



AISHE Code: C-27584

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GOVERNMENT DEGREE COLLEGE, THORRUR

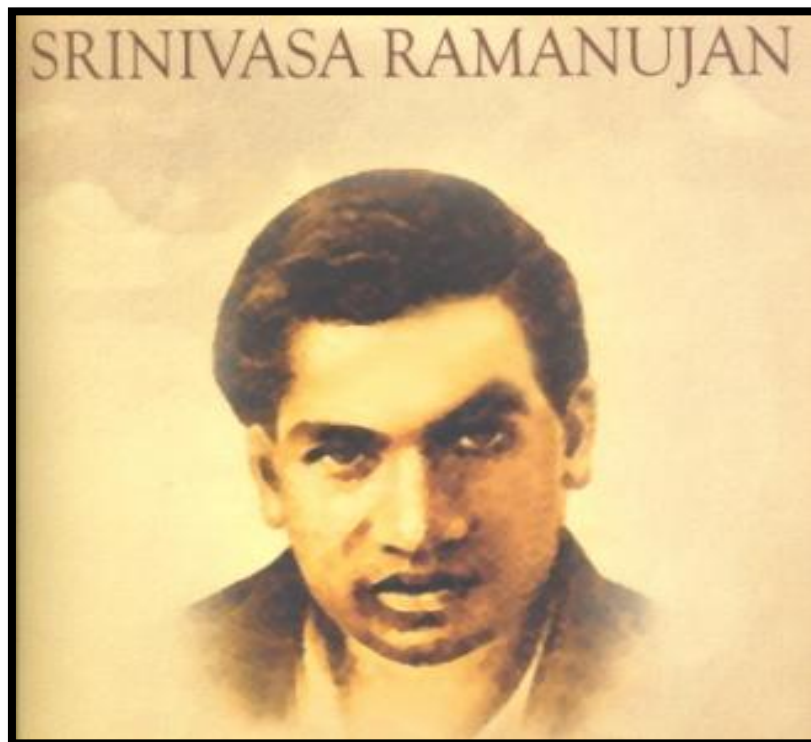
MAHABUBABAD DISTRICT, TELANGANA STATE – 506163

e-Mail: jc.gdc.thorrur@gmail.com, Mobile: 8008307999

Website: <https://gdcts.cgg.gov.in/thorrur.edu>



DEPARTMENT OF MATHEMATICS



Birth : 22nd December 1887

Death : 26th April 1920

**THE AMAZING
HARDY-RAMANUJAN NUMBER**

$$1729 = 1^3 + 12^3$$

$$1729 = 9^3 + 10^3$$

$$1+7+2+9 = 19 \times 91 = 1729$$

CONTENTS

S. No	INDEX	Page No.
1	Introduction/About the Department	1
2	Vision & Mission	1
3	Department Profile	2
4	Courses/Programmes Offering	3
5	Course Details(Sem Wise)	3
6	Strength Particulars	4
7	Faculty Details	4
8	Workload Particulars	4
9	Time Table	5
10	Infrastructure Facilities	7
11	Departmental Library	7
12	Academic Activities	7
13	Result Analysis	10
14	e-Content/ICT	13
15	Certificate/Add On Courses	17
16	Extension Activities	18
17	Research Activities	22
18	Collaboration/MoUs	23
19	Best Practices	24
20	Student Progression	24
21	Future Plans	24

INTRODUCTION:

Government Degree College, Thorrur was established on 2008 in Mahabubabad District of Telangana. Thorrur is a major town located 70 Kilometers away from District head quarters to cater the higher Education needs of the students of Thorrur. The college is affiliated to Kakatiya University, Warangal and completed as per the almanac prescribed by the University. The Department of Mathematics in the College was started in the year 2015 with B. Sc. (MPC) and started B.Sc., (MPCs) course in the year 2019.

ABOUT THE DEPARTMENT

Government Degree College, Thorrur was established in 2008 in Mahabubabad District of Telangana State. Thorrur is a major town located 70 Kilometers away from District head quarters to cater the higher education needs of the students of Thorrur. The College is affiliated to Kakatiya University, Warangal and completed as per the almanac prescribed by the Kakatiya University. The Department of Mathematics in the College has started in the year of 2015 with B.Sc(M.P.C) and with B.Sc (M.P.Cs) in the year of 2019.

VISION AND MISSION:

VISION:

- To help the students develop a positive identity as a Mathematics Learner and see themselves as mathematically skilled, to support them as they use Mathematics to make sense of the world, and to enable them to make critical decisions.
- To provide an Environment where students can learn, become competent users of Mathematics in other disciplines.

MISSION:

- We guide, teach and support students of all mathematical abilities and interests. We welcome students into our community of Mathematical scholars.
- Develop critical thinking and problem solving skills, content knowledge, and the ability to communicate ideas effectively.

DEPARTMENTAL PROFILE

1. Name of the Department : Mathematics
2. Year of Establishment : 2015
3. Names of Programmes / Courses offered : B.Sc(M.P.C), B.Sc(M.P.CS)
4. Annual/semester/choice based credit System (programme wise):
Choice Based Credit System
5. MoUs with other Colleges :
 1. Government Degree college ,Yellandu.
 2. Government Degree college, Wardhannpet.
 3. Sri Vikas Degree college, Nekkonda.

6. **Number of teaching posts:**

Designation	Sanctioned	Filled
Asst. Professors	01	01

7. **Faculty profile :**

Name	Qualification	Designation	No.of Yearsof Experience
K.RAJITHA	M.Sc, B.Ed,	Lecturer	9 years

8. **List of Senior Faculty visiting the Department :**

1. J. Shanker, Lecturer in Mathematics, Mulugu.
2. L.Ravinder, Lecturer in Mathematics, Jammikunta.

9. **Student -Teacher Ratio (programme wise) : 20 :1**

10. **Student progression:**

Student progression	Against% Enrolled
UG to PG	01

11. **Details of Infrastructural facilities:**

- a) **Library** : 22 Books of reference are with department
b) **Internet facilities for Staff & Students** : Yes Available

12. Details on student enrichment programmes (Special Lectures /workshops/Seminar) with external Experts: **Group Discussions, Quiz, Seminars, Extension Lectures**

13. Teaching methods adopted to improve Student learning:

Lecture Method and Online tools such as ZOOM, You tube, WhatsApp

14. Participation in Institutional Social Responsibility (ISR) and Extension Activities:

Participation in NSS, Career Guidance Cell, TSKC, Virtual Class Room, Women Empowerment Activities, Alumni.

COURSES/PROGRAMMES OFFERING (At present):

The Mathematics department offers the following UG courses under CBCS System (BSc. Physical Sciences):

1. Mathematics-Physics-Chemistry - EM
2. Mathematics-Physics-Computer Science - EM

C.B.C.S.PROGRAMMES: COURSES (Semester Wise)

S.No	Group	Medium	Year	Semester
1	B.Sc(M.P.Cs)	EM	First Year	I-Sem
				II-Sem
2	B.Sc(M.P.Cs)	EM	Second Year	III-Sem
				IV-Sem
3	B.Sc(M.P.Cs)	EM	Final Year	V-Sem
				VI-Sem

SYLLABUS:

https://drive.google.com/file/d/1u2Z2JXBtSB-du2HoS_Rbn9VFal6U4uAu/view?usp=share_link

STRENGTH PARTICULARS

Academic Year	Group	I YEAR	II YEAR	III YEAR	Total
2017-18	B.Sc.(M.P.Cs.)EM	01	02	02	05
2018 - 19	B.Sc.(M.P.Cs.)EM	Nil	Nil	Nil	Nil
2019-20	B.Sc.(M.P.Cs.)EM	18	Nil	Nil	18
2020 - 21	B.Sc.(M.P.Cs.)EM	17	02	Nil	19
2021-22	B.Sc.(M.P.Cs.)EM	22	18	02	42
2022-23	B.Sc.(M.P.Cs.)EM	27	21	18	66

FACULTY DETAILS:

1. Number of Teaching posts:

Designation	Sanctioned	Filled
Asst. Professors	01	01

2. Details of Teaching Staff:

S.No.	Name of the Teaching Staff	Designation	Qualification	Period
1	K.RAJITHA	Contract Lecturer	M.Sc ,B.Ed	13.07.2018 to Till date

WORK LOAD PARTICULARS:

S.No	Class	Year	Medium	Hours/Week		Total
				Theory	Tutorial	
01	B.Sc(MP Cs)	First	English	05	01	06
02	B.Sc(MP Cs)	Second	English	05	01	06
03	B.Sc(MP Cs)	Third	English	05	01	06
Grand Total						18

TIME-TABLE:

GOVERNMENT DEGREE COLLEGE-THORRUR, MAHABUBABAD (Dist)

TIME TABLE-(2021-22) I, III and V SEMISTER

B.Sc. (MATHEMATICS)

MON	First Year		MAT		L U N C H			
	Second Year	MAT						
	Third Year			MAT				
TUE	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
WED	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
THU	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
FRI	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
SAT	First Year							
	Second Year							
	Third Year				MAT			

GOVERNMENT DEGREE COLLEGE-THORRUR, MAHABUBABAD (Dist)

TIME TABLE - (2021-22) II, IV and VI SEMISTER

B.Sc. (MATHEMATICS)

DAY	YEAR/TIME	I (10.00 to 11.00)	II (11.00 to 12.00)	III (12.00 to 1.00)	(1.00 to 1.30)	IV (1.30 to 2.30)	V (2.30 to 3.30)	VI (3.30 to 4.30)
MON	First Year		MAT		L U N C H			
	Second Year	MAT						
	Third Year			MAT				
TUE	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
WED	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
THU	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
FRI	First Year		MAT					
	Second Year	MAT						
	Third Year			MAT				
SAT	First Year							
	Second Year							
	Third Year						MAT	

Details of Infrastructural facilities:

- a) Internet facilities for Staff & Students : Yes Available
- b) Class rooms with ICT facility : LCD Projector
- c) Laboratories : Well equipped laboratories available.

Department Library:

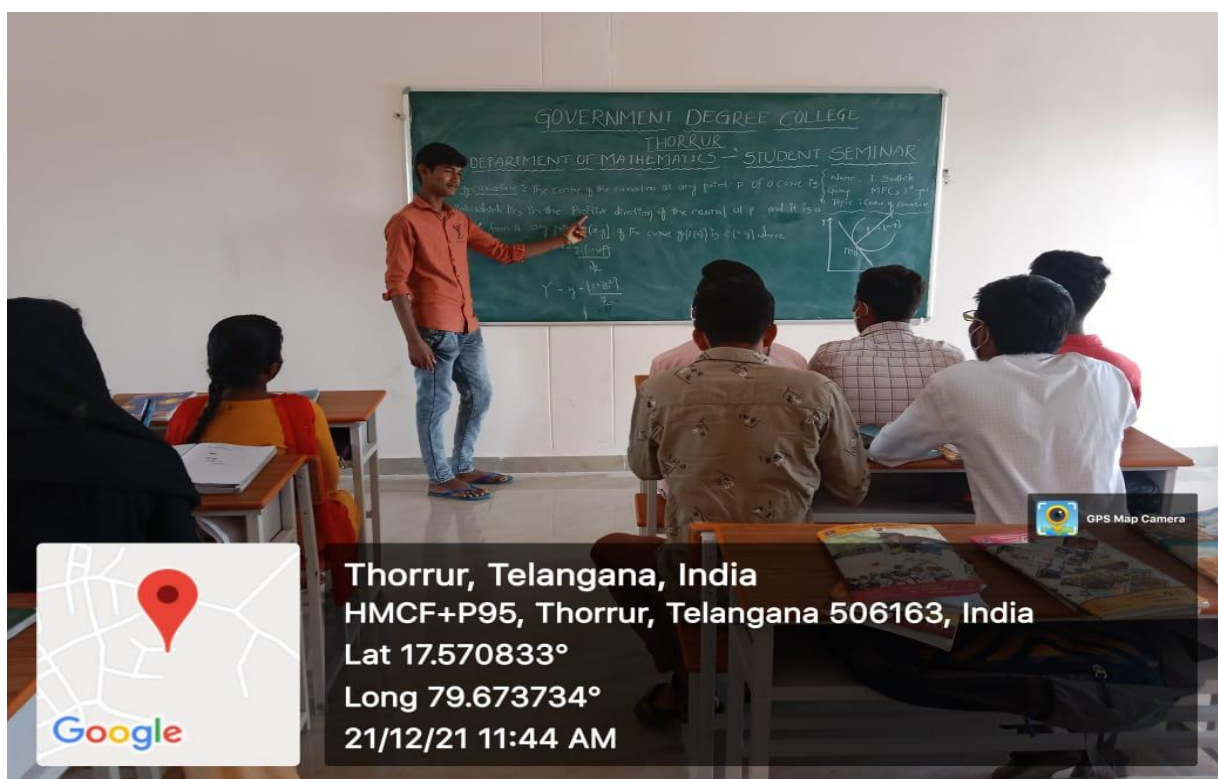
- a) Library : 22 Books of reference are with department

ACADEMIC ACTIVITIES/TEACHING LEARNING PROCESS/METHODS:

- Student Seminars
- Field Trips
- Group Discussions
- Quiz Competitions
- Extension Lectures
- Student Study Projects
- Assignments

ACADEMIC ACTIVITIES OF THE DEPARTMENT

STUDENT SEMINARS



Student Seminar Conducted on the Date 21st December 2021 by T.Sadhik, M.P.Cs I Year

FIELD TRIPS



Visited APGVB, Thorrur Branch on the Date 23rd September 2019

GROUP DISCUSSIONS



Group Discussion Conducted On the Date 13th September 2019

QUIZ COMPETITIONS



Quiz Competition Conducted on the Date 25th April 2022

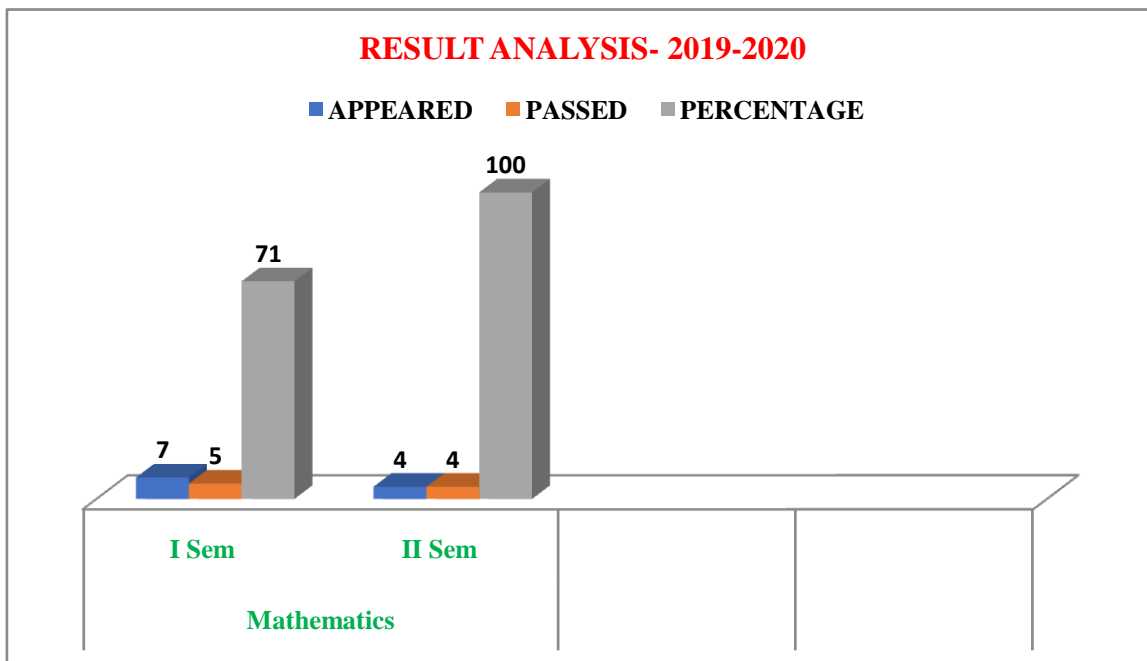
EXTENSION LECTURES



An Extension Lecture given by J. Shanker, Lecturer in Maths, GDC Mulugu

RESULT ANALYSIS:

GOVERNMENT DEGREE COLLEGE THORRUR				
DEPARTMENT OF MATHEMATICS				
RESULT ANALYSIS- 2019-2020				
SUBJECT	SEMESTER	APPEARED	PASSED	PERCENTAGE
Mathematics	I Sem	7	5	71
	II Sem	4	4	100

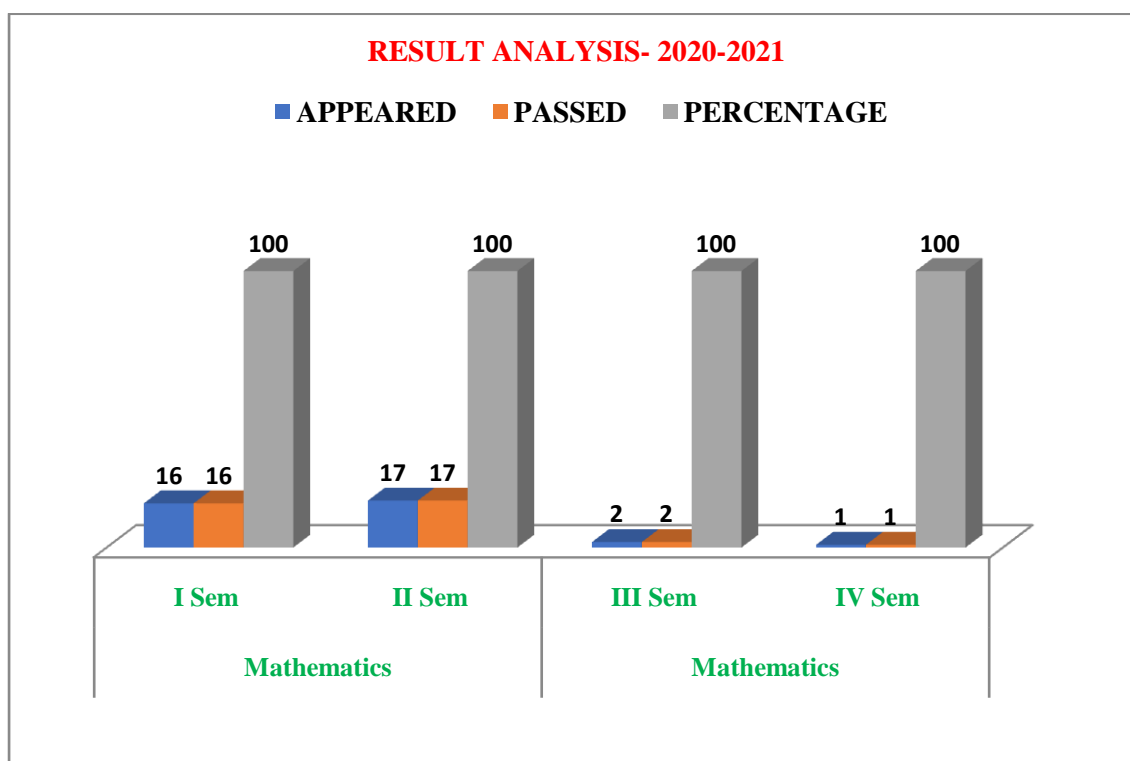


GOVERNMENT DEGREE COLLEGE THORRUR

DEPARTMENT OF MATHEMATICS

RESULT ANALYSIS- 2020-2021

SUBJECT	SEMESTER	APPEARED	PASSED	PERCENTAGE
Mathematics	I Sem	16	16	100
	II Sem	17	17	100
Mathematics	III Sem	2	2	100
	IV Sem	1	1	100

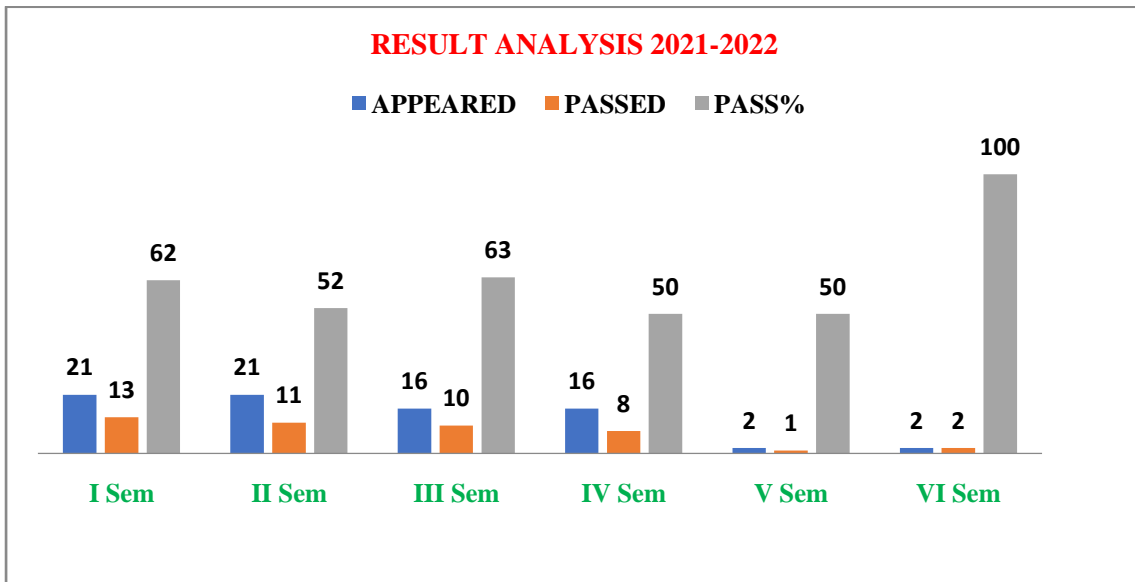


GOVERNMENT DEGREE COLLEGE, THORRUR

DEPARTMENT OF MATHEMATICS

RESULT ANALYSIS(2021-22)

SUBJECT	SEMESTER	APPEARED	PASSED	PASS%
Mathematics	I Sem	21	13	62
	II Sem	21	11	52
	III Sem	16	10	63
	IV Sem	16	8	50
	V Sem	2	1	50
	VI Sem	2	2	100



Details of e-Content/ICT:

S.No.	Name of the Lecturer	PPT	Lectures uploaded on YouTube
1	K.RAJITHA	10	42

ACADEMIC YEAR 2019-20

DIFFERENTIAL AND INTEGRAL CALCULUS	1	PARTIAL DIFFERENTIATION	https://youtu.be/JTU8zgrLSKw	14
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PARTIAL DIFFERENTIATION	https://youtu.be/_X8txBTfCWE	19
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PARTIAL DIFFERENTIATION	https://youtu.be/uz7Z8Izvsb0	21
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PARTIAL DIFFERENTIATION	https://youtu.be/kAQg9GXv8Gs	25
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PARTIAL DIFFERENTIATION	https://youtu.be/cuu3J6fs9HM	15
DIFFERENTIAL AND INTEGRAL CALCULUS	1	HOMOGENEOUS FUNCTIONS.	https://youtu.be/aW9PruSu1bQ	14
DIFFERENTIAL AND INTEGRAL CALCULUS	1	THEOREMS ON TOTAL DERIVATIVE.	https://youtu.be/REVfU6EHK7k	20
DIFFERENTIAL AND INTEGRAL CALCULUS	1	DIFFERENTIATION OF COMPOSITE FUNCTIONS.	https://youtu.be/ZyDLMrICx8c	13
DIFFERENTIAL AND INTEGRAL CALCULUS	1	IMPLICIT FUNCTIONS.	https://youtu.be/hk2SddCM6Is	14

DIFFERENTIAL AND INTEGRAL CALCULUS	1	PROBLEMS ON IMPLICIT FUNCTIONS.	https://youtu.be/HovpXeJFA4s	18
DIFFERENTIAL AND INTEGRAL CALCULUS	1	EQUALITY OF F_{yx} & F_{xy}	https://youtu.be/KRKzViCUw2U	16
DIFFERENTIAL AND INTEGRAL CALCULUS	1	EQUALITY OF F_{yx} & F_{xy} THEOREM.	https://youtu.be/0U0SWVOSTpc	10
DIFFERENTIAL AND INTEGRAL CALCULUS	1	TAYLORS THEOREM FOR FUNCTION OF TWO VARIABLES.	https://youtu.be/3BpfYO1--xU	14
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PROBLEMS ON TAYLORS THEOREM.	https://youtu.be/8aAIA1Xps4	19
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PROBLEMS ON TAYLORS THEOREM.	https://youtu.be/Eot-yRQtV6Q	18
DIFFERENTIAL AND INTEGRAL CALCULUS	1	MAXIMA AND MINIMA OF FUNCTION TWO VARIABLES.	https://youtu.be/Eldf4oE3FsU	16
DIFFERENTIAL AND INTEGRAL CALCULUS	1	PROBLEMS ON MAXIMA AND MINIMA.	https://youtu.be/ZDwlDkGuBq8	20
DIFFERENTIAL AND INTEGRAL CALCULUS	1	MAXIMA AND MINIMA.	https://youtu.be/WsWgaP_oHWQ	22
DIFFERENTIAL AND INTEGRAL CALCULUS	1	LEGRANGES METHOD OF UNDETERMINED MULTIPLIERS.	https://youtu.be/hvXsIDZtujA	17
DIFFERENTIAL AND INTEGRAL CALCULUS	1	LEGRANGES METHOD OF UNDETERMINED MULTIPLIERS.	https://youtu.be/112MuJ6jCAY	18

DIFFERENTIAL AND INTEGRAL CALCULUS	1	CURVATURE AND EVOLUTES.	https://youtu.be/TSupkqSUcjA	16
DIFFERENTIAL AND INTEGRAL CALCULUS	1	LENGTH OF ARC AS A FUNCTION	https://youtu.be/4Dz408bAuZI	16
DIFFERENTIAL AND INTEGRAL CALCULUS	1	RADIUS OF CURVATURE.	https://youtu.be/oIlze20G_4g	16

ACADEMIC YEAR 2020-2021

DIFFERENTIAL EQUATIONS	2	INTRODUCTION TO DIFFERENTIAL EQUATIONS	https://youtu.be/oifmrS4Mr7Q	23
DIFFERENTIAL EQUATIONS	2	DIFFERENTIAL EQUATIONS OF FIRST ORDER AND FIRST DEGREE.	https://youtu.be/XJRkIowrKBA	27
DIFFERENTIAL EQUATIONS	2	HOMOGEONEOUS D.E	https://youtu.be/nRXS_JAII MY	26
DIFFERENTIAL EQUATIONS	2	DIFFERENTIAL EQUATIONS REDUCIBLE TO HOMO.FORM.	https://youtu.be/icuee3qVCVo	26
DIFFERENTIAL EQUATIONS	2	LINEAR DIFFERENTIAL EQUATIONS	https://youtu.be/pVrfln_jws	27
DIFFERENTIAL EQUATIONS	2	DIFFERENTIAL EQUATIONS REDUCIBLE TO LINEAR FORM.	https://youtu.be/vaUPBe6sZhY	25

DIFFERENTIAL EQUATIONS	2	EXACT DIFFERENTIAL EQUATIONS	https://youtu.be/ySBdtNUqvCM	20
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/sVU88Q1HP5A	13
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/AXbDEzckW1k	13
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/zLUhUZoC4d4	20
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/3UATl-xP-Vo	17
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/SkE8ggSM5fU	19
DIFFERENTIAL EQUATIONS	2	INTEGRATING FACTORS	https://youtu.be/qZnVP1VAjO4	19
DIFFERENTIAL EQUATIONS	2	CHANGE IN VARIABLES AND TOTAL DE.	https://youtu.be/EngNR58XeAk	20
DIFFERENTIAL EQUATIONS	2	D.E OF THE FORM $dx/P = dy/Q = dz/R$.	https://youtu.be/G91jXF9LnQA	22
DIFFERENTIAL EQUATIONS	2	EQUATIONS OF THE FIRST ORDER BUT NOT OF THE FIRST DEGREE.	https://youtu.be/-B9NPr4-NtO	15
DIFFERENTIAL EQUATIONS	2	EQUATIONS SOLVABLE FOR Y	https://youtu.be/GDRPdkZgD-8	15
DIFFERENTIAL EQUATIONS	2	EQUATIONS SOLVABLE FOR X	https://youtu.be/ANdZBzCTuXk	10
DIFFERENTIAL EQUATIONS	2	CLAIRAUTS EQUATION.	https://youtu.be/S9juAm2XgGA	13

CERTIFICATE COURSES: 02

Department	Academic Year	Name of the Certificate Course	No. of Students Enrolled	No. of Students Completed
MATHEMATICS	2020-21	Vedic Mathematics	23	23
	2021-22	Arithmetic & Reasoning	30	27

VEDIC MATHEMATICS (2020-21)



Presentation of Certificates those who have completed Certificate Course

ARITHMETIC & REASONING (2021-22)



Presentation of Certificates to the Students

EXTENSION ACTIVITIES:

MATHEMATICS DAY CELEBRATIONS

2019-20



2020-21



2021-22

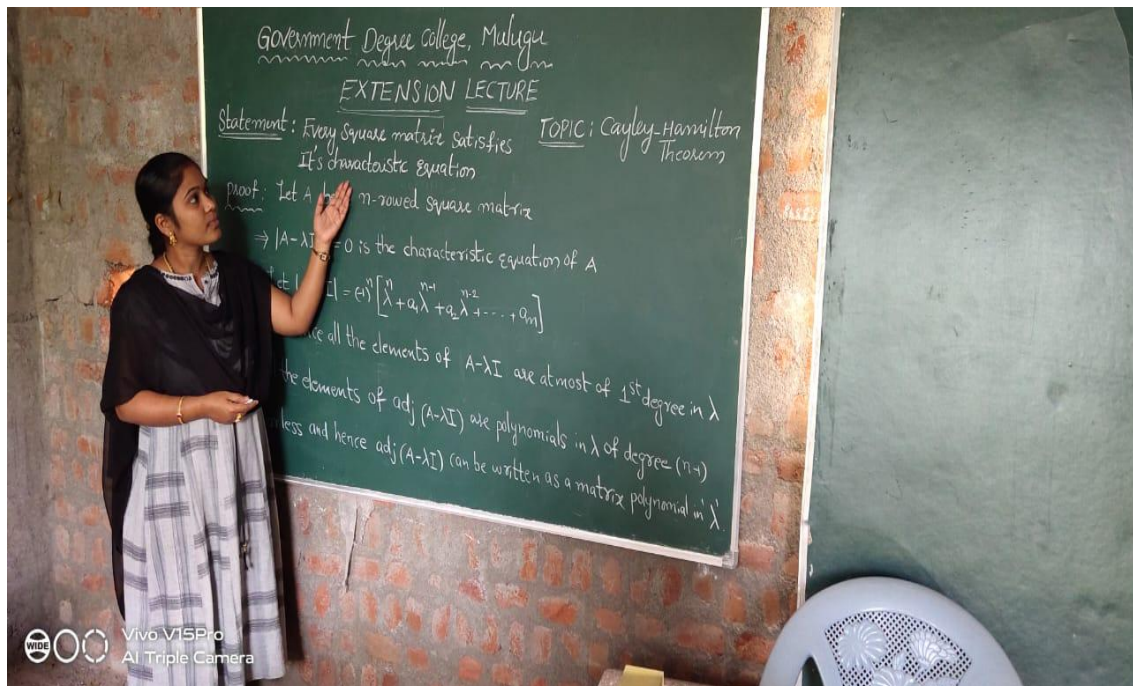


Mathematics Day Celebrations on the Occasion of "Srinivasa Ramanujan" Birth Anniversary

GUEST LECTURES



Guest Lecture given at GDC Yellandu, On the Topic “Eulers Theorem”



Guest Lecture given at GDC Mulugu, On the Topic “Cayley-Hamilton Theorem”

ADMISSION CAMPAIGN



Admission Campaigning at GJC,Nellikuduru

HARITHA HARAM



Participating in Haritha Haram Programme

CULTURAL PROGRAMMES



Participating in Rangoli Competitions On the Occasion of Republic Day

Academic/ Examination Services by Faculty:

S.No.	Name of the Lecturer	Paper Setting	Resource Person	Examiner
1	Kodaparthi Rajitha	Paper Setting	-	Examiner

RESEARCH ACTIVITIES:

1. No. of Seminars Attended: 06
2. No. of Workshops: 04
2. No. of Training Programs Attended: 08

JIGNASA STUDENT STUDY PROJECT



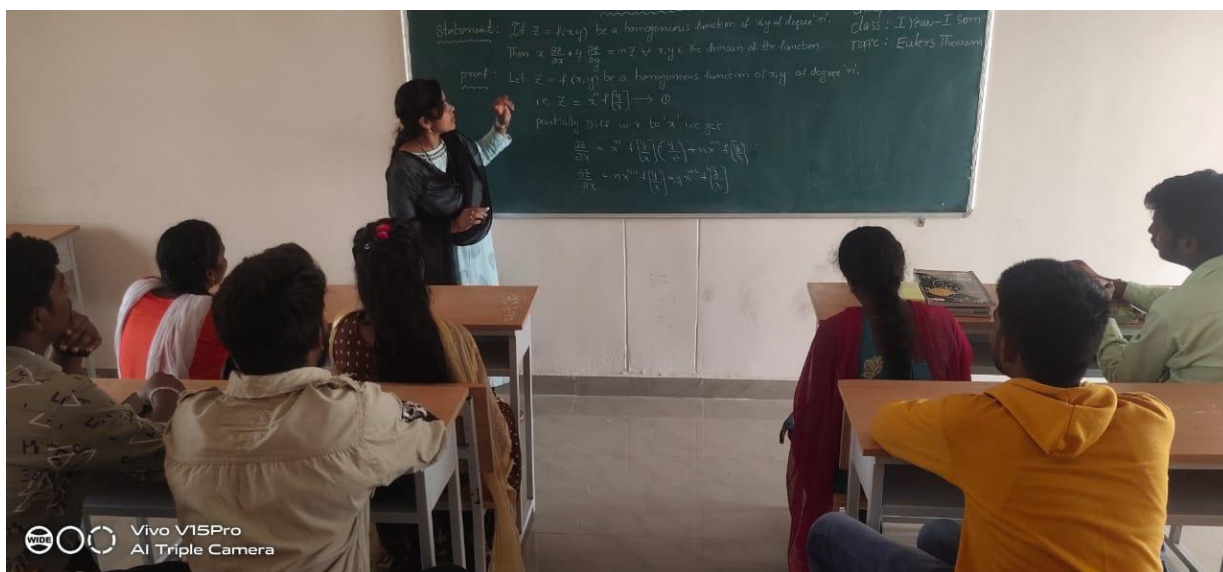
Presentation of study project on the topic “Eigen values and Eigen vectors”

Collaboration/ MoU's :

The department has signed MoUs with the following colleges.

1. Government Degree college ,Yellandu.
2. Government Degree college, Wardhannpet
3. Sri Vikas Degree college, Nekkonda

Activities under Collaboration work:



Guest Lecture given at GDC Yellandu, On the Topic “Eulers Theorem”

BEST PRACTICES:

MATHS FRIEND



Our Students taking free classes to the Government School students of their Villages

Student Progression:

Student progression	Against % Enrolled
UG to PG	50

Future plans:

The Department of Mathematics is planning

1. To Start P.G Entrance (Mathematics) Coaching for the students after completion of their U.G.
2. To take classes of Arithmetic, Reasoning and Mental Ability for all the Final year Students to cope up with competitive exams.
3. To start a U.G Course B.Sc. (M.St.Cs) with Statistics as a Subject.