



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.mugberiagangadharimahavidyalaya.ac.in

Report
Of
Web Developer Foundation Certification Course

Course period: 17th August – 23rd November, 2023
(Total 48 hours)

Organized
by

Department of Mathematics(UG & PG)
Mugberia Gangadhar Mahavidyalaya

Bhupatinagar, Purba Medinipur- 721425

ACCREDITED BY NAAC WITH GRADE B⁺

Affiliated to

Vidyasagar University

https://twitter.com/MugberiaM/status/1715000172965707881?t=39M_aXmcmzy7n24jJvsCTA&s=08



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NOTICE

Dated: 07/08/2023


This is to hereby notify the Department of Mathematics of Mugberia Gangadhar Mahavidyalaya is going to inaugurate a “**Web Developer Foundation Certification Course**” on 17th August 2023 at S.N. Bose hall. So all the students of the college are asked to enlist your name for the said course which will be held on and from 17th August to 23rd November 2023 in the Computer Lab of the Department of Mathematics through offline mode. The program will be delivered by lecture, interaction, ppt presentation, computer lab, assignment, etc. There is Rs 200 course access fee for the student. Last date of registration for this program is 16th August 2023.


07/08/2023

Dr. Kalipada Maity

Associate Professor & HOD

Department of Mathematics


07-08-2023
Dr. Swapan Kumar Misra

Principal

Mugberia Gangadhar Mahavidyalaya



Web Developer Foundation Certification Course

Organized by Dept. of Mathematics

1. Introduction to the Internet and Web

- 1.1 Basic components of a web page
- 1.2 Web hosting and the types of web hosting services
- 1.3 Types of networks

2. Fundamentals of HTML

- 2.1 Document Object Model (DOM) in HTML
- 2.2 Head, title, metadata, and different types of semantic tags in HTML
- 2.3 Different types of multimedia tags in HTML
- 2.4 Types of embedding tags in HTML
- 2.5 The link creation tag in HTML
- 2.6 HTML tags for gathering inputs from clients
- 2.7 FTP applications
- 2.8 Developing multiple HTML files using standard semantic tags
- 2.9 Registration of the website name
- 2.10 An overview of the website control panel
- 2.11 Hosting a website using cPanel

3. Fundamentals of CSS

- 3.1 Types of attribute selectors in CSS
- 3.2 Class selector in CSS
- 3.3 ID selector in CSS
- 3.4 Universal selector in CSS
- 3.5 CSS combinators
- 3.6 Descendant selector in CSS
- 3.7 Child selector in CSS
- 3.8 General sibling selector
- 3.9 Adjacent sibling selector
- 3.10 Pseudo and pseudo-elements in CSS
- 3.11 CSS box-sizing property
- 3.12 Styling borders and backgrounds using CSS
- 3.13 Handling images and forms using CSS
- 3.14 Styling table elements using CSS

4. Database Management

- 4.1 SQL vs NoSQL
- 4.2 Acid properties in DBMS
- 4.3 Structured Query Language (SQL)
- 4.4 Architecture of a DBMS
- 4.5 Database data schemas
- 4.6 Database normalization
- 4.7 Database storage systems
- 4.8 Database file structure
- 4.9 Database indexing
- 4.10 Database backup and recovery

- 4.11 Querying data using SQL/NoSQL
- 4.12 Storing, editing, and deleting data on a DBMS
- 4.13 The UPDATE statement in SQL

5. HTTP Servers

- 5.1 What is HTTP?
- 5.2 HTTP headers
- 5.3 HTTP response status codes
- 5.4 HTTP response classes
- 5.5 Node HTTP module
- 5.6 Demo: Creating an HTTP server in Node
- 5.7 HTTP form data
- 5.8 HTTP form data request type
- 5.9 Demo: Processing form data
- 5.10 Query strings
- 5.11 Query string module
- 5.12 Query string methods
- 5.13 Demo: Encoding a query string
- 5.14 Demo: Decoding a query string

6. API (Application Programming Interface)

- 6.1 What is REST API?
- 6.2 Why REST API?
- 6.3 Data exchange formats
- 6.4 JSON vs XML
- 6.5 Application architecture
- 6.6 Monolith architecture
- 6.7 Why monolith architecture?
- 6.8 Microservice architecture
- 6.9 Why microservice architecture?

7. Full-Stack Application and the Types of Application Development Stacks

- 7.1 Creating full-stack applications like Netflix
- 7.2 Deploying Netflix application in AWS
- 7.3 Types of application development stacks

8. Back-end Web Development Frameworks

- 8.1 What is Express.js?
- 8.2 Why Express.js?
- 8.3 Installing Express.js
- 8.4 Express.js components
- 8.5 HTTP routing in Express.js
- 8.6 HTTP request methods
- 8.7 Templating
- 8.8 Templating engines

9. Requesting and Querying Data from DBMS

- 9.1 What is Mongo DB?
- 9.2 Why Mongo DB?
- 9.3 Installing Mongo DB
- 9.4 Documents
- 9.5 Collections
- 9.6 Mongo DB data types
- 9.7 Using Mongo DB with Express.js

- 9.8 Native Mongo DB driver
- 9.9 Why use native Mongo DB driver?
- 9.10 Mongoose
- 9.11 Why use Mongoose?

10. Hands-on Exercises

- 10.1 Uploading files using FTP applications
- 10.2 HTML DOM manipulation
- 10.3 Browser DOM manipulation
- 10.4 Changing the color button on click
- 10.5 Installing Node.js
- 10.6 Creating an HTTP server
- 10.7 Processing form data
- 10.8 Encoding a query string
- 10.9 Decoding a query string
- 10.10 Monolith architecture

Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 17.08.2023

In the light of this, a committee was formed under the mentorship of the Principal, Mugberia Gangadhar Mahavidyalaya, Dr. Swapan Kumar Mishra and Dr. Kalipada Maity, Asso. Prof. and HOD of Department of Mathematics as Convener to conduct the program in a systematic manner. The 32 hours “**Web Developer Foundation Certification Course**” was completed successfully under the proper guidance of Hon’ble Principal Sir Dr Swapan Kumar Mishra and Hon’ble Dr Kalipada Maity sir (Associate Professor, HOD, NAAC Coordinator), through face-to-face program as held from, 17th August to 22nd September, 2023 with more than 40 participants.



Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 22.08.2023

In the welcome address Dr. Kalipada Maity, Coordinator, Associate Professor, HOD, NAAC Coordinator, of Mathematics Department had briefly discussed about the relevance of organizing about ‘**Web Developer Foundation Certification Course**’ in the transition period to move towards the digital milieu along with the uncertainties owing to the covid situation. Learners should do self-analysis to find out their strengths as well as weaknesses and go on finding jobs commensurate with their attainments and choices. Two types of analyses are

necessary, one is suitable person for the specific job and the second one is suitable job for the specific person. Thus the appropriate placement may be done.

Dr. Monaranjan De , Assistant Professor, Department of Mathematics, the first speaker of the technical session of the program had discussed about the scopes and opportunities of the employment at govt. and private sector after completion of the course. He suggested participants not to be worried if they don't get job in govt. sector because numerous opportunities have been created in the private sector where job aspirants can be absorbed as per their expectation. He ended his speech with lots of blessings and good wishes for the participants in their future life.

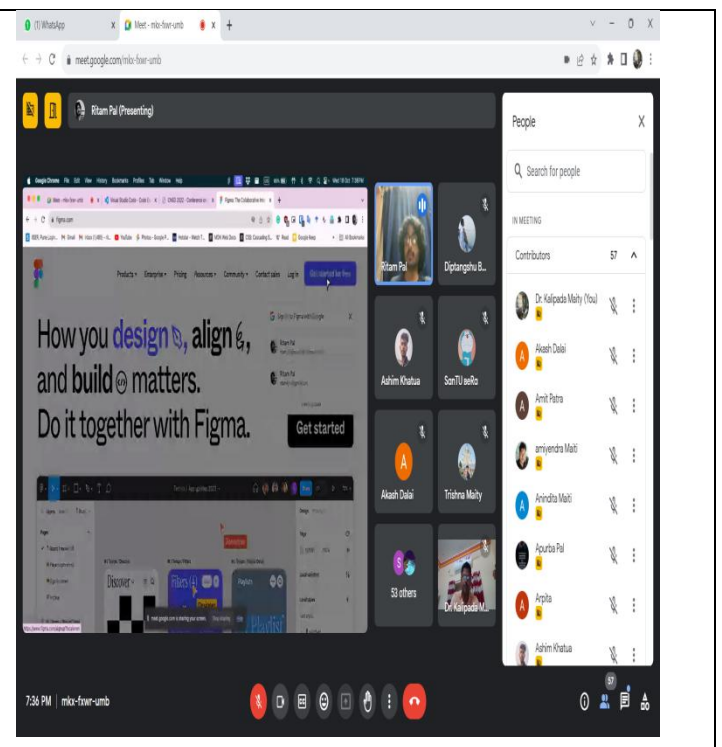
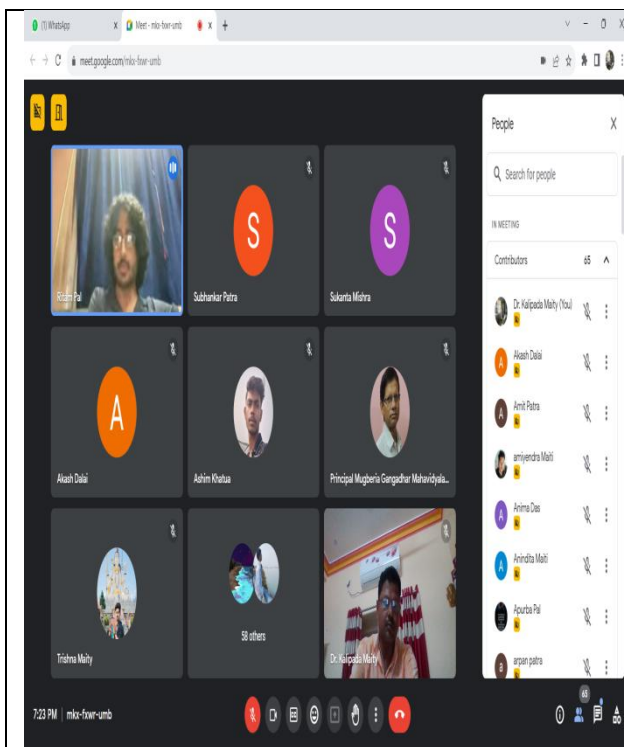
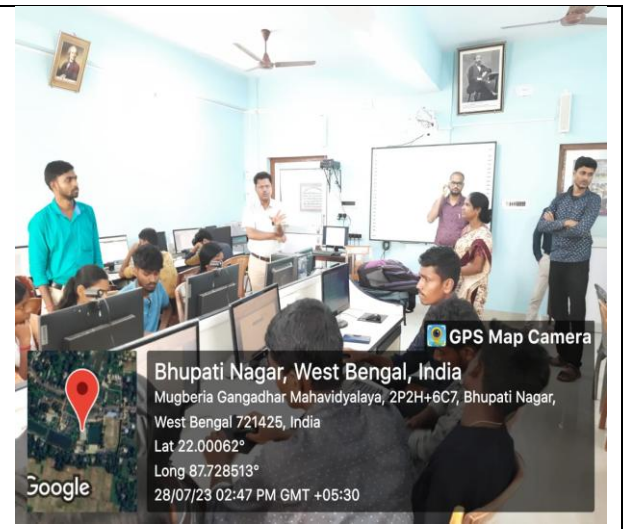
Mr. Subham Maity, Contractual Assistant Professor, Department of Mathematics has discussed through ppt presentation about the job opportunities of the present course and allied scopes of the same. He advised participants to utilize their time in routine as well as rigorous practices of job-related study with peers and making a group of the common minded peers for evaluating their performance to keep themselves upgraded.

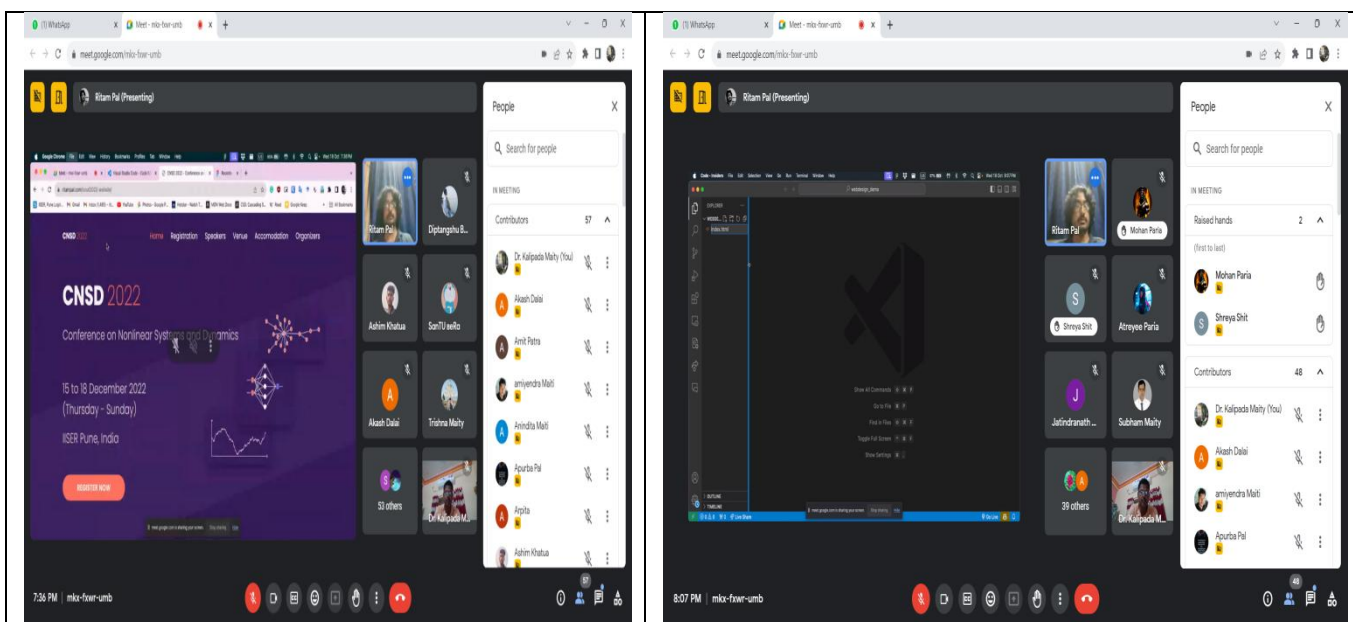
Department of Mathematics Mugberia Gangadhar Mahavidyalaya

Date: 18.10.2023

On this day, **Mr. Ritam Pal, Prime Minister Research Fellow, Dept. of Physics, IISER Pune**, the speaker of the technical session of the program had discussed about the scopes and opportunities of the employment at govt. and private sector after completion of the course. He suggested participants not to be worried if they don't get job in govt. He started the technical class, how to design the website page. He had taught about Figma, VLC code etc..

https://twitter.com/MugberiaM/status/1715000172965707881?t=39M_aXmcmzy7n24jJvsCTA&s=08





REGISTER STUDENTS OF THE COURSE

UG Students of semester -1

Sl. No.	Name	Student ID	Hons Subject
01	Abhisake Pradhan	20231014	Mathematics
02	Abhishek Maity	20230009	Mathematics
03	Akash Dalai	20231550	Mathematics
04	Anupama Sahoo	20230715	Mathematics
05	Arnangsi Das	20230116	Mathematics
06	Ashim Khatua	20230346	Mathematics
07	Asim Pradhan	20230960	Mathematics
08	Bhaskar Maity	20230160	Mathematics
09	Dipti Rani Shit	20230643	Mathematics
10	Nibedita Maity	20230376	Mathematics
11	Purnima Dinda	20230298	Mathematics
12	Saikat Jana	20230378	Mathematics
13	Sanchari Maity	20230053	Mathematics
14	Sasanka Pal	20230510	Mathematics
15	Satyajit Das	20230500	Mathematics
16	Satyam Kumar Maity	20230302	Mathematics
17	Sonali Maity	20231554	Mathematics
18	Soumya Kanti Guria	20230691	Mathematics
19	Sourav Patra	20230016	Mathematics
20	Subhayan Kar	20230113	Mathematics
21	Sukanta Misra	20231546	Mathematics
22	Sukdeb Santra	20230511	Mathematics

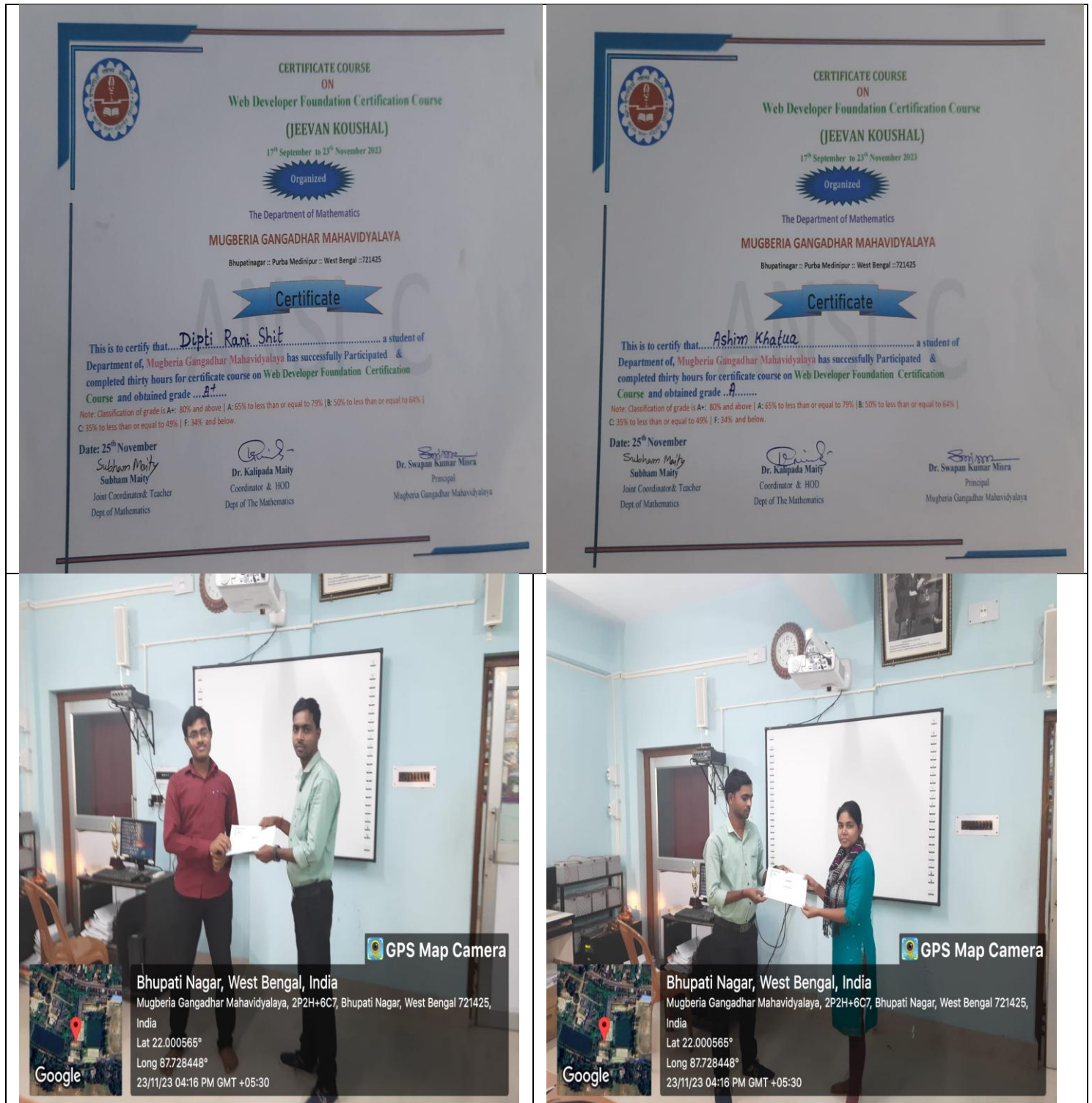
23	Swarnali Jana	20230895	Mathematics
24	Trishna Maity	20230809	Mathematics
Sl. No.	Name	Student ID	Hons Subject
01	Amit Nanda Goswami	20230350	Zoology
02	Anirban Das	20230843	Zoology
03	Anudipa Das	20230970	Zoology
04	Anuradha Pradhan	20231329	Zoology
05	Aparna Manna	20231186	Zoology
06	Bidhan Mondal	20230515	Zoology
07	Disha Dalai	20230682	Zoology
08	Iti Jana	20231306	Zoology
09	Karuna Pradhan	20231007	Zoology
10	Madhumita Mahapatra	20230438	Zoology
11	Mahuya Bera	20230339	Zoology
12	Mampi Dhauria	20230564	Zoology
13	Mita Bar	20230770	Zoology
14	Nazim Mallik	20230087	Zoology
15	Nilanjan Das	20230946	Zoology
16	Prasanta Mandal	20231529	Zoology
17	Rinku Mandal	20231387	Zoology
18	Sabita Mandal	20230605	Zoology
19	Saheli Patra	20231095	Zoology
20	Samaresh Manna	20231258	Zoology
21	Satyajit Mistri	20230866	Zoology
22	Sayantika Das	20230684	Zoology
23	Senjuti Roy	20231361	Zoology
24	Shayan Pradhan	20231153	Zoology
25	Sima Kamila	20231301	Zoology
26	Sima Roy	20231011	Zoology
27	Sonali Das	20230323	Zoology
28	Souvik Sahoo	20230381	Zoology
29	Subarna Khatua	20231114	Zoology
30	Subhajit Maity	20231224	Zoology
31	Sudipta Maity	20231254	Zoology
32	Sumitra Maity	20231100	Zoology
33	Sunanda Samanta	20230436	Zoology
Sl. No.	Name	Student ID	Hons Subject
01	Gourab Pradhan	20230421	Chemistry
02	Kishor Kumar Maity	20230010	Chemistry
03	Puja Bramha	20230185	Chemistry
04	Ranita Kuila	20230469	Chemistry
05	Sanghita Manna	20230090	Chemistry

06	Sathi Maity	20231509	Chemistry
07	Shyarita Patra	20231508	Chemistry
08	Soumyakanta Sahoo	20230566	Chemistry
09	Subhadeep Samanta	20230831	Chemistry
10	Subhadip Giri	20230836	Chemistry
11	Suparna Chakraborty	20231109	Chemistry
12	Tanushree Jana	20230982	Chemistry
13	Tanushree Maity	20230372	Chemistry

UG Students of semester -3 (Dept. of Mathematics)

S.N.	Student Name	UG (Hons)
1	Anima Das	UG - III Sem
2	AninditaMaity	UG - III Sem
3	Anwesha Makur	UG - III Sem
4	ArpitaBera	UG - III Sem
5	AtreyeeParia	UG - III Sem
6	BibekGiri	UG - III Sem
7	BithikaKhatua	UG - III Sem
8	DebayanPandit	UG - III Sem
9	MallikaChanda	UG - III Sem
10	Mohan Kumar Paria	UG - III Sem
11	Moumita Jana	UG - III Sem
12	Palash Das	UG - III Sem
13	Paramita Jana	UG - III Sem
14	PoulamiBera	UG - III Sem
15	PrajnaParamitaMaity	UG - III Sem
16	Prashanta Rana	UG - III Sem
17	SankariMaity	UG - III Sem
18	SathiGiri	UG - III Sem
19	Satyajit Jana	UG - III Sem
20	Shirshendu Mandal	UG - III Sem
21	Shreya Bhunia	UG - III Sem
22	Shreya Shit	UG - III Sem
23	Soumitra Das	UG - III Sem
24	SriparnaMondal	UG - III Sem
25	SubhasisGiri	UG - III Sem
26	Sudipa Jana	UG - III Sem
27	Sulekha Rani Maity	UG - III Sem
28	Suman Das	UG - III Sem
29	Surajit Jana	UG - III Sem
30	Swarnali Mondal	UG - III Sem

Certificate Distribution of this course:



Department of Mathematics
Mugberia Gangadhar Mahavidyalaya

Date: 25.11.2023

Last day of the speech of the last speaker, there was an interactive session with the participants conducted by Dr. Kalipada Maity , Associate Professor & HOD and Mr. Subham Maity, Joint Coordinator, Contractual Teacher, Lots of relevant questions were raised by the participants like further opportunities after completion of the course, possibility of getting job in other states and abroad, making private entrepreneurship based on the present course, available loan facilities based on the academic attainment and the linked courses for further study etc. All pertinent queries of the participants were resolved by the resource persons with their insights and erudite reply. At the end of the program the vote of thanks was proposed by Dr. Kalipada Maity, Coordinator, Associate Professor, HOD, NAAC Coordinator, Mathematics Department.



Swapan Kumar Misra 25.11.2023
Dr. Swapan Kumar Misra

Principal
Mugberia Gangadhar Mahavidyalaya

Principal
Mugberia Gangadhar Mahavidyalaya