Day 1: (1.15pm - 4.15pm)

1. Dr Swapan Kumar Misra, Principal, Mugberia Gangadhar Mahavidyalaya.
2. Dr Kalipada Maity, Associate Professor & NAAC Coordinator, HOD (UG & PG), Department of Mathematics.
3. Dr Manoranjan De, Assistant Professor, Department of Mathematics.

Tuesday

29/11/2022

Day 2: (2.15 pm- 4.15 pm)

1. Mr. Goutam Kumar Mondal, Contractual Assistant Professor, Department of Mathematics.
2. Miss Twameka Tripathi (Alumni).

Wednesday

30/11/2022

Day 3: (2.15 pm- 4.15pm)

1. Mr. Subham Maity, Contractual Teacher, Department of Mathematics.
2. Mr. Manish Acharya(Alumni).

Thursday

01/12/2022

Day 4: (2.15 pm- 4.15 pm)

1. Mr. Bikash Panda, SACT, Department of Mathematics.
2. Miss Twameka Tripathi (Alumni).

Friday

01/12/2022

Department of Mathematics
Mugberia Gangadhar Mahavidyalaya

Goutam Kumar Mandal

Dr Kalipada Maity

Dr Swapan Kumar Misra

A large number of lectures were delivered by Dr. Swapan Kumar Misra(Principal), Dr. Kalipada Maity(Associate Professor, HOD & NAAC Coordinator, dept of Mathematics), Dr. Manoranjan De(Assistant Professor, dept of Mathematics), also by the other faculties of dept of Mathematics.

Presentation considerations and tips:

1. Be careful of over-designing. Busy Power Points slides may be distracting for most learners, and there is nothing worse than waiting for someone's heading to 'appear' on the screen!
2. If you include pictures and diagrams, make sure they are highly relevant to the material on the slide and assist learning.
3. If you have things you want to stand out do not use red and green as colour-blind students cannot tell the difference.
4. Beware that not all fonts are visible on a large screen (even if they are clearly visible to you).
5. Using different fonts can be good, but can also be an issue for some students, so if it is not necessary, it is wise use Arial or a font without a serif.
6. If you are including links to web pages such as YouTube, check them before the lecture.

Link: <https://twitter.com/Swapank26545954/status/1597578356706643974?s=20>

Link: <https://twitter.com/Swapank26545954/status/1597583803534675970?s=20>

Workshop for Capacity Building of the Students



Department of Mathematics

Mugberia Gangadhar Mahavidyalaya

Second day workshop for capacity building for the students, the students of PG-3rd semester makes their PPT by hands on workshop. Six group of students complete their project topic under the supervisor Mr. Goutam Mandal(Contractual Teacher, Dept of Mathematics).

SL NO	NAME	ROLL NO	PROJECT TOPIC	SUPERVISOR NAME
1	Sanchayan Laha Saikat Jana	2571 2570	Application of Probability	Santu Hati
2	Shrabani Jana Suchismita Pradhan	2574 2584	Fibonacci Sequence	Goutam Mandal
3	Sreya Jana Diptangshu Barman Priti Das Adhikari	2580 2559 2567	Application of matrices to encode and decode messages	Goutam Mandal
4	Tapasi Karan Poushali Tripathy	2591 2565	Roll of Mathematics in Modern Technology	Dr. Kalipada Maity
5	Pradyot Dalapati Krisnendu Pradhan Snehasish Bhoumik	2566 2562 2577	The Laplace Transform and it's real life application	Dr. Manoranjan De
6	Goutam Jana Susmita Sahoo Buddhadev Jana	2560 2590 2556	Graph theory and its application	Goutam Mandal

Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 30.11.2022

Third day workshop for capacity building for the students, the students of PG-3rd semester makes their PPT by hands on workshop. Five group of students complete their project topic under the supervisor Mr. Goutam Mandal(Contractual Teacher, Dept of Mathematics).

SL NO	NAME	ROLL NO	PROJECT TOPIC	Supervisor Name
1	Debajyoti Maity Raja Kumar Shee Puspendu Sau	1558 2569 2568	Application of Trigonometry	Santu Hati
2	Debabrata Patra Biswajit Mandal Sumana Maity	2557 2555 2595	Complex analysis in Fourier transformation applications	Goutam Mandal
3	Subinoy Patra Saheb Bera Sudeshna Maity	2583 2592 2585	Fluid Mechanics and its application	Goutam Mandal
4	Amiya Mandal Subhadip Mandal Soumya Kanti Mandal	2551 2581 2594	Application of Differential Equation in real life	Dr. Kalipada Maity
5	Snigdha Mandal Biren Pahari Sayan Das	2578 2554 2593	Application of Numerical Metho	Dr. Kalipada Maity

Workshop for Capacity Building of the Students(Day-2)



Bhupati Nagar, West Bengal, India
Mugberia Gangadhar Mahavidyalaya, 2P2H+395, Bhupati Nagar, West Bengal 721425, India
Lat 22.000102°
Long 87.728585°
30/11/22 03:26 PM GMT +05:30



Bhupati Nagar, West Bengal, India
Mugberia Gangadhar Mahavidyalaya, 2P2H+395, Bhupati Nagar, West Bengal 721425, India
Lat 22.000102°
Long 87.728585°
30/11/22 04:06 PM GMT +05:30

Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 02.12.2022

Next day workshop for capacity building for the students, the students of UG-5th semester makes their PPT by hands on workshop. Seven group of students complete their project topic under the supervisor Mr. Goutam Mandal(Contractual Teacher, Dept of Mathematics).

**List of Projects done by UG 5th Semester Students ,
Dept of Mathematics (UG & PG),
Mugberia Gangadhar Mahavidyalaya
under DBT Start College Scheme, Govt. of India**

Sl. No.	Title of the Project	Students	Supervisor Name
1.	FIBONACCI NUMBERS AND IT'S APPLICATION	Soumyadeep Bej, Jatindranath Samanta, Surajit Maity	Dr. Kalipada Maity, Associate Professor, HOD, Department Of Mathematics
2.	LOGARITHMIC FUNCTION	Amiyendra Maity Subhadip Mahapatra Bachaspati Mondal	Bikash Panda,SACT , Department Of Mathematics
3.	PYTHAGOREAN TRIPLE	Sudeshna Maity Sonali Mandal Gourangi Pal	Mr. Suman Giri, SACT, Department Of Mathematics
4.	TWIN PRIMES, COUSIN PRIMES, BALANCED PRIMES	Atanu Maity Ayan Pradhan Subhajit Giri	Mr. Goutam Kumar Mandal, Contractual Teacher, Department Of Mathematics
5.	THE GOLDEN RATIO	Suman Das Sudipta Mondal Ranajit Mandal	Santu Hati, Contractual Teacher ,Department Of Mathematics
6.	ARMSTRONG NUMBERS	Rajkumar Karan Amit Patra Soumitra Das	Hironmoy Manna, SACT , Department Of Mathematics
7.	THE BLACK HOLE NUMBER	Megha Rani Sahoo Bidisha Sasmal Paramita Maity Annesha Khatua	Mr. Debraj Manna, SACT , Department Of Mathematics

Workshop for Capacity Building of the Students(Day-3)



Bhupati Nagar, West Bengal, India
Mugberia Gangadhar Mahavidyalaya, 2P2H+395, Bhupati Nagar, West Bengal
721425, India
Lat 22.000102°
Long 87.728585°
01/12/22 01:56 PM GMT +05:30

Bhupati Nagar, West Bengal, India
Mugberia Gangadhar Mahavidyalaya, 2P2H+395, Bhupati Nagar, West Bengal 721425, India
Lat 22.000102°
Long 87.728585°
01/12/22 01:57 PM GMT +05:30
Department of Mathematics (UG & PG)

Department of Mathematics

Mugberia Gangadhar Mahavidyalaya

Next day workshop for capacity building for the students, the students of PG-1st semester makes their PPT by hands on workshop. Seven group of students complete their project topic under the supervisor Mr. Goutam Mandal(Contractual Teacher, Dept of Mathematics).

SL NO	NAME	ROLL NO	PROJECT TOPIC	SUPERVISOR NAME
1	Chayan Jana Hemarjun Datta Amarnath Rana	3305 3307 3301	Bifurcation Theorem	Dr. Manoranjan De
2	Shipra Jana Sayantani Giri Subhasree Bishal	3321 3320 3322	Ramanujan MockTheta Function	Goutam Mandal
3	Basudeb Maity Suryadip Barik Dipak Paria	3304 3329 3306	Differential Equation	Dr. Kalipada Maity
4	Lalita Patra Sampa Bhunia Ayantika Mandal	3308 3318 3303	Graph Theory	Dr. Manoranjan De
5	Puja Sahoo Nayanika Bhunia Soumitra Das	3316 3314 3326	Ramanujan Sum	Goutam Mandal
7	Manoj Maity Santu Bera Samik Das	3312 3319 3317	Prime Number	Santu Hati



Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 03.12.2022

Course period: 29.11.2022 to 03.12.2022

Registration

Five Days Workshop for Capacity Building of the students

How Do You Present a Power Point as a Student?
(For UG-V & PG students)

Organized by
Department of Mathematics (UG & PG)
Mugberia Gangadhar Mahavidyalaya
In collaboration with CIAS, Tamuk, Purba Medinipur WB and DBT, Govt. of India.
Date: 29th November to 3rd December 2022

Signature of The Participants

Day-1

Sl.	Full Name of the participant	UG/PG	SEM	Signature
1.	Puja Sahoo	PG	1st	Puja Sahoo
2.	Sayanitani Giri	PG	1st	Sayanitani Giri
3.	Sudeshna Maity	PG	3rd	Sudeshna Maity
4.	Susmita Sahoo	PG	3rd	Susmita Sahoo
5.	Biti Das Adhikari	PG	3rd	Biti Das Adhikari
6.	Sreya Jana	PG	3rd	Sreya Jana
7.	Shrabani Jana	PG	3rd	Shrabani Jana
8.	Suchismita Pradhan	PG	3rd	Suchismita Pradhan
9.	Shipra Jana	PG	1st	Shipra Jana
10.	Nayonika Bhunia	PG	1st	Nayonika Bhunia
11.	Sampa Bhunia	PG	1st	Sampa Bhunia
12.	Ayanika Mandal	PG	1st	Ayanika Mandal
13.	Lalita Patra	PG	1st	Lalita Patra
14.	Snigdha Mandal	PG	3rd	Snigdha Mandal
15.	Sunama Maity	PG	1st	Sunama Maity
16.	Tapasi Karan	PG	3rd	Tapasi Karan
17.	Prashanti Tripathy	PG	3rd	Prashanti Tripathy

Signature of The Participants

Day-2

Sl.	Full Name of the participant	UG/PG	SEM	Signature
1.	Annesha Khata	UG	5th Sem	Annesha Khata
2.	Bidisha Sasmal	UG	5th Sem	Bidisha Sasmal
3.	Sudeshna Maity	UG	5th Sem	Sudeshna Maity
4.	Sonali Mandal	UG	5th Sem	Sonali Mandal
5.	Magda Rani Sahoo	UG	5th Sem	Magda Rani Sahoo
6.	Paromita Maity	UG	5th Sem	Paromita Maity
7.	Bachaspati Mandal	UG	5th Sem	Bachaspati Mandal
8.	Sudipta Mandal	UG	5th Sem	Sudipta Mandal
9.	Sumit Maity	UG	5th Sem	Sumit Maity
10.	Suman Rm	UG	5th Sem	Suman Rm
11.	Saumitra Das	UG	5th Sem	Saumitra Das
12.	Souryadeb Das	UG	5th Sem	Souryadeb Das
13.	Jatindranath Samanta	UG	5th Sem	Jatindranath Samanta
14.	Atanu Maity	UG	5th Sem	Atanu Maity
15.	Ayan Pradhan	UG	5th Sem	Ayan Pradhan
16.	Amarendra Maity	UG	5th Sem	Amarendra Maity
17.	Raj Kumar	UG	5th Sem	Raj Kumar

Signature of The Participants

Day-3

Sl.	Full Name of the participant	UG/PG	SEM	Signature
1.	Sudeshna Maity	UG	5th	Sudeshna Maity
2.	Sonali Mandal	UG	5th	Sonali Mandal
3.	Gourangi Pal	UG	5th	Gourangi Pal
4.	Magda Rani Sahoo	UG	5th	Magda Rani Sahoo
5.	Bidisha Sasmal	UG	5th	Bidisha Sasmal
6.	Paromita Maity	UG	5th	Paromita Maity
7.	Souryadeb Das	UG	5th	Souryadeb Das
8.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
9.	Amarendra Maity	UG	5th	Amarendra Maity
10.	Sudipta Mandal	UG	5th	Sudipta Mandal
11.	Sumit Maity	UG	5th	Sumit Maity
12.	Suman Rm	UG	5th	Suman Rm
13.	Saumitra Das	UG	5th	Saumitra Das
14.	Souryadeb Das	UG	5th	Souryadeb Das
15.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
16.	Atanu Maity	UG	5th	Atanu Maity
17.	Raj Kumar	UG	5th	Raj Kumar

Signature of The Participants

Day-4

Sl.	Full Name of the participant	UG/PG	SEM	Signature
1.	Sudeshna Maity	UG	5th	Sudeshna Maity
2.	Sonali Mandal	UG	5th	Sonali Mandal
3.	Gourangi Pal	UG	5th	Gourangi Pal
4.	Magda Rani Sahoo	UG	5th	Magda Rani Sahoo
5.	Bidisha Sasmal	UG	5th	Bidisha Sasmal
6.	Paromita Maity	UG	5th	Paromita Maity
7.	Souryadeb Das	UG	5th	Souryadeb Das
8.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
9.	Amarendra Maity	UG	5th	Amarendra Maity
10.	Sudipta Mandal	UG	5th	Sudipta Mandal
11.	Sumit Maity	UG	5th	Sumit Maity
12.	Suman Rm	UG	5th	Suman Rm
13.	Saumitra Das	UG	5th	Saumitra Das
14.	Souryadeb Das	UG	5th	Souryadeb Das
15.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
16.	Atanu Maity	UG	5th	Atanu Maity
17.	Raj Kumar	UG	5th	Raj Kumar

Signature of The Participants

Day-5

Sl.	Full Name of the participant	UG/PG	SEM	Signature
1.	Sudeshna Maity	UG	5th	Sudeshna Maity
2.	Sonali Mandal	UG	5th	Sonali Mandal
3.	Gourangi Pal	UG	5th	Gourangi Pal
4.	Magda Rani Sahoo	UG	5th	Magda Rani Sahoo
5.	Bidisha Sasmal	UG	5th	Bidisha Sasmal
6.	Paromita Maity	UG	5th	Paromita Maity
7.	Souryadeb Das	UG	5th	Souryadeb Das
8.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
9.	Amarendra Maity	UG	5th	Amarendra Maity
10.	Sudipta Mandal	UG	5th	Sudipta Mandal
11.	Sumit Maity	UG	5th	Sumit Maity
12.	Suman Rm	UG	5th	Suman Rm
13.	Saumitra Das	UG	5th	Saumitra Das
14.	Souryadeb Das	UG	5th	Souryadeb Das
15.	Jatindranath Samanta	UG	5th	Jatindranath Samanta
16.	Atanu Maity	UG	5th	Atanu Maity
17.	Raj Kumar	UG	5th	Raj Kumar

Signature of The Participants

Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 03.12.2022

Brief description of the course on Workshop

PPT presentation is a part of Mathematics where we can determine the truth values of the given statements. Logical reasoning has a major role to play in our daily lives. It is the concept in Mathematics that deals with finding the truth values of any Mathematical statement.

Students who hold a Bachelor's degree in mathematics can turn to applied mathematics, statistics, physics or Astrophysics or engineering, if they wish to continue their studies. Such a program develops skills such as knowledge of arithmetic, algebra, trigonometry and strong deductive reasoning. After graduating a Master's degree in mathematics, students have the choice to be employed as operational researchers, statisticians, aerospace engineers, accountants, software testers or teachers.

During this type program students communicate with the faculty and other students via e-mail, electronic forums, videoconferencing, chat rooms, bulletin boards, instant messaging and other forms of computer-based interaction.

Considering the above facts and requests from students, the department of Mathematics, Mugberia Gangadhar Mahavidyalaya arranged successfully a program on “**How do you present a power point as a student ?**” from 23 November, 2022 to 3 December 2022 through offline mode. 29 students registered attended for this 5 days (20 hours) program. They completed the course successfully and The Department hopes that the program will be successful.

Information and communication technology (ICT) is an element of many industries, allowing companies to use different tools to complete everyday tasks like sending emails and using programming languages to build proprietary business software. Having any level of competency in ICT skills can allow you to pursue a job that involves working with technology. Understanding what these skills are and how to develop them can help you no matter what profession or career path you choose to explore.

Information and communication technologies (ICT) need little introduction in India, a country with over 800 million internet and smartphone users. These numbers are impressive but much like the situation across the world, the number of adequately skilled ICT professionals in India falls glaringly short of the number of open job roles available in the field.

ICT skills include those required for communication technologies such as cloud computing, robotic process automation, artificial intelligence, big data, and telecom technologies among others. A recent report by the Telecom Sector Skill Council found that India will require 22 million skilled individuals by 2025 as the country rapidly adopts these technologies. The factors driving this demand are India's 5G push, new telecom policies, and booming IT and startup ecosystem which is focusing not just on enterprise servicing but on products and solutions. Global data estimates that by 2023, ICT spending in India will reach \$144 billion.

As industries become more 5G-centric, ICT will cement its position as the mainstay of every sector in India and the world. ICT skills and human capital will therefore undoubtedly emerge as the most crucial resource for the survival and success of every organization.



MUGBERIA GANGADHAR MAHAVIDYALAYA

ESTD.—1964

P. O.—BHUPATINAGAR ☼ Dist.—PURBA MEDINIPUR

S. T. D. Code—03220 ☎ Ph. No.—270236, Pin.—721425 (W. B.)

Ref. No.—M. G. M. / /

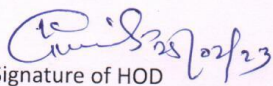
Dated.....25/02/2023

From : The Principal / Secretary,

Report On

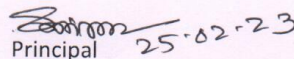
Hand on Practice on Computation Skill through MATLAB
Arranged by the Department of Mathematics (UG & PG)
Mugberia Gangadhar Mahavidyalaya

25.02.2023


Signature of HOD

Department of Mathematics

Dr. Kalipada Maity
Associate Professor of Mathematics
Mugberia Gangadhar Mahavidyalaya


Principal 25-02-23

Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya



MUGBERIA GANGADHAR MAHAVIDYALAYA

ESTD.—1964

P. O.—BHUPATINAGAR ☼ Dist.—PURBA MEDINIPUR

S. T. D. Code—03220 ☎ Ph. No.—270236, Pin.—721425 (W. B.)

Ref. No.—M. G. M. / /

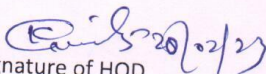
Dated. 25/02/2023

From : The Principal / Secretary.

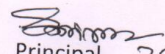
Notice

Date-20.02.2023

This is to hereby notify all the students that the Dept. of Mathematics, Mugberia Gangadhar Mahavidyalaya is going to organize a hand on practice on computation skill through MATLAB on 25th February, 2023 at 10.30a.m in our department through offline mode. All the teachers and the students of 3rd semester of the department are requested to be presented positively.


Signature of HOD
Department of Mathematics

Dr. Kalipada Maity
Associate Professor of Mathematics
Mugberia Gangadhar Mahavidyalaya


Principal 20-02-2023
Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya

A hand on practice on computation skill through MATLAB is held on 25th February 2023 at 10.30a.m to 2.00p.m in Mathematics department Lab. In this program all the students of 3rd semester of Mathematics department are participate this hand on computation skill. In this program Dr. Kalipada Maity , HOD Dept. of Mathematics said about hand on computation skill. Mr. Krishnendu Barman, assistant professor of Dept. of Mathematics, Pravat Kumar College presents in this program. Dr. Manoranjan De, Mr. Santu Hati, Mr. Goutam Kumar Mandal are also engaged as a examiner in this program.

List of presented students is given below

Mugberia Gangadhar Mahavidyalaya
Bhupatinagar, Purba Medinipur, 721425, West Bengal
Attendance Sheet / Submission of Answer Scripts

Examination: B.Sc. 3rd Sem (Heat) Year: 2023 Semester: 3rd Date: 25/02/2023
B.A/B.Sc./B.Com.(Hons./Gen.) Subject: Math (A/H) C7P Paper: C7P

SLNo.	Name of Candidate	Roll	No.	Signature of Candidate with date
+	H23129	210110		
1.	Soyen Saboo	1123129	210110	Soyen Saboo 25.02.23
2.	Rudra Prakash Das	1123129	210103	Rudra Prakash Das 25.02.23
3.	Sandip Kumar Paul	1123129	210106	Sandip Kumar Paul 25.02.23
4.	Sandipam Kala	1123129	210107	Sandipam Kala 25.02.23
5.	Tanmay Kumar Adak	1123129	210116	Tanmay Kumar Adak 25.02.23
6.	Pritish Bag	1123129	210099	Pritish Bag 25.02.23
7.	Rasbihari Mal	1123129	210101	Rasbihari Mal 25.02.23
8.	Debanshu Roy	1123129	210097	Debanshu Roy 25.02.23
9.	Shibam Majhi	1123129	210111	Shibam Majhi 25.02.23
10.	Samapti Jana	1123129	210105	Samapti Jana 25.02.23
11.	Sonakshi Manna	1123129	210113	Sonakshi Manna 25.02.23
12.	Nandini Jana	1123129	210098	Nandini Jana 25.02.23
13.	Baranti Mondal	1123129	210096	Baranti Mondal 25.02.23
14.	Somasri Sau	1123129	210112	Somasri Sau 25.02.23
15.	Ayantika Jana	1123129	210095	Ayantika Jana 25.02.23
Total 15 Students.				
25/02/23				
Hand on practice on computation skill through MATLAB				
25/02/23				
Signature of Teacher / Invigilator				
Date: 25/02/2023				
Dr. Kalipada Maity Associate Professor of Mathematics Mugberia Gangadhar Mahavidyalaya				
Centre-in-Charge / Principal				
Date: 25/02/23				
Principal Mugberia Gangadhar Mahavidyalaya				


For practices, the 18 numerical problem of paper code C7P using MATLAB software is given below:

3rd Semester Examination 2022
MATHEMATICS (Honours)
Paper: C7P
[CBCS]
Time: Two Hours

Group-A
Answer any one question:
[Q. No. 1 to 8 will be in Gr-A] 1 × 7 = 7

Group-B
Answer any one question:
[Q. No. 1 to 10 will be in Gr-B] 1 × 8 = 8

1. Write a program to find a real root of the equation $\log(x) = \cos(x)$ correct up to three decimal places by bisection method.
2. Write a program to find a real root of the equation Newton-Raphson method correct up to four decimal places. Demonstrate your program for the equation $e^x - 3x = 0$.
3. Write a program to find a real root of the equation $x \sin(x) - 1 = 0$ by secant method.
4. Write a program to find a real root of the equation $x^2 + \sin x - 4 = 0$ by Newton-Rapson method correct up to four decimal places.
5. Write a program to find a real root of the equation by iteration method correct up to five decimal places. Demonstrate your program for the equation $x^3 + 2x - 2 = 0$.
6. Write a program to find the sum of the series $(1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{n})$. Demonstrate your programme for $n = 1049$.
7. Write a program to find the sum of the series $(1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{n})$ for $n = 234$.
8. Write a program to find a real root of the equation by the method of false position correct up to three decimal place. Demonstrate your program for the equation $\sin x + \cos x = 1$.


Dr. Kalipada Maity
Associate Professor of Mathematics
Mugbata Gangadhar Mahavidyalaya

GROUP-B

1. Find the value of $\int_0^2 (1 + x^2 \sin 4x) dx$ using Simpson's $(1/3)$ rule by writing a program ($n = 10$).
2. Write a program to find a real root of the equation $x^4 - 3x^2 + 4 = 0$ by Newton-Raphson method correct up to four decimal place.
3. Write a program to find the sum of the series $\left(1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{999}\right)$ correct up to five decimal places.
4. Write a program to find a real root of the equation $x^2 + x - 7 = 0$ by bisection method correct up to three decimal places.
5. Write a program to find a real root of the equation by Secant method. Demonstrate your program for the equation $x^3 - 8x - 4 = 0$.
6. Find the value of $\int_0^1 x^2 dx$ using trapezoidal rule by writing a program ($n = 10$).
7. Write a program to find the value of $y(0.1)$ and $y(0.2)$ from the differential equation $\frac{dy}{dx} = x^2 + y^2$, $y(0) = 1$ by Euler's method.
8. Write a program to find the value of $y(0.2)$ from the differential equation $\frac{dy}{dx} = 1 + y \sin x - x^2$, $y(0) = 0$ by fourth order R-K method.
9. Write a program to solve the system of equation $3x + y + 2z = 6$, $-x + 4y + 2z = 5$, $2x + y + 4z = 7$ by Gauss-seidel method.
10. Find the value of $\int_0^5 (x + \cos x) dx$ using Simpson's $(1/3)$ rule by writing a program ($n = 20$).


Dr. Kalipada Maity
Associate Professor of Mathematics
Mughera Gangadhar Mahavidyalaya

Sample Copy of Student Answer Scripts

Group-A ⑧
Group-B ⑥

1776552

Group-A

- 8) Write a program to find a real root of the equation by the method of false position correct up to three decimal place. Demonstrate your Program for the equation $\sin x + \cos x = 1$.

Coding:-

```
a=input('Enter the lower value of interval:\n');
b=input('Enter the upper value of interval:\n');
while abs(b-a) > 0.0001
    fa = sin(a) + cos(a) - 1;
    fb = sin(b) + cos(b) - 1;
    Xm = (a*fb - b*fa) / (fb - fa);
    fxm = sin(Xm) + cos(Xm) - 1;
    if fa * fxm < 0
        b = Xm;
    else
        a = Xm;
    end
end
fprintf('The root of the equation is %f\n', Xm);
```

25/02/23

Group - B

1776552

6. Find the value of $\int x^2 dx$ using trapezoidal rule by writing a program ($n=10$).

Coding:-

```
a = input('Enter the lower limit of integration: \n');
b = input('Enter the upper limit of integration: \n');
n = input('Enter the number of sub-intervals: \n');
h = (b-a)/n;
Sum = 0;
for i = 1 : (n-1)
    Xi = a + i*h;
    Sum = Sum + 2*(Xi^2);
end
Sum = Sum + (a^2) + (b^2);
Sum = Sum*(h/2);
fprintf('The value of integration is %f \n', Sum);
```

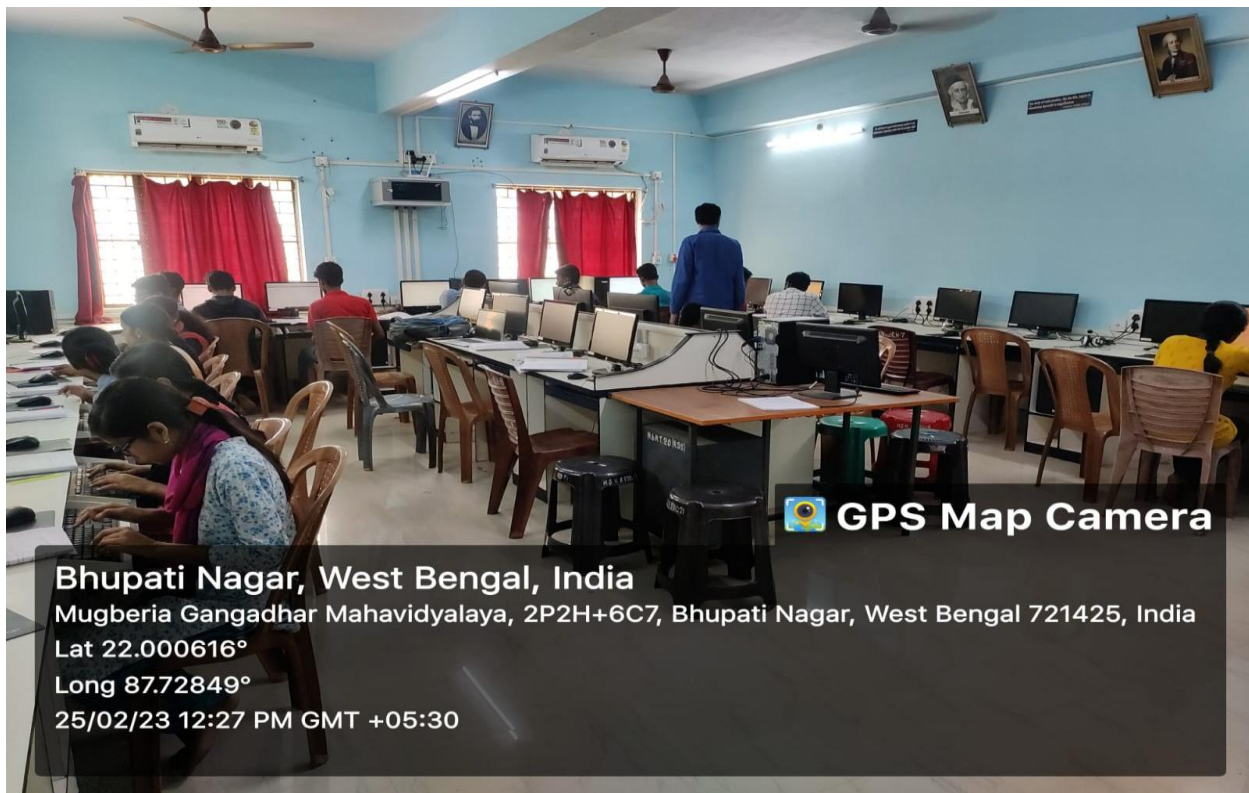
Input / output :-
Enter the number of

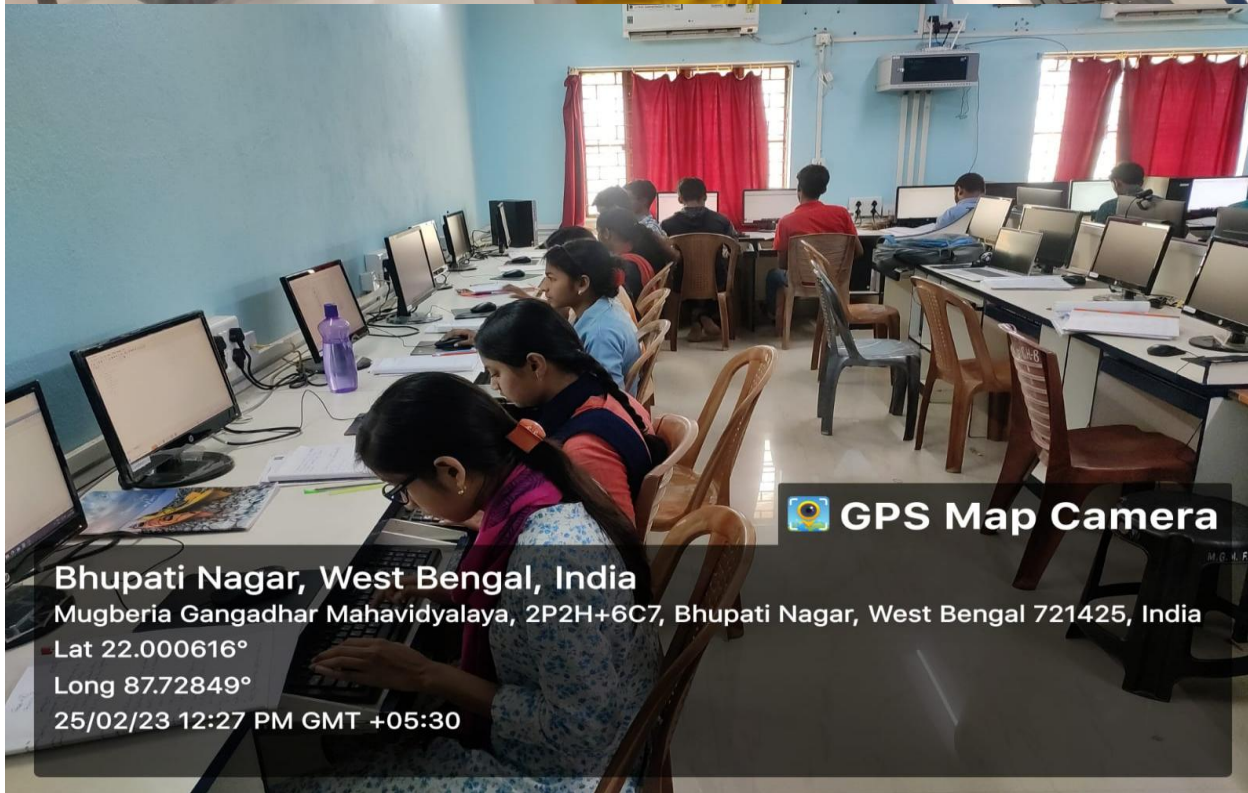
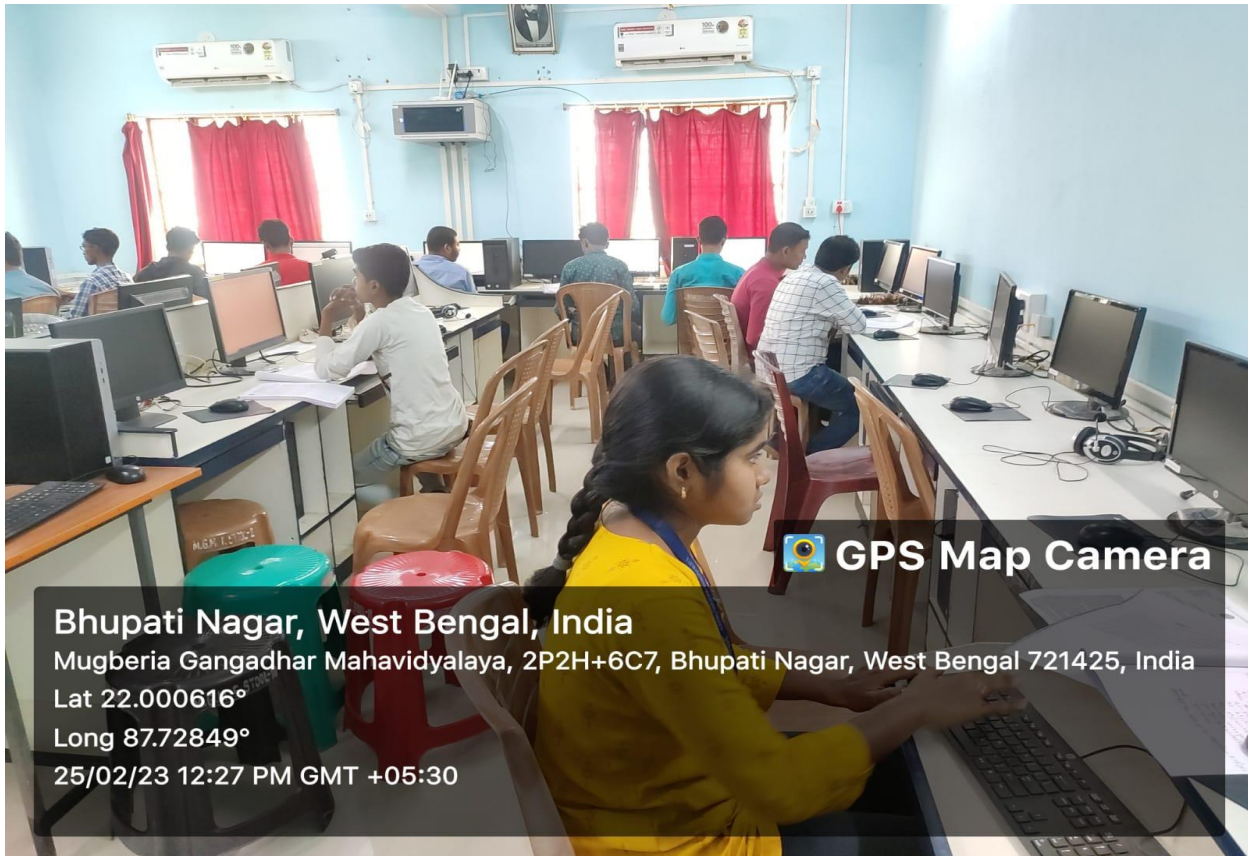
23/07/23.

input / output :-
Enter the lower limit of integration:
0
Enter the upper limit of integration:
1
Enter the number of sub-intervals:
10
The value of integration is 0.335000.

23/07/23.

Some GPS Images are insert below







MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

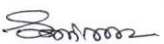
DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

NOTICE

Dated: 20/02/2021

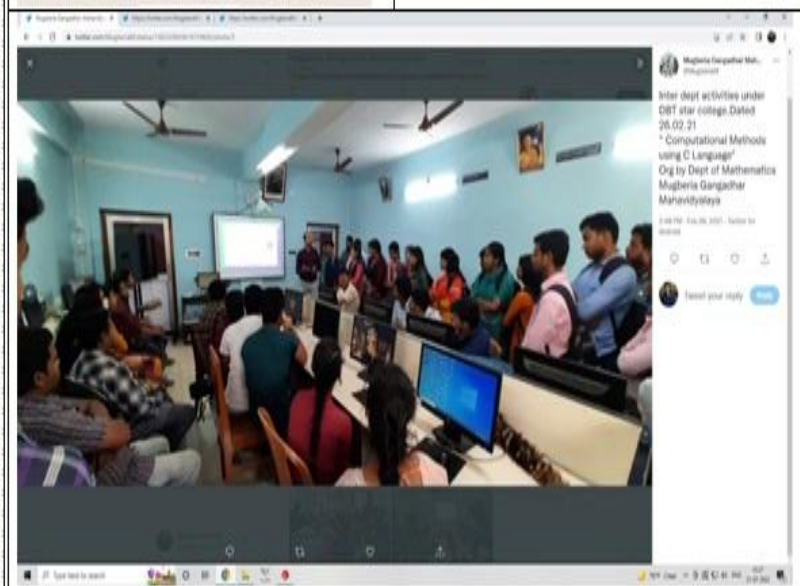
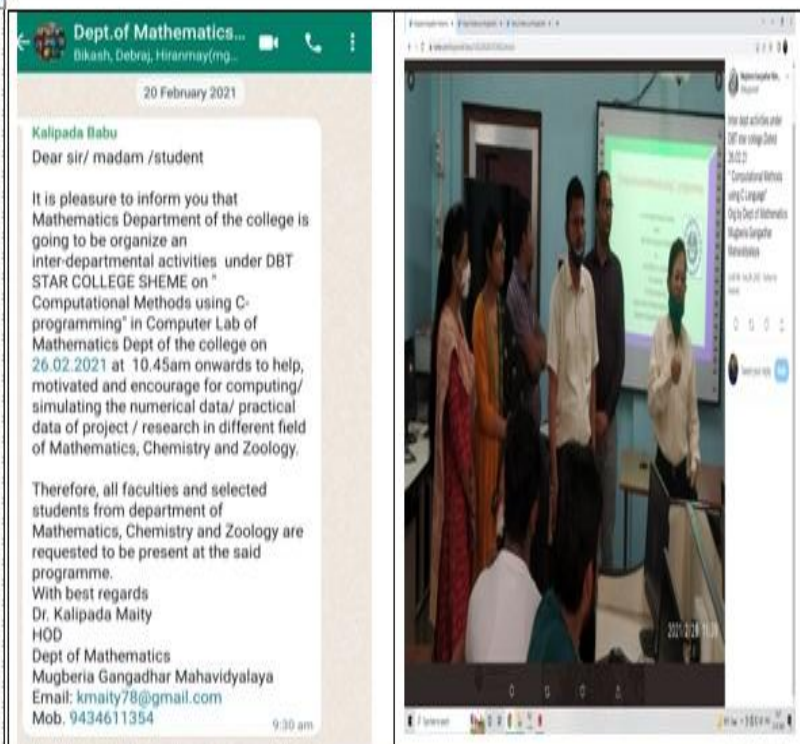
This is to hereby notify all the students that the dept. of Mathematics, Mugberia Gangadhar Mahavidyalaya is going to organize a skill development programme “A Computational Methods using C Programme” 26 February 2021 in our department through offline mode. The program will be delivered by lecture, interaction and ppt presentation along with hands on practical. All the students of Chemistry, Zoology and Mathematics departments of the college are requested to be present in this prog.

 20-02-2021
Dr. Swapan Kumar Misra
Principal
Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya



A computational Method using C-Programming



Department of Mathematics organised an inter departmental workshop program entitled "A computational Method using C-Programming" on 26th February, 2021 at 10:45am onwards to help, motivate and encourage for computing simulating the numerical data / practical data of project / research paper in different field of Mathematics, Chemistry and Zoology in Computer Lab of Mathematic's Department. Dr. Swapan Kumar Misra, principal of this college inaugurated the program. Dr. Manoranjan De, Assistant Professor, Department of Mathematics was the main speaker of this program. He involved all the students for hands-on session using offline and online mode. Total 74 students (Male: 42 and Female: 32) with 12 faculty members (Male: 09 and Female: 03) among above three departments participated in this program. They enjoyed the hands-on session and learned the programming code without doubt. Finally, the speaker discussed advanced computation methods to motivate the students. Thus, this activity was successful.



MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiangangadharMahavidyalaya.ac.in

NOTICE

Dated: 18/02/2021

This is to hereby notify all the students that the dept. of Mathematics, Mugberia Gangadhar Mahavidyalaya is going to organize a skill development programme “A Computational Methods using MATLAB ” 19 February 2021 in our department through offline mode. The program will be delivered by lecture, interaction and ppt presentation along with hands on practical. All the students of Chemistry, Zoology and Mathematics departments of the college are requested to be present in this prog.

Swapan Kumar Misra 18.02.2021

Dr. Swapan Kumar Misra

Principal

Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya



Computational Method using Matlab

Department of Mathematics, Mugberia Gangadhar Mahavidyalaya



Department of Mathematics organised an inter departmental workshop program entitled “**Computational Method using Matlab**” on 19th February, 2021 at 11:00 am onwards to help, motivate and encourage for computing simulating the numerical data / practical data of project / research paper in different field of Mathematics, Chemistry and Zoology in Computer Lab of Mathematic’s Department. Dr. Swapan Kumar Misra, principal of this college inaugurated the program. Mr. Santu Hati, Research Scholar, Department of Mathematics was the main speaker of this program. He involved all the students for hands-on session using offline and online mode. Total 72 students (Male: 43 and Female: 29) with 10 faculty members (Male: 08 and Female: 02) among above three departments participated in this program. They enjoyed the hands-on session and learned the programming code without doubt. Finally, the speaker discussed advanced computation methods to motivate the students. This program was successful.



MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

NOTICE

Dated: 16/02/2022

This is to hereby notify all the students that the dept. of Mathematics, Mugberia Gangadhar Mahavidyalaya is going to organize a skill development programme "Introduction to Excel " 17 February 2022 in our department through offline mode. The program will be delivered by lecture, interaction and ppt presentation along with hands on practical. All the students of Chemistry, Zoology and Mathematics departments of the college are requested to be present in this prog.

Swamis 16.02.2022

Dr. Swapan Kumar Misra
Principal
Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya





Introduction to Excel

Department of Mathematics organised an inter departmental workshop program entitled "Introduction to Excel" on 17th February, 2022 at 02:15pm onwards to help, motivate and encourage for computing simulating the numerical data / practical data of project / research paper in different field of Mathematics, Chemistry and Zoology in Computer Lab of Mathematics Department under DBT start college Strengthening scheme. Dr. Swapan Kumar Misra, principal of this college inaugurated the program. The Joint co-ordinators Dr. Bidhan Ch. Samanta & Dr. Kalipada Maity were thanks to DBT and the organizing Department. Dr. Manoranjan De, Assistant Professor, Department of Mathematics was the main speaker of this program. He nicely presented his PPT and involved all the students for hands-on session. Total 62 students (Male: 37 and Female: 25) with 14 faculty members (Male: 09 and Female: 05) among above three departments participated in this program. They acquired the most of the knowledge of excel. Finally, three students asked various type of questions related to advanced excel and the speaker discussed their questions in details to satisfy them. Dr. De also promised that he will teach another session to learn advanced excel, for

