



# **DEPARTMENT OF MATHEMATICS**

## **MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE**

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

### **CURRICULUM FOR CERTIFICATE COURSE**

# **CERMA007: QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS**

**OFFERED DURING THE**  
**ACADEMIC YEAR 2020-21**  
**[APPROVED BY ACADEMIC COMMITTEE, MAMO COLLEGE]**



MANASSERY, MUKKAM POST,  
KOZHIKODE, KERALA, INDIA, 673 602.  
EMAIL: MAMOCOLLEGE@GMAIL.COM



OFFICE: 0495-2297319  
PRINCIPAL: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

## CONTENTS

1	INSTITUTIONAL VISION, MISSION & OBJECTIVES	3
2.	VISION, MISSION, OBJECTIVES & CORE VALUES OF THE DEPARTMENT	4
3.	B.Sc MATHEMATICS: PEOs	5
4.	B.Sc MATHEMATICS: PSOs	7
5.	B.Sc MATHEMATICS: POs	8
6.	CERMA007: COURSE CURRICULUM	12
6.1.	COURSE LEVEL	13
6.2.	PREREQUISITE	13
6.3.	COURSE INTAKE & ADMISSION	13
6.4.	COURSE COORDINATOR	13
6.5.	COURSE PREAMBLE	13
6.6.	DURATION	13
6.7.	CURRICULUM FOCUS	14
6.8.	COURSE OBJECTIVES	14
6.9.	SKILL EXPECTED	14
6.10.	COURSE OUTCOMES	14
6.11.	MAPPING OF COs WITH POs AND PSOs	15
6.12.	MODULE-WISE COURSE CONTENTS	15
6.13.	DELIVERY MODE	16
6.14.	DELIVERY SCHEDULE	17
6.15.	DETAILED COURSE DELIVERY PLAN	17
6.16.	ASSESSMENT COMPONENTS	19
6.17.	COURSE EVALUATION & GRADING	19
6.18.	GRIEVANCE REDRESSAL	20
6.19.	ISSUANCE OF CERTIFICATES	20



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

DEPARTMENT OF MATHEMATICS

CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE  
APTITUDE IN COMPETITIVE EXAMS [CERMA007]

## INSTITUTIONAL VISION, MISSION & OBJECTIVES 01



**VISION:** Build Scientifically Oriented, Intellectually Accomplished, Morally Upright and Socially Committed youth who can play a constructive role in Nation Building.



**MISSION:** Intellectual, social and economic empowerment of the youth in general and women, minorities, orphans and the destitute in particular by providing quality, value-based higher-education.



**OBJECTIVES:** Pursuit of Excellence, Harnessing technology, Thrust on value-based education, Nurturing Excellence and Moulding the youth for Nation Building



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut. Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

# VISION, MISSION, OBJECTIVES & CORE VALUES OF THE DEPARTMENT

# 02



VISION

**VISION:** Educating students to excel in all their endeavours for the betterment of the society and nation



MISSION

**MISSION:** Empowers students to fulfil their moral, professional, social and economic financial responsibilities



**OBJECTIVES:** (a) Develop a positive attitude towards Mathematics and to appreciate its practical applications in life, (b) Develop problem solving skills and the ability to use mathematics in everyday life, (c) Develop problem solving skills and the ability to use mathematics in everyday life and (d) Use mathematical language effectively and accurately.



VALUES

**CORE VALUES:** Practical Orientation, Intellectual Enlightenment, Social Commitment, Moral Uprightness, Ethical Self-Fashioning, Cultural Enrichment, International Outlook, Aesthetic Sensibility, Vocational Excellence and Psychological Stability.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



## MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

DEPARTMENT OF MATHEMATICS

CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE  
APTITUDE IN COMPETITIVE EXAMS [CERMA007]

# B.Sc. MATHEMATICS: PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) 03

After 4 to 5 years of graduation, the career and professional accomplishments attained by the B.Sc Mathematics Graduates would reflect that the programme really prepared the graduates to deal with the real world, where they could apply and use the skills and knowledge they have learned to good use

Specifically, the graduate would be able to:



**PEO1:** Have significant opportunities in various service domains at National and International levels like banking, insurance, government jobs, consultancy, teaching, defense, industry, research and entrepreneurial pursuit.



**PEO2:** Have leadership quality to handle all kind of circumstances in diversities by providing interdisciplinary and multidisciplinary learning environment.



**PEO3:** Inculcate value system while working in a team assigned with a important targets they will contribute through their critical thinking and



COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

mathematical competence holding the ethical values.



**PEO4:** Achieve peer recognition as an individual or as a team member having specialized knowledge and expertise to investigate, formulate, analyse and implement on the problems of pure, applied and computational mathematics to compete at global level.



**PEO4:** Have continuous learning attitude to adopt new skills and techniques to overcome the problems related with new technologies.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: [mamocollege@gmail.com](mailto:mamocollege@gmail.com)



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)





# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

# B.Sc MATHEMATICS: PROGRAMME SPECIFIC OUTCOME (PSOs) **04**

On the successful completion of the B.Sc. Mathematics Programme, the graduates would be able to:



**PSO1:** Understand the mathematical concepts and applications in the field of algebra, real and complex analysis, optimization, differential equations, Vector calculus etc.



**PSO2:** Adopt changing scientific environment in the process of sustainable development by using mathematical tools



**PSO3:** Handle the advanced techniques in algebra, analysis, optimization, differential equations, engineering, finance and actuarial science to analyse and design algorithms solving variety of problems related to real life problems.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602**



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]



**PSO4:** Have necessary language skills and expertise in the field of research and developments through seminar and project.



**COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602**



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: [mamocollege@gmail.com](mailto:mamocollege@gmail.com)



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)





## MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

### DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

# B.Sc MATHEMATICS: PROGRAMME OUTCOMES (POs) 05

On the successful completion of the B.Sc. Mathematics Programme, the graduates would be able to:



**PO1: KNOWLEDGE DOMAIN:** Demonstrate an understanding of the basic concepts in mathematics, statistics, operations research and their importance in the solution of some real- world problems.



**PO2: PROBLEM ANALYSIS:** Analyse and solve the well-defined problems in mathematics statistics, and operations research. Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decision. Find, analyse, evaluate and apply information systematically and shall make defensible decisions.



**PO3: PRESENTATION AND INTERPRETATION OF DATA:** Demonstrate the ability to manipulate and visualize data and to compute standard statistical summaries.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)









# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

-  **PO4: ETHICS:** Analyse relevant academic, professional and research ethical problems and commit to professional ethics and responsibilities with applicable norms of the data analysis and research practices.
-  **PO5: MODERN TOOL USAGE:** Learn, select, and apply appropriate methods and procedures, resources and computing tools with an understanding of the limitations.
-  **PO6: COMMUNICATION:** Effectively communicate about their field of expertise on their activities, with their peer and society at large. Such as, being able to comprehend and write effective reports and design documentation, make effective presentations.
-  **PO7: PROJECT MANAGEMENT:** Apply Knowledge and understanding of principles of mathematics and statistics effectively as an individual, and as a member or leader in diverse teams to manage projects in multidisciplinary environment.
-  **PO8: INDIVIDUAL AND TEAM WORK:** Work effectively as an individual, as a member or leader of various teams, and in multi-disciplinary settings.
-  **PO9: DESIGN/DEVELOPMENT OF SOLUTIONS:** Model the real-world problems in to mathematical equations and draw the inferences by finding appropriate solutions.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]



**PO10: LIFE-LONG LEARNING:** Continue to acquire mathematical knowledge and skills appropriate to professional activities and demonstrate highest standards of ethical issues in mathematics.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

DEPARTMENT OF MATHEMATICS

**CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]**

## CERTIFICATE COURSE

# CERMA007: QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS **06**

## COURSE CURRICULUM

Course Name	Quantitative Aptitude In Competitive Exams
Course Code	CERMA007
Year	2020-21
Course Designer	Mr. Muhammed Shakeeb M
Course Duration	30 Hrs
Course Schedule	November to February
Maximum Students Intake	60 Students



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

#### 1. COURSE LEVEL

Foundational, skill-oriented certificate programme.

#### 2. PREREQUISITE

None.

#### 3. COURSE INTAKE & ADMISSION

Maximum 60 students will be given admission to the course based on First-Come-First-Serve basis. All the students of the MAMO College are eligible for free enrolment for the course. The enrolment notification will be issued for the course well in advance of the commencement of the course.

#### 4. COURSE COORDINATOR

Mr. Muhammed Shakeeb M, Assistant Professor, Department of Mathematics

#### 5. COURSE PREAMBLE

Government jobs are the dream of ordinary people today. However, nowadays it is not so easy. To overcome this, we introduce a certificate course named “quantitative aptitudes in competitive exams”. This will help you to solve most of the math questions that come up in government competitive exams.

#### 6. DURATION

Total Duration: 30 Hrs. [Contact Hrs. 25 Hrs and Assessment Works: 5]



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

## 7. CURRICULUM FOCUS

Enhance the employability of the learners through curriculum enrichment for additional skill development.

## 8. COURSE OBJECTIVES

Learners are exposed to

- (a) Solve different types of problems
- (b) Compete in various types of government exams.

## 9. SKILL EXPECTED

On the successful completion of the course, learners will be able to:

- (a) Solve different types of problems in competitive exams
- (b) Cultivate problem analysing and problem solving skills.

## 10. COURSE OUTCOMES

Upon the successful completion of the course, learners will be able to:

CO No	Course Outcome(CO)	Skill/Knowledge Attainment Level Based on Revised Bloom's Taxonomy
CO1	Develop skills to solve problems	Develop
CO2	Analyse which kind of problems	Analyze
CO3	Create new ideas about problems solving	Create



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)





# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut. Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

CO No	Course Outcome(CO)	Skill/Knowledge Attainment Level Based on Revised Bloom's Taxonomy
CO4	Solve different types of mathematical problems and draw various types of graphs using MATLAB.	Apply

## 11. MAPPING OF COs WITH PSO<sub>s</sub> AND PO<sub>s</sub>

CO <sub>s</sub>	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4
CO1	1	3	1	1	1	1	2	1	1	1	1	1	1	2
CO2	1	1	1	2	2	2	3	1	2	1	3	1	1	1
CO3	2	1	2	2	1	1	1	1	1	2	2	1	1	1
AVG	1.3	1.5	1.5	1.5	1.3	1.3	1.8	1.3	1.3	1.3	1.8	1.3	1.3	1.3

## 12. MODULE-WISE COURSE CONTENTS

### MODULE 1: INTRODUCTION TO BASIC CONCEPTS

**MODULE DURATION:** 8 Hrs. [Contact Hrs. 6 Hrs and Assessment Works: 1 Hrs]

**MODULE CONTENT:** Number system, Different types of numbers, Basic operation in mathematics, Geometric shapes and basic ideas,

**MODULE OUTCOME:** On successful completion of the module, learners can familiarize with the basics of maths and able to do basic problems.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

#### MODULE 2: BASIC PROBLEMS

**MODULE DURATION:** 11 Hrs. [Contact Hrs. 9 Hrs and Assessment Works: 2]

**MODULE CONTENT:** Clock problems, work and time, coding and decoding, numerical problems, averages, odd man out, simplification.

**MODULE OUTCOME:** On successful completion of the module, learners will be able handle more problems like Clock problems, work and time, coding and decoding, numerical problems, calendar problems and averages

#### MODULE 3: ADVANCED TYPE PROBLEMS

**MODULE DURATION:** 11 Hrs. [Contact Hrs. 9 Hrs and Assessment Works: 2 Hrs]

**MODULE CONTENT:** Age problems, calendar problems, relationship problems, advanced numerical problems

**MODULE OUTCOME:** On successful completion of the module learners can familiarize with the advanced problems

#### REFERENCES:

1. *Magic Maths*, Talent Academy, Neyyar publications (P) LTD, 2020

## 13. DELIVERY MODE

The course employs multi-mode delivery mechanism including contact lecture and online classes.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)

  
**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

#### 14. DELIVERY SCHEDULE

November to February.

#### 15. DETAILED COURSE DELIVERY PLAN

Hour	Delivery Mode and Activity	Topics to be Covered
1	Contact Hour - 1: Classroom Discussion	Introducing the Course
2	Contact Hour - 2:	Need of mathematics in daily life
3	Contact Hour - 3:	Introducing the numbers
4	Contact Hour - 4:	Different types of numbers
5	Contact Hour - 5:	Basic operations
6	Course work-1: Course Assignment	Course Assignment to solve different kind of simple problem
7	Contact Hour - 6:	Introducing geometric shapes
8	Contact Hour - 7:	Detailed study of geometric shapes
9	Course Work – 2: Course Assignment	Course Assignment to Create different kinds of geometric shapes like circle, triangle, rectangle...
10	Assessment Hour - 1	Course Assignment to solve problems related to geometric shapes
11	Contact Hour - 8:	Basics of Clock problem
12	Contact Hour - 9:	More about clock problems
13	Contact Hour - 10:	Basics of work and time problems.
14	Contact Hour - 11:	Coding and decoding
15	Course Work – 3: Course Assignment	Solving problems related to clock, coding-decoding and work & time



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

Hour	Delivery Mode and Activity	Topics to be Covered
16	Contact Hour - 12:	Daily uses of Clock problems and work & time problems
17	Assessment Hour - 2	Course Assignment to find and solve more problems
18	Contact Hour - 13:	Numerical problems and averages
19	Contact Hour - 14:	Finding odd man out
20	Contact Hour - 15:	Simplification
21	Contact Hour - 16:	Age related problems
22	Contact Hour - 17:	Calendar problems
23	Course Work – 4: Course Assignment	Solving problems related to age and calendar
24	Assessment Hour - 3	Assignment to find daily life usages of age problems, calendar problems and average problems
25	Contact Hour - 18:	Simplification
26	Contact Hour - 19:	Simplification
27	Contact Hour - 20:	Doubt clearing session from all the topics
28	Course Work – 5: Course Assignment	Course Assignment to solve 10 simplification problems
29	Assessment Hour – 4	Course End Assessment
30	Assessment Hour - 5	Course End Assessment



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121

**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



[www.mamocollege.org](http://www.mamocollege.org)



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

## 16. ASSESSMENT COMPONENTS

Total Marks: 100

**CLASSROOM AND GROUP PARTICIPATION: 20 Marks.** This component aims at testing the course content understanding and the reflection skills and their attainment levels.

**COURSE WORK: 30 Marks.** This component aims at testing the skill attainment levels of the learners in analysing and implementing the real-world problem.

**MID-COURSE ASSIGNMENT: 20 Marks.** This component aims at testing the module-wise attainment levels of the course objectives and course outcome and module outcomes.

**END-COURSE ASSESSMENT: 30 Marks.** This component aims at testing overall attainment levels of the course with respect to course objectives, course outcome and module outcomes.

## 17. COURSE EVALUATION & GRADING

The course evaluation is done/coordinated entirely by the course coordinator. The following 10-point Indirect Grading System is used for awarding grades to students:

Percentage of Mark	Letter Grade	Interpretation	Class
95 and above	O	Outstanding	First Class with Distinction
85 to below 95	A+	Excellent	First Class with Distinction
75 to below 85	A	Very good	First Class with Distinction
65 to below 75	B+	Good	First Class
55 to below 65	B	Satisfactory	First Class



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)

  
**COORDINATOR**  
**ACADEMIC COMMITTEE**  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602



# MUHAMMED ABDURAHIMAN MEMORIAL ORPHANAGE (MAMO) COLLEGE

[Govt. Aided First Grade College & Affiliated to University of Calicut.  
Re-Accredited by NAAC with A Grade]

## DEPARTMENT OF MATHEMATICS

### CURRICULUM FOR CERTIFICATE COURSE IN QUANTITATIVE APTITUDE IN COMPETITIVE EXAMS [CERMA007]

Percentage of Mark	Letter Grade	Interpretation	Class
45 to below 55	C	Average	Second Class
35 to below 45	P	Pass	Third Class
Below 35	F	Failure	Fail
Incomplete	I	Incomplete	Fail
Absent	Ab	Absent	Fail

The grade is awarded by the course-coordinator by considering the overall performance of the learner in all the assessment component of the course.

## 18. GRIEVANCE REDRESSAL

The grievances, if any, can be submitted to the Head of the Department for its redressal. Those grievances that cannot be redressed by HoD can be forwarded to Academic Council of the College for final decision on the matter.

## 19. ISSUANCE OF CERTIFICATES

The Course Completion Certificate will be issued to all the successful candidates showing the Total Marks and Grade Obtained.



Manassery, Mukkam Post,  
Kozhikode, Kerala, India, 673 602.  
email: mamocollege@gmail.com



Office: 0495-2297319  
Principal: 0495-2295121



[www.mamocollege.org](http://www.mamocollege.org)

  
COORDINATOR  
ACADEMIC COMMITTEE  
MUHAMMED ABDURAHIMAN MEMORIAL  
ORPHANAGE COLLEGE  
P.O. MANASSERY, MUKKAM - 673602