

DEPARTMENT OF MATHEMATICS CMS COLLEGE KOTTAYAM (AUTONOMOUS)

FUNCTIONAL MATHEMATICS

Value Added Course for the academic year 2019-20



ADD-ON COURSE ON : COMPUTATIONAL SCIENCE

NAAC IN ACCORDING MARK Granter

Conterred with Special Hentage Status

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DEPARTMENT OF MATHEMATICS

MS COLLEGE KOTTAYAM

MAIN TOPICS

MATLAB : The MATLAB Environment, Matrices and Operators, Functions, Programmer's Toolbox, Plotting and Image Processing

Online certification : MATLAB and Octave for Beginners by EPFL

Mathematica : Launching Mathematica, Functions and Their Graphs, Algebra, Calculus, Sequences and SeriesMatrices

Online certification : Mathematica Student Certification Program by Wolfram

R Programming: Introduction to R Programming, installing and running R and it's associated packages, basics of R Programming, Data types in R, syntax, looping and control statements in R, Some packages in R-matlib,ggplot, etc., Sample programs and conclusion.

Online certification: Data Science: R BasicsProvided by Harvard University (HarvardX)

Python programming: Introduction to Python, installing and running Python and associated packages, Basics of Python programming, Python data types, syntax, looping and control statements, Some important packages-numpy, matplotlib, math, random, etc., Sample programs and conclusion

Online certification: Python Basics for Data ScienceProvided by IBM

LAST DATE FOR REGISTRATION :

RESOURCE PERSONS:

T.M JACOB

ASSOCIATE PROFESSOR

NIRMALA COLLEGE

MUVATTUPUZHA

Dr. NIDHI. P .RAMESH GUEST FACULTY NIRMALA COLLEGE MUVATTUPUZHA

ADD ON COURSE:2 FUNCTIONAL MATHEMATICS

OBJECTIVES

By the end of the course, the learner should be able to

- 1. develop a positive attitude towards learning Mathematics and perform mathematical operations and manipulations with confidence, speed and accuracy.
- 2. think and reason precisely, logically and critically in any given situation and develop investigative skills in Mathematics.
- 3. acquires the skills to identify, concretise, symbolise and use mathematical relationships in everyday life.
- 4. comprehend, analyse, synthesise, evaluate, and make generalizations so as to solve mathematical problems.
- 5. Collect, organize, represent, analyse, interpret data and make conclusions and predictions from its results.
- 6. apply mathematical knowledge and skills to familiar and unfamiliar situations.

chapter	COURSE DESCRIPTION	HOURS
1	Logical Reasoning	nooks
2	Simplification	2
3	Profit & Loss	3
4	Simple Interest	2
5	Compound Interest	2
6	Work & Time	3
7	Time & Distance	3
8	Blood Relations	2
9	Coding Decoding	1
10	Sequences	1
11	Area and perimeter of polygons	2
12	Permutations and combinations	2
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CONTENT

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DEPARTMENT OF MATHEMATICS CMS College, Kottayam

(Autonomous) Affiliated to Mahatma Gandhi University, Kottayam Kottayam P. O., Kottayam Kerala, India – 686001 Phone: +91 4812 566002 +91 94463 91943 Web: www.cmscollege.ac.in

Report of the Add on Course on

'Functional Mathematics'

An addon course on 'Functional Mathematics' was conducted by the Department of Mathematics, CMS College Kottayam during the academic Year 2019-20. The coordinators of the programmewereDr.Ambily P Mathew, Department of Mathematics, CMS College, Kottayam and Mr. Anandhu Mohan, Guest Lecturer, Department of Mathematics, CMS College Kottayam. The course covers the topics in Computational softwares, R, Mathematica, Matlab and Python. The course was conducted by the resource persons.Dr. Jacob T.M (Associate Professor, Department of Mathematics, Nirmala College Muvattupuzha),Dr. Nidhi P. Ramesh (Assistant Professor, Department of Mathematics, Nirmala College, Muvattupuzha, Mr. Anandhu Mohan, Guest Lecturer, Department of Mathematics, CMS College Kottayam and Mr. Sudheesh Kumar V. R, Guest Lecturer, Department of Mathematics, CMS College, Kottayam.In addition to the direct contact classes, Google classroom and Moodle Platforms were used for the conduct of the programme. A total of 34 Students were enrolled for the course during the year and all of them successfully completed the course.



Dr. Ambily P Mathew

Kottayam

VALUE ADDED COURSES - ATEENDANCE SHEET

Name of the Department: Mathematics Name of the Course : Functional Mathematics Academic Year : 2019-20

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VALUE ADDED COURSES - ATEENDANCE SHEET

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Do Ambild P. Mathew Do Ambild P. Mathew Course co-ordenator