

Date: 8-4-2021

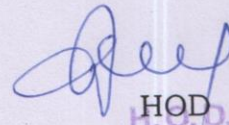
From,  
Head of the Department  
Department of CSE  
AIET, Moodbidri

To,  
The Principal,  
AIET, Moodbidri

Sub: Seeking permission to conduct the FDP on "Applications of Mathematical Concepts in Data Analysis and Machine Learning using Python" - reg...

As cited in the above subject, the Department of Computer Science and Engineering is conducting a faculty development program on 21<sup>st</sup> April 2021, for all faculties of AIET. In this regard I request your kind permission and guidance.

Thanking You.




HOD

Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225

CC to:

1. All HODs



PRINCIPAL

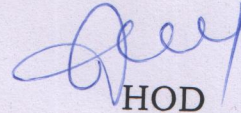
Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225, D.K



11/04/21

## Circular

All the staffs are hereby informed to attend and actively participate in the faculty development programme from 19/04/2021 to 21/04/2021 on the topic Applications of Mathematical Concepts in Data Analysis and Machine Learning using Python by Dr.S.Mohideen Badhusha, Sr.Professor, Dept of CSE.



HOD

H. O. D.

Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225

Cc to,

All the department HOD S and faculty.



**Faculty Development Programme on  
“Applications of Mathematical  
Concepts in Data Analytics and  
Machine Learning using Python”  
19<sup>th</sup> to 21<sup>st</sup> April 2021**

**ORGANIZING COMMITTEE**

- Chief Patron** : Dr. M. Mohan Alva  
Chairman, AEF
- Patron** : Sri. Vivek Alva  
Managing Trustee, AEF
- Chief Advisor** : Dr. Peter Fernandes  
Principal, AIET
- Convener** : Dr. Manjunath Kotari  
Professor & Head, Dept. of CS&E
- Resource Person** : Dr. S.Mohideen Badhusha,  
Sr. Professor, CSE, AIET
- Coordinator** : Prof. Megha D. Hegde  
Assistant Professor, Dept. of CS&E
- Members** : Prof. Sayeesh  
Prof. Ankitha Shetty  
Prof. Shruthi Shetty J  
Prof. Shilpa  
Prof. Veena M

**Contact Person for Correspondence**

**Prof. Megha D. Hegde**

Phone: 7760052722

Email: [meghahegde@aiet.org.in](mailto:meghahegde@aiet.org.in)

**Register on or before 10<sup>th</sup> April, 2021**

**Registration Fee: Rs. 200**

**Payment mode: Google pay or  
7760052722@upi**

**Three Days (Offline) Faculty  
Development Programme on  
“Applications of Mathematical  
Concepts in Data Analytics and  
Machine Learning using Python”**

**19<sup>th</sup> to 21<sup>st</sup> April, 2021**

**Organized by**

**Department of Computer Science and  
Engineering  
in association with  
Computer Society of India (CSI)**



**Alva's Institute of Engineering &  
Technology**

**Shobhavana , Mijar, Moodbidri – 574225**

**D.K, Karnataka State**

**(Accredited by NBA New Delhi (CSE & ECE))**

**Web Site: [aiet.org.in](http://aiet.org.in)**

**Phone 08258-262726, 262724, 262725**



**ALVA'S INSTITUTE OF ENGG. & TECHNOLOGY**

Alva's Institute of Engineering and Technology, Mijar, Moodbidri is a premier Engineering Institute of Alva's Education Foundation, established in the year 2008, located adjacent to Mangalore-Sholapur National Highway, which is 24 Kms from Mangalore International Airport. The college is recognized by All India Council for Technical Education (AICTE), New Delhi & Affiliated to Visvesvaraya Technological University, Belagavi. The college is ranked as one of the best Technical Institute in South Canara region. The institute offers under graduate programs in 5 branches of Engineering – Computer Science & Engineering, Civil Engineering, Electronics & Communications Engineering, Information Science & Engineering, Mechanical Engineering. **Department of CSE and ECE were accredited by NBA New Delhi.** Seven departments at the institute has been recognized as research centers by Visvesvaraya Technological University, Belagavi.

**Department of Computer Science & Engineering**

Department of Computer Science and Engineering started functioning from the year 2008, with an intake of 60 and has enhanced to 120 & 180 from academic year 2012-13 & 2020-21 respectively. The Post Graduate course, M.Tech in Computer Science and Engineering, was introduced from the academic year 2012-13 with an intake of 18 students. Department is recognized as a research centre from VTU. Faculty members are actively involved in co-curricular and extracurricular activities with association and professional bodies like CSI/ISTE. Department of Computer Science & Engineering has always been on a high growth and path since its establishment. To keep pace with latest technologies, department has employed experienced and dedicated faculty with strong commitment towards research work. The department is dedicated to education, research and

overall excellence. For skill development Department have highly equipped add-on labs like Envision lab, Innovation Lab and iOS Lab.

The students are well placed in reputed industries as well as continuing higher education in the premier institutes. The Department of CSE organizes various events such as workshops, Seminars, Technical talks, delivered by eminent resource persons from academia & industry, who have excelled in their field.

The department regularly conducts special courses on advanced topics. Department of CSE encourages the faculty and students for participating in research activities for enhancing their subject knowledge and acquire information regarding current trends.

#### VISION OF THE DEPARTMENT

“Engendering competent, excellent professionals by transforming the knowledge and computing skills to individuals through modern innovative tools and techniques”

#### MISSION OF THE DEPARTMENT

- To produce skilled, creative software developers through rigorous training.
- To conduct specific technical courses to keep abreast to the latest technological developments and transformations in the domain.
- To implement the ideas of research and innovations in interdisciplinary domains.
- To establish Industry-Institute Interaction programs to enhance the skills of employability and entrepreneurship.

#### PROGRAM SPECIFIC OUTCOMES

**A graduate of the Computer Science and Engineering Program will exhibit:**

**PSO1:** Professional Skills: The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.

**PSO2:** Problem-Solving Skills: The ability to solve real-world problems by suitable mathematical model with strong technological concepts in rapidly growing arena of computer technology.

**PSO3:** Successful Career and Entrepreneurship: Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development.

#### PROGRAM EDUCATIONAL OBJECTIVES

**The graduates of Computer Science & Engineering will able to**

**PEO1:** Exhibit fundamental strength in core courses of Computer Engineering to solve the problems of computing world.

**PEO2:** Adapt and contribute the emerging technological changes.

**PEO3:** Employed in computing profession or engaged in learning to pursue higher studies.

#### FDP OVERVIEW

The main objective of the FDP is to groom the problem solving skills in mathematics especially in Data analytic and Machine Learning using Python. The Python package Sympy helps solve the problems in Mathematics with simple coding skill in Python language.

The basic Python coding skill is trained so that any traditional mathematical problem can be solved through Sympy. In addition to it, the mathematics in Data analytic and Machine Learning is imparted through Exercises so that problems related to Data analytic and Machine Learning can be solved through Python package Sympy.

#### FDP OBJECTIVES

**Learning Objectives:**

- To make the faculty members understand the basics of Python to implement the basic mathematical concepts
- To enhance the coding skill in Python to implement the mathematical concepts in Data Analytic and Machine Learning
- To provide on-line hands-on training sessions with which the required knowledge of implementation of mathematical concepts in Data Analytic and Machine Learning.

#### EXPECTED OUTCOME

- The faculty members will be able to imbibe the basics of Python to implement basic mathematical concepts in practical perspective.
- The faculty members will be able to implement the mathematical concepts in Data Analytics and Machine Learning Models through acquired knowledge in Python

#### TARGET AUDIENCE

The FDP is open for the faculty members of Mathematics department, research scholars, PG Scholars, participants from Government, Industry and staff of host institutions. Maximum 40 participants may be allowed to attend offline FDP on a first come first serve basis.



**Three Days (Offline) Faculty Development Programme on “Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python”**

**19<sup>th</sup> to 21<sup>st</sup> April, 2021**

**REGISTRATION FORM**

Name:.....

Organization:.....

Address for communication:.....

.....

.....

Phone: No:.....

E-mail:.....

**Online Registration Link:**

<https://forms.gle/fGbMqAt2qRiMkTEJ7>

**REGISTRATION FEE DETAILS**

Date:.....

Transaction No:.....

.....

Amount:.....

Place:.....

Signature of the Participant:

Signature of the Head of the Institution with seal:

Day	Session	Portions/ Activities	Duration
DAY 1 FN	Session 1 (9.30 am -11.30 am)	Inaugural Function	2 hour
		Lecture Session on basics of Python with demo	
DAY 1 AN	Session 2 (11.45 am – 1.00 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Session 3 (2.00 pm -3.00 pm)	Lecture Session on basics of Python with demo	1 hour
DAY 2 FN	Session 4 (3.15 pm – 4.30 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Session 1 (9.30 am -11.30 am)	Lecture Session on Implementation of Mathematical concepts using python with demo	2 hour
DAY 2 AN	Session 2 (11.45 am – 1.00 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Session 3 (2.00 pm -3.00 pm)	Lecture Session on Implementation of Mathematical concepts using python with demo	1 hour
DAY 3 FN	Session 4 (3.15 pm – 4.30 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Session 1 (9.30 am -11.30 am)	Lecture Session on Implementation of Mathematical concepts in Data science and Machine Learning using python with demo	2 hour
DAY 3 AN	Session 2 (11.45 am – 1.00 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Session 3 (2.00 pm -3.00 pm)	Lecture Session on Implementation of Mathematical concepts in Data science and Machine Learning using python with demo	1 hour
DAY 3 AN	Session 4 (3.15 pm – 4.30 pm)	Hands-on session for solving relevant exercises	1 1/4 hour
	Valedictory Function		

**Alva's Institute of Engineering & Technology**  
**Moodbidri - 574225, D.K Distict., Karnataka, India**  
*(Accredited by NBA, NewDelhi CSE & ECE)*



**Faculty Development Programme (FDP)**

**On**

**“Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python”**

Organized by Department of **Computer Science and Engineering**  
In Association with **Computer Society of India (CSI)**

**From**

**19th to 21th April 2021**

**INVITATION**

.....  
.....  
.....

# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY, MOODBIDRI

We cordially invite you to the

**INAUGURATION**

*of*

**Faculty Development Programme (FDP)**

**on**

**“Applications of Mathematical Concepts in Data Analytics  
and Machine Learning using Python”**



*Resource Persons:* **Dr. S. Mohideen Badhusha.**

*Sr. Professor, Department of CSE, AIET, Mijar*

*Patron:* **Mr. Vivek Alva**, Managing Trustee, AEF, Moodbidri

*Chief Advisor:* **Dr. Peter Fernandes**, Principal, AIET, Mijar, Moodbidri

*Convener:* **Dr. Manjunath Kotari**, Professor and Head, Dept. of CS & Engg.



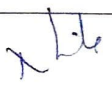



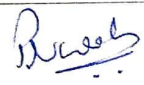


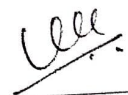

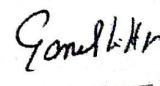
*HODs & Staff, AIET*



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Faculty Development Programme on "Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python" from 19<sup>th</sup> April to 21<sup>st</sup> April 2021.

**List of Participants**

Sl. No	Name	College Name with Address	Phone Number	Signature
1.	PARTHA SARATHI PATI	AIET, Mijar	9854528595	
2.	RASHMI R	AIET, Mijar	8095661974	
3.	NISHA KUMARI	AIET, Mijar	9611820582	
4.	SOWMYA	AIET, Mijar	9964981549	
5.	DEEPAK K S	Deepak K.S PG studies and research Alva's college center for	888455639	
6.	KAVITHA.B	AIET Mijar	9481446513	
7.	DR. PRAMEELA KOLAKE	AIET Mijar	9448711100	
8.	DR. PRASHANTHI K S	AIET, Mijar	9611627987	
9.	KISHOR KUMAR	Kishor Kumar Alva's College	9731312475	
10.	VEDAMURTHY H N	Alva's Centre for PG studies and Research	8951004098	
11.	DHANYASHREE ATHIKARI	Alva's College Centre for PG Studies and Research	9740264908	
12.	GANESH H N	Alva's college, center for PG studies and Research.	9113659069	





**Alva's Institute of Engineering & Technology**  
Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

13.	SYDNA REEMA SERRAO	Alva's Centre for PG studies and research	9480875953	<u>R</u>
14.	Mr. MADHUSUDHAN S	AIES, Mijar	9480544177	<u>R</u>
15.	K. Sureshendra	AIES, Mijar, CSE Dept	9014881394	<u>kn</u>

16. Ms. Anusha Alva's college.  
17. Mrs. Vivian Alva's College.

Ans.  
R

## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Faculty Development Programme on "Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python" from 19<sup>th</sup> April to 21<sup>st</sup> April 2021.

### Attendance Sheet

Sl. No	Name	19 <sup>th</sup> April		20 <sup>th</sup> April		21 <sup>st</sup> April	
		FN	AN	FN	AN	FN	AN
1.	PARTHA SARATHI PATI						
2.	RASHMI R						
3.	NISHA KUMARI						
4.	SOWMYA						
5.	DEEPAK K S						
6.	KAVITHA.B						
7.	DR. PRAMEELA KOLAKE						
8.	DR. PRASHANTHI K S						
9.	KISHOR KUMAR						
10.	VEDAMURTHY H N						
11.	DHANYASHREE ATHIKARI						
12.	GANESH H N						
13.	SYDNA REEMA SERRAO						
14.	Mr. MADHUSUDHAN						
15.	K.Surendra						
16.	Ms. ANUSHA						
17.	Mrs. VIVIAN VEERA CRASTO						
18.							



**ALVA'S INSTITUTE OF ENGINEERING &  
TECHNOLOGY, MOODBIDRE**



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**Report on offline FDP on  
“Applications of Mathematical Concepts in  
Data**

**Analytics and Machine Learning using  
Python”**

**from 19th to 21th April 2021**

Department of CSE organized offline FDP on “Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python” from 19th to 21st April 2021. 14 Participant from various colleges joined this workshop.

The main objective of the FDP is to groom the problem solving skills in mathematics especially in Data analytic and Machine Learning using Python. The Python package Sympy helps solve the problems in Mathematics with simple coding skill in Python language. The basic Python coding skill is trained so that any traditional mathematical problem can be solved through Sympy. In addition to it, the mathematics in Data analytic and Machine Learning is imparted through Exercises so that problems related to Data analytic and Machine Learning can be solved through Python package Sympy.



Day 1: The day started with Inaugural Function. Principal, HODs of various department, resources person graced the inaugural function. The day then continued with the daily sessions. The first lecture Session was on basics of Python with demo and continued with Hands-on session for solving relevant exercises. The after session dealt with Lecture Session on basics of Python with demo followed by Hands-on session with relevant exercises.



Day 2: This day the lecture session was on Implementation of Mathematical concepts using python with demo followed by Hands-on session for solving relevant exercises. Afternoon session started with explanation on Implementation of Mathematical concepts using python with demo followed by Hands-on session for solving relevant exercises.



Day 3: On this day Lecture Session was on Implementation of Mathematical concepts in Data science and Machine Learning using python with demonstration followed by Hands-on session for solving relevant exercises. The afternoon session was on Implementation of Mathematical concepts in Data science and Machine Learning using python with demo then participants was given hands-on session for the same.

The FDP was concluded on 21<sup>st</sup> April 2021 by having valedictory function by getting the feedback from the participants and certificates was also given to the participant.

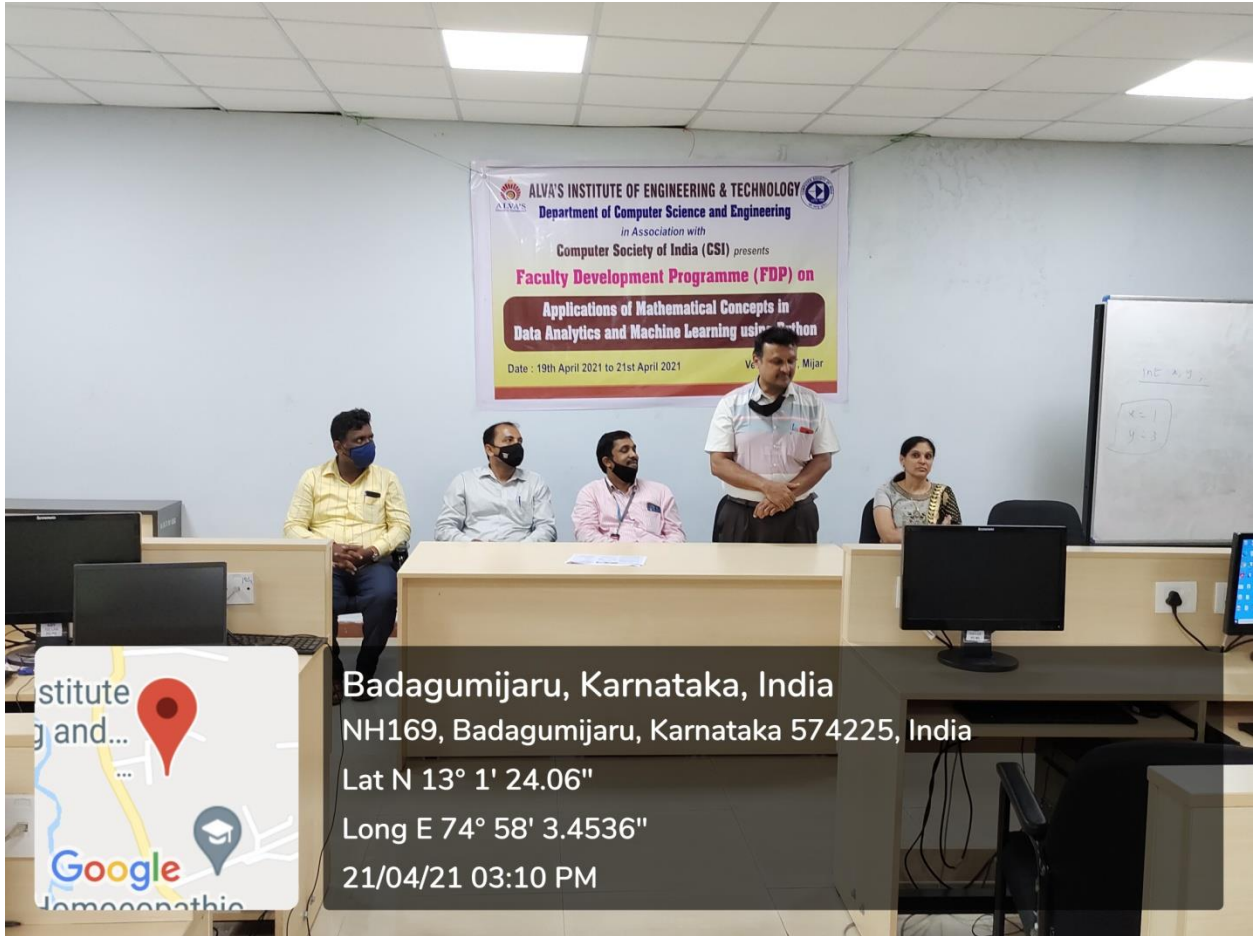






### Outcomes of FDP:

- To make the faculty members understand the basics of Python to implement the basic mathematical concepts
- To enhance the coding skill in Python to implement the mathematical concepts in Data Analytic and Machine Learning
- To provide on-line hands-on training sessions with which the required knowledge of implementation of mathematical concepts in Data Analytic and Machine Learning.





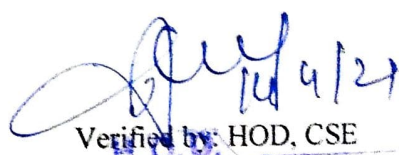
Date: 14-04-2021

1. Name of the event : Budget of **FDP on "Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python"** to be held from 19<sup>th</sup> April to 21<sup>st</sup> April 2021.
2. Dept. organizing the event : CSE
3. Resource Person : Dr. S. Mohideen Badhusha, Sr. Professor, Dept. of CSE
4. Coordinator : Ms. Megha D. Hegde, Dept of CSE

Sl. No.	Particulars	Party	Amount
1.	FDP registration FEE (200Rs.*20 Participants)	Dept. of CSE, AIET	4000=00
2.	Printing & Stationary	Nil	----
3.	Banner +Certificate	Madhuban Printers, Moodbidri	1200=00
4.	Transportation & Others	Nil	----
5.	Food & Refreshment	Tea + Snacks	600=00
		<b>Total</b>	<b>5800=00</b>

**Rupees: Five Thousand Eight hundred Only**

Prepared by: Ms. Megha D. Hegde

  
 Verified by: HOD, CSE  
 H.O.D.  
 Dept. Of Computer Science & Engineering  
 Alva's Institute of Engg. & Technology  
 Mijar, MOODBIDRI - 574 225


Date: 23-04-2021

1. Name of the event : Expenses of **FDP** on "Applications of Mathematical Concepts in Data Analytics and Machine Learning using Python" held on 19<sup>th</sup> April to 21<sup>st</sup> April 2021.
2. Dept. organizing the event : CSE
3. Resource Person : Dr. S. Mohideen Badhusha, Sr. Professor, Dept. of CSE
4. Coordinator : Ms. Megha D. Hegde, Dept of CSE

Sl. No.	Particulars	Party	Amount
1.	FDP registration FEE (200Rs.*12 Participants)	Dept. of CSE, AIET	2400=00
2.	Printing & Stationary (Banner +Certificate)	Madhuban Printers, Moodbidri	1123=00
3.	Transportation & Others	Nil	----
4.	Food & Refreshment	Tea + Snacks	487=00
		<b>Total</b>	<b>4010=00</b>
		<b>Advance</b>	<b>2400=00</b>
		<b>Total amount spent</b>	<b>1610=00</b>
		<b>Funds Remaining in department Fund</b>	<b>790=00</b>

**Rupees: Five Thousand Eight hundred Only**

Prepared by: Ms. Megha D. Hegde

  
Verified by: HOD, CSE  
Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225





# Madhuban COLOURZ

Pancharatna Business Centre  
Alvas Hospital Road, Moodabidri - 574 227  
Tel.: +91 8258 239773  
E-mail: madhuban.colourz@gmail.com

## TAX INVOICE

PAN : AECPA8061P

GSTIN : 29AECPA8061P1Z5

Invoice No : **MCM 042**

Invoice Date :

State : Karnataka

Code : 29

E-Way Bill No : .....

Vehicle Number : .....

PO No : .....

PO Date : .....

Name : Alvas Education Foundation Moodabidri.

Address : .....

GSTIN : .....

State : .....

Code : .....

SL NO.	PRODUCT DESCRIPTION	HSN CODE	QTY	PER UNIT	TAXABLE VALUE
	Printing Charges at Files 6x4		1		240.

Total Invoice Amount in Words

Rupees Two hundred forty three only.

Total Amount before Tax

Add: CGST 9%

21.6

Add: SGST 9%

21.6

Add: IGST

GRAND TOTAL

283.2

### Company Bank Details

Bank Name : KARNATAKA BANK LTD

Bank A/C : 4822000100025901

Bank IFSC : KARB0000482

Branch : MOODABIDRI BRANCH

Certified that the particulars given above are true and correct

For **Madhuban Colqurz**

Authorised Signatory





# Madhuban

## COLOURZ

Pancharatna Business Centre  
Alvas Hospital Road, Moodabidri - 574 227  
Tel.: +91 8258 239773  
E-mail: madhuban.colourz@gmail.com

PAN : AECPA8061P

GSTIN : 29AECPA8061P1Z5

### TAX INVOICE

Invoice No : **MCM 044**

Invoice Date : 20/4/2021

State : Karnataka

Code : 29

E-Way Bill No : .....

Vehicle Number : .....

PO No : .....

PO Date : .....

Name : A.I.E.T. Mijan

Address : .....

GSTIN : .....

State : .....

Code : .....

SL NO.	PRODUCT DESCRIPTION	HSN CODE	QTY	PER UNIT	TAXABLE VALUE
	Printing Charges of Certificates		50		750-00

Total Invoice Amount in Words

Rupees Eight hundred forty  
only

Total Amount before Tax

Add: CGST 6%

45-00

Add: SGST 6%

45-00

Add: IGST

GRAND TOTAL

840-00

Certified that the particulars given above are true and correct

For **Madhuban Colourz**

*Rajeev*  
Authorised Signatory

#### Company Bank Details

Bank Name : KARNATAKA BANK LTD

Bank A/C : 4822000100025901

Bank IFSC : KARB0000482

Branch : MOODABIDRI BRANCH

# CASH BILL

Bill No. 1

## The Snack House

To: \_\_\_\_\_

Date: 21/4/2021

No.	PRODUCT	QUANTITY	RATE	AMOUNT
	Tea & coffee	22	10	220
	Samosa	21	12	252
	Egg Puffs	01	15	15
	TOTAL AMOUNT			487-

2. 6-6

MELROY LOBO

- Please pay by A/c payee cheque drawn in favour of Melroy Lobo
- Interest at 20% per annum will be charged for overdue payments
- Goods once sold will not be taken back
- Our responsibility ceases as soon as the goods leave our premises
- All disputes will be subject to Mangalore jurisdiction only
- All taxes are suffered at our suppliers end

*Signature*





## ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri – 574 225.

(Affiliated to Visvesvaraya Technological University, Belagavi)

(Accredited by NBA, New Delhi CSE & ECE)

### *Certificate of Participation*

*This is to certify that .....of .....has  
attended a 3 days FDP on “Applications of Mathematical Concepts in Data Analytics and Machine Learning  
using Python” organized by Department of Computer Science and Engineering, Alva’s Institute of Engineering  
and Technology, Mijar in Association with Computer Society of India (CSI) from 19th April 2021 to 21st April 2021.*

*Dr. S Mohideen Badhusha*  
Resource Person

*Dr. Manjunath Kotari*  
HOD, Dept. of CSE

*Dr. Peter Fernandes*  
Principal