



HAJEE KARUTHA ROWTHER HOWDIA COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai.)

Uthamapalayam, Theni District. Pin Code: 625 533.

DEPARTMENT OF MATHEMATICS

PART – IV PG – NME MATHEMATICS

SYLLABUS

Choice Based Credit System – CBCS

(As per TANSCH/ MKU Guidelines)

(Academic Year 2020-2021 onwards)

Details of Course Category, Code, Credits & Title

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max. Marks	Credits
Semester - III							
Part - IV							
NME	20PMAN31	Mathematics for Competitive Examinations	3	25	75	100	3

Course Code	Course Title	Category	Total Hours	Credits
20PMAN31	Mathematics for Competitive Examinations	NME	45	3

Nature of Course	
Knowledge Oriented	✓
Skill Oriented	✓
Employability Oriented	✓
Entrepreneurship Oriented	

Course Relevance	
Local	
Regional	
National	
Global	✓

Preamble

The course provides various mathematical aptitude techniques of solving problems in percentages, Profit and Loss, Simple and compound interest etc.

Syllabus

UNIT I	9 Hours
H.C.F. and L.C.M of numbers – decimal – fractions – simplifications – average.	
UNIT II	9 Hours
Percentage – profit and loss- ratio and proportion partnership	
UNIT III	9 Hours
Simple Interest and Compound interest	
UNIT IV	9 Hours
Time and work – Time and distance	
UNIT V	9 Hours
Calendar –clocks	

Text Books

Agarwal R.S, "**Quantitative Aptitude**" Publishers: S. Chand and Co, 1990.

Agarwal A.S., "**Verbal and non-verbal reasoning**" Publishers: S. Chand and Com., 1994.

Unit I: Chapter1-Section-1 to 4, 6

Unit II: Chapter -1-Section – 10 to 12

Unit III: Chapter 1-Section 21 and 22

Unit IV: Chapter 1-Section – 15, 17

Unit V: Chapter 1 - Section – 27, 2

Reference Books

Sandip jana, Sukhendu, susanta Mandal "*Mathematics for competitive Examinations*"

John P. D Angelo Douglas B. West "*Mathematical Thinking*"

Pedagogy

Chalk & Talk, E-Resources, Group Discussion

Teaching aids

Black Board, LCD Projector

Course Contents and Lecture Schedule

Module No.	Topic	No. of Lectures	Content Delivery Methods
UNIT - I			
1.1	H.C.F. and L.C.M of numbers	2	Chalk & Talk
1.2	Decimal	1	E-Resources
1.3	Fractions	2	Discussion
1.4	Simplifications	2	
1.5	Average	2	
UNIT - II			
2.1	Percentage	4	Discussion
2.2	Ratio and proportion partnership	5	Chalk & Talk
UNIT - III			
3.1	Simple Interest and Compound interest	9	Chalk & Talk
UNIT - IV			
4.1	Time and work	5	Discussion
4.2	Time and distance	4	E-Resources
UNIT - V			
5.1	Calendar	5	E-Resources
5.2	Clocks	4	Chalk & Talk
Total		45	

Course Designer

Ms. M. Vijayasankari

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