



**JVR GOVERNMENT COLLEGE**  
**SATHUPALLY - KHAMMAM [DIST]**  
**TELANGANA STATE**



**PROFILE  
 OF  
 DEPARTMENT OF MATHEMATICS**

**WELCOME  
 TO  
 NAAC PEER TEAM**

**23.09.2022 to 24.09.2022**

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**Srinivasa ramanujan**

22 Dec 1887 - 26 April 1920

## *Department of Mathematics*

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### **HISTORY OF THE DEPARTMENT**

The Department was established at the time of inception of the college in the year 1976, It has been rendering services to cater the needs of the poor , needy , backward and tribal area students. The entire Sathupally division is depending on the only JVR government college Sathupally . Keeping in view of the emerging global scenario of present trends, department has been introducing combination of computer subject courses from the academic year 2000-01 like- B.Sc (MATHS, PHYSICS , COMPUTER SCIENCE ) and B.Sc(MATHS, CHEMISTRY, COMPUTER SCIENCE).

#### **ABOUT THE DEPARTMENT:**

The department provides excellent learning in Mathematics with highly qualified, dedicated faculty members supported by abundant books in the library catering the needs of the students . The faculty members are updating themselves to modern methods to teaching by attending to various refresher courses , seminars , workshops and pursuing the latest in the subject by going through mathematical science journals and Internet Explorer. The Departmental Library consisting of number of Reference books is used by Staff and Students.

Established with MPC (T/M) Programme : 1976-77

Introduced MPCS & MCCS (T/M) Programme : 2000-2001

Introduced MPC & MPCS (E/M) Programme : 2018-2019

## Vision

- To spread the knowledge of Mathematics to young Generation through teaching

## Mission

- To develop a positive attitude towards Mathematics
- To make students competent in Mathematics
- To develop problem solving skills in Mathematics among the students

## Objectives

- To Become Confident in using Mathematics to analyze and Solve problems in Real life situations
- To make the subject a study of utility that can generate income

## PROGRAMMES AND COURSES OFFERED :

### I. Programme offered during the academic years : 2016-17 to 2020-21

S.NO.	NAME OF THE COURSE	2016-17	2017-18	2018-19	2019-20	2020-21
1.	BSC[MPC]	YES	YES	YES	YES	YES
2.	BSC[MPCS]	YES	YES	YES	YES	YES
3.	BSC[MCCS]	YES	YES	YES	YES	YES

### II. At present the Department of Mathematics offers the following UG courses:

Programme	Name of the Programme	Combination
UG	BSC[ Physical Science ]	Maths, Physics and Chemistry
		Maths, Physics and Computer Science
		Maths, Chemistry and Computer Science

CBCS system is followed for all UG Programme since 2016.

### **Distinguished personalities in the Department :**

- Sri P.L.Sathyanarayana(6-9-1976 to 2-5-1977) worked for the department one year
- Sri S.V. Raghavendra Rao: worked for the department 10 years above.
- Sri R..V.V.S.Murthy , worked for the Department
- Sri P.Prathapa Reddy (12-9-1979 to 1-4-1981 ) worked for the department one and Half year above.
- Sri. M.A.Baig : worked for the Department in 1981 to 1983
- Sri.Y.Radha Krishna (1-3-1983 to 1-7-1991): worked for a long time (i.e., 8 years above) and he was considered to bear eminent personality.
- Sri. D. Ramanaiah (9-7-1990 to6-8-1992): worked for the Department for two years above.
- Sri. N. KrishnaReddy(8-7-1991 ot 1-9-1992) : worked for the department one year above.
- Sri. S. Rajaiah(17-9-1992 to 30-04-1995 ): worked for two and half years above.
- Sri T. Sambaiah(9-12-1996 to 17-06-1997) : worked for six months only.
- Sri . P. Srinivasa Rao(October 1998 to 2010) : Served the department for seven years above  
He was the alumni of this college studied in 1990 - 93
- Sri.T.Kavitha [ 22.05.2013 TO 29.06.2018 ]
- Sri B.venkateswara Rao [ 21.05.2013 TO 29.06.2018 ]
- Sri.B.Saritha [ 18.07.2018 TO 07.02.2022 ]
- Sri. P.Srinivas [11-01-2022 to till today ].

## FACULTY PROFILE

### STAFF PARTICULARS – SUCCESSION LIST

From Academic Year 2016-17 to 2021-22

S. No.	Name of Faculty	Qualification	Nature of appointment	Date of Joining	Date of Leaving
1	B.Venkateswara Rao	M.Sc, B.Ed, SET	Regular	21.05.2013	29.06.2018
2	T.Kavitha	MSc.,M.Phill, B.Ed,SET,Phd	Regular	22.05.2013	29.06.2018
3	B.Saritha	M.Sc, SET	Contract	18.07.2018	07.02.2022
4	P.Srinivas	M.Sc. SET	Regular	11-01-2022	till today

### DETAILS OF TEACHING STAFF

Name	Designation	Qualification	Experience in present cadre(Years)	Total Teaching Experience (Years)	Age
P.SRINIVAS	ASST PROF OF MATHS	M.Sc, T.S-SET	19	22	45

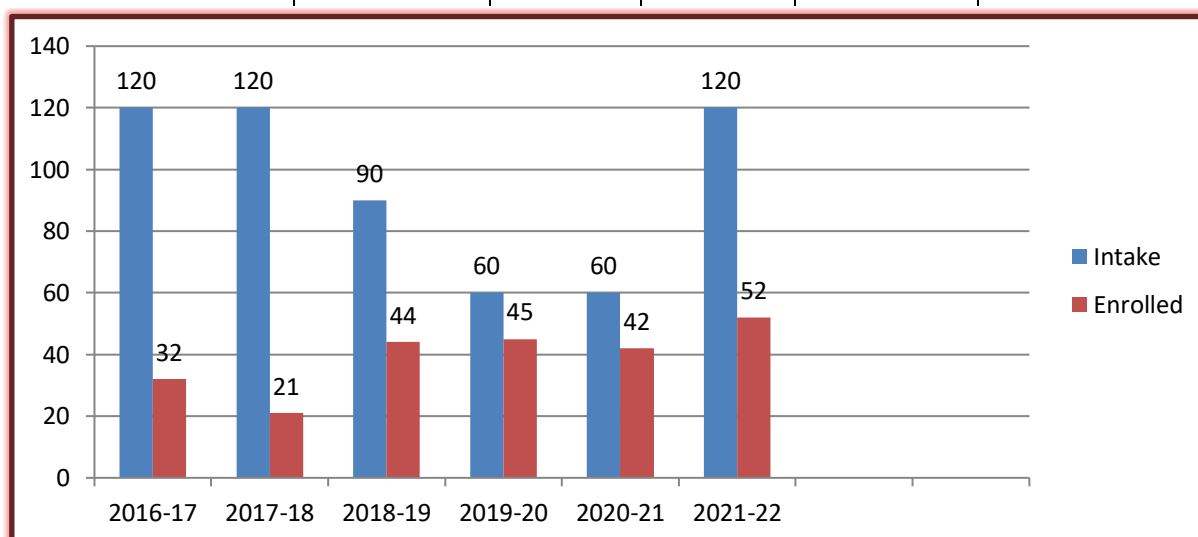
## CRITERION-I

### CURRICULAR ASPECTS

#### Students Enrollment:

The number of students enrolled in first year in each academic year for last five academic years are given below.

Year	Intake	Enrolled	Percentage of enrollment
2016-17	120	32	27%
2017-18	120	21	17.5%
2018-19	90	44	49%
2019-20	60	45	75%
2020-21	60	42	70%
2021-22	120	52	43%



Bar chart representation is given below.

It is observed from the graph good percentage of enrollment in the year 2019-20. The reason for not get very good percentage of enrollment is that, admitted students used to go to Engineering courses EAMCET counselling which would be conducted after the close of admission process of Degree courses. Another reason is that some students who get admission in residential degree colleges also go out from our college.



**STUDENT PROFILE**  
**COMMUNITY WISE : 2016-17 To 2021-22**

ACADEMIC YEAR	SC			ST			BC			OTHERS			GRAND TOTAL		
	B	G	TOTAL	B	G	TOTAL	B	G	TOTAL	B	G	TOTAL	B	G	TOTAL
2016-17	09	09	18	21	24	45	17	10	27	02	01	03	49	44	93
2017-18	04	08	12	20	18	38	16	09	25	01	02	03	41	37	78
2018-19	05	04	09	3	12	42	20	10	30	03	01	04	31	27	58
2019-20	12	08	20	24	17	41	19	05	24	05	01	06	60	31	91
2020-21	17	11	28	26	14	40	20	05	25	02	01	03	65	31	96

## **STUDENTS IN DIFFERENT SPECIFIC PROGRAMMES IN 2021-22:**

### **i. Mathematics , Physics and Computer Science combination (EM).**

<b>1. B.Sc. Physical Sciences CBCS: MPCS</b>		
<b>S. No</b>	<b>Year</b>	<b>Number of Students</b>
<b>1</b>	<b>I</b>	<b>22</b>
<b>2</b>	<b>II</b>	<b>18</b>
<b>3</b>	<b>III</b>	<b>11</b>

### **ii. Mathematics ,Physics and Chemistry combination (EM).**

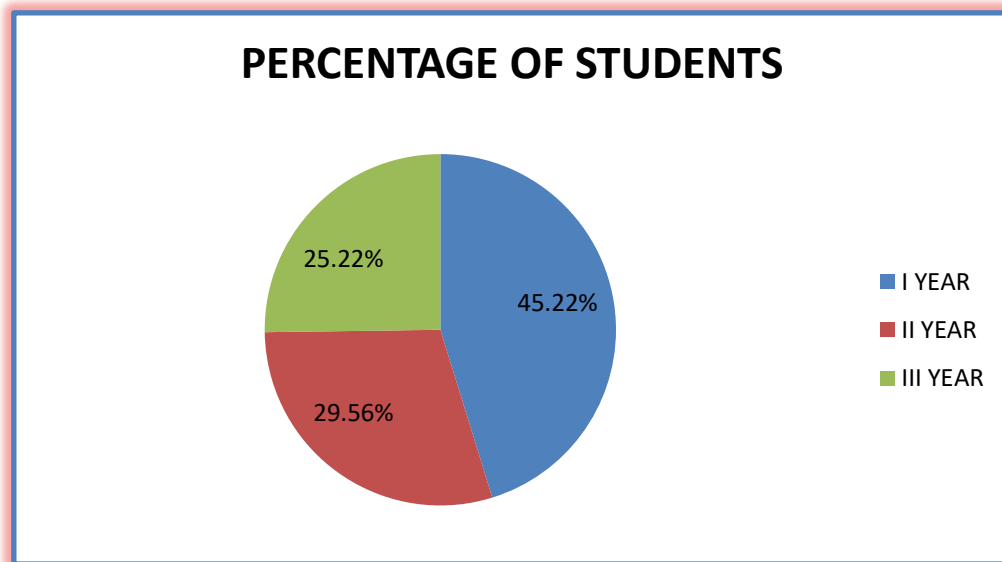
<b>1. B.Sc. Physical Sciences CBCS: MPC</b>		
<b>S. No</b>	<b>Year</b>	<b>Number of Students</b>
<b>1</b>	<b>I</b>	<b>23</b>
<b>2</b>	<b>II</b>	<b>12</b>
<b>3</b>	<b>III</b>	<b>16</b>

### **iii. Mathematics , Chemistry and Computer Science combination (EM).**

<b>1. B.Sc. Physical Sciences CBCS: MCCS</b>		
<b>S. No</b>	<b>Year</b>	<b>Number of Students</b>
<b>1</b>	<b>I</b>	<b>7</b>
<b>2</b>	<b>II</b>	<b>4</b>
<b>3</b>	<b>III</b>	<b>2</b>

### **Ratio of students in Current academic Year:**

There are totally 115 students with Mathematics course. Ratio of percentage of students in year wise is given in below chart.



### **COURSES:**

As College is affiliated to Kakatiya University -Warangal, department of Mathematics is following the almanac and teaching the syllabus set by the university. Choice Based Credit System was introduced in academic year 2016- 17. Again, syllabus was changed according to the needs of global requirements in the academic year 2019-20. Accordingly, we are now offering the following courses in the department. There are four Discipline Specific Compulsory courses in first four semesters. There are two Discipline Specific Elective courses in 5<sup>th</sup> and 6<sup>th</sup> semesters for each semester, out of those, one course can be elected in each semester. Six hours have been allotted to each course in a week, out of those five hours for theory and one hour for tutorial. Five credits are earmarked for each course. Candidate has to get 40% marks in University Exam cum Internal Assessment in order to pass a course.

**COURSE STRUCTURE:**

<b>Semester</b>	<b>Name of the course</b>	<b>Nature of Course</b>	<b>Hours (Theory+Tutorial) /Week</b>	<b>Credits</b>
I	Differential and Integral Calculus	DSC	(5+1) =6	5
II	Differential Equations	DSC	(5+1) =6	5
III	Real Analysis	DSC	(5+1) =6	5
III	Theory of Equations/Logic and Sets	SEC	2	2
IV	Algebra	DSC	(5+1) =6	5
IV	Number Theory / Vector Calculus	SEC	2	2
V	Linear Algebra	DSC	(5+1) =6	5
	1.Basic Mathematics 2.Mathematics of Finance & Insurance	GE	4	4
VI	(A) Numerical Analysis	DSE	(5+1) =6	5
	(B) Integral Transforms	DSE	(5+1) =6	5
	(C) Analytical Solid Geometry	DSE	(5+1) =6	5
	Mathematical Modelling	Project / Optional	4	4

## **PO'S AND PSO'S AND COURSE OUTCOMES**

Department lays down Programme outcomes , Programme Specific Outcomes and Course outcomes for each course according to the Learning Outcome Based curriculum set by UGC. Department is striving to attain course outcomes with curricular and co-curricular activities. Course Outcomes for the academic year 2021-22 are given below.

### **Programme outcomes:**

PO1: Scientific temper will be developed in Students.

PO2: Students will acquire basic Practical skills & Technical knowledge along with domain knowledge of different subjects in the science stream.

PO3: Students will become employable; they will be eligible for career opportunities in Industry, or will be able to opt for entrepreneurship.

PO4: Students will possess basic subject knowledge required for higher studies, professional and applied courses like Management Studies, Law etc.

PO5: Students will be aware of and able to develop solution oriented approach towards various Social and Environmental issues.

### **Programme Specific Outcomes:**

PSO1: Think in a critical manner.

PSO2: Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences.

PSO3: Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of mathematics.

PSO4: Provide students/learners sufficient knowledge and skills enabling them to undertake further studies in mathematics and its allied areas on multiple disciplines concerned with mathematics.

PSO5: Encourage the students to develop a range of generic skills helpful in Employment and social activities.

## Course outcomes

### **Course : BS104: Differential Calculus**

CO1: To understand the concept of partial diff. Equations in more than two variables.

CO2: To find extreme values of multivariable functions using derivatives.

CO3: Verify the values of limit of a function at a point using the definition of a limit.

CO4: Identify and apply the intermediate value theorem, Mean value theorem and  
L- Hospital's rule.

### **Course: BS204: Differential Equations**

CO1: To be able to solve first order and first degree differential equations.

CO2: To learn methods to solve linear differential equation with constant coefficients.

CO3: To learn methods for solving non-homogeneous differential equation.

### **Course: BS304: Real Analysis**

CO1: To learn basic properties of real numbers and its subsets

CO2: To study concept of sequence and series and hence find sum of infinite terms  
with different methods.

CO3: To learn Riemann Integral and its properties in detail, leading to fundamental  
theorem of calculus.

CO4: To study pointwise and uniform convergence of sequences and series of  
functions.

### **Course : BS404: Algebra**

CO1: To learn fundamental properties and mathematical tools such as closure, identity.

CO2: To enhance abstract thinking of students.

CO3: To learn to compare two different algebraic structures and study transfer of  
properties in between these structures through homomorphism and isomorphism.

CO4: To learn the construction of field of quotients of an integral domain.

CO5: To study the Rings of polynomial and its factorization over a field.

**Course: BS503: Linear Algebra**

CO1: To learn the importance of linear transformation in Physics, Engineering, Social science and various branches of Mathematics.

CO2: To learn to find Eigen values and Eigen vectors of a matrix which is used in the study of vibrations, chemical reactions and geometry.

CO3: To learn Inner Product spaces and Gram-Schmidt process of orthogonalization.

**Course: BS506: Analytical Solid Geometry**

CO1: To learn analytical geometry of 2 and 3 dimensions which include study of conics, planes, lines, sphere, cone and cylinder.

CO2: To learn describe some of the surfaces by using analytical geometry.

**Course: BS603: Numerical Analysis**

CO1: To learn to apply the various numerical techniques for solving real life problems.

CO2: The problems which cannot be solved by usual formulae and methods can be Solved approximately by using the numerical techniques.

CO3: To fit curve to the data by using 5 different methods of interpolation as well as extrapolation.

CO4: To find approximate solutions to difficult differential equations occurring in.

## Personal Profile:

**P.SRINIVAS** M.Sc., TS-SET.  
Assistant Professor of Mathematics



- 1) Name : PALLA.SRINIVAS
- 2) Father Name : BIKSHAM
- 3) Mother Name : MUTHYALAMMA
- 4) Date of Birth : 01-01-1977
- 5) Place of Birth : MIRYALAGUDA(V&M), NALGONDA(DIST.)
- 6) Marital Status : Married

## Educational Profile:

Course	Institution	Year of passing
SSC	Z.P.H.S.,Bakalwadi-Miryalaguda	1993
Intermediate (MPC)	Saketha Jr.college-Miryalaguda	1995
B.Sc. (MPC)	KNM Govt Degree College- Miryalaguda	1998
M.Sc. (MATHEMATICS )	AV College ,Osmania University- Hyderabad	2000

## Achievements:

- Qualified TS-SET (Mathematical Sciences) in Aug-2018.
- Maintaining a YouTube channel (Video Lessons) in the name of "Vas Maths UG Classes", by P.Srinivas.

## ServiceParticulars:

**Date of appointment:** 06-04-2018

(Into service)

**Date of joining** : 11-01-2022

(In this college)

**06-04-2018 to 10-01-2022** : KNM Govt Degree College-Miryalaguda,Nalgonda(Dist).

**11-01-2022 to till today** : JVR Govt College, Sathupally,Khammam (Dist).



## **Faculty Development Programmes**

### **SEMINAR / WORKSHOP / WEBINARS ATTENDED:**

1. Participated in Work shop on “ LINEAR ALGEBRA” organized by Department of Mathematics, Nagarjuna Government college(A) Nalgonda on 27.10.20218
2. Participated in National Seminar on “Mathematics and its applications “ at Mahatma Gandhi University organized by Department of Mathematics , Nalgonda on 28.02.2015
3. Participated in Two day National webinar on “Wavelets, Frame Theory and its applications” held at the Department of Mathematics , Mahatma Gandhi University , Nalgonda sponsored by UGC , New Delhi during October 13 to 14 , 2020.
4. Participated one week Online FIPShort-Term course on ICT Tools in Higher Education sponsored by UGC – HRDC – RUSA organized from 20.08.2020 to 26.08. 2020

### **External Academic Activities:**

- Question paper setter for
  - 1) Mahatma Gandhi University, Nalgonda
  - 2) Nagarjuna Govt. College(A), Nalgonda.
- Evaluator for
  - 1) Mahatma Gandhi University, Nalgonda.
  - 2) Nagarjuna Govt. College (A), Nalgonda.
- 2000 to 2008 worked as a lecturer in under the osmania university affiliated degree college and 2008 to 2021 worked as a lecturer in under the Mahatma Gandhi university affiliated degree college and 2022 onwards working as a lectuer in under the Kakatiya university affiliated degree college.

### **Skills Highlighted:**

- MS office
- Effective use of ICT tools in teaching

### **Mailing Address:**

#### **Office:**

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 Department of Mathematics ,  
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 Khammam (Dt) – 507303.  
 E-mail ID: [pallasrinivasmaths@gmail.com](mailto:pallasrinivasmaths@gmail.com)

**DEAPRTMENT TIME TABLE**  
**SEMESTER –II,IV&VI: 2021-22**

<b>D A Y</b>	<b>YEAR</b>	<b>9.30- 10.30</b>	<b>10. 30- 11. 30</b>	<b>11.30 - 12.30</b>		<b>1-2</b>	<b>2-3</b>	<b>3-4</b>
<b><u>M</u> <u>O</u> <u>N</u></b>	1	-	<b><u>M</u> <u>AT</u></b>		<b>LUNCH BREAK</b>	-	-	-
	2	<b><u>MAT</u></b>	-	-		-	-	-
	3	-	-	<b><u>MAT</u></b>		-	-	-
<b><u>T</u> <u>U</u> <u>E</u></b>	1	-	<b><u>M</u> <u>AT</u></b>	-		-	-	<b><u>MAT</u></b>
	2	-	-	-		-	-	-
	3	<b><u>MAT</u></b>	-	-		-	-	-
<b><u>W</u> <u>E</u> <u>D</u></b>	1	-	<b><u>M</u> <u>AT</u></b>	-		<b><u>M</u> <u>AT</u></b>	-	-
	2	-	-	-		-	<b><u>MAT</u></b>	-
	3	<b><u>MAT</u></b>	-	-		-	-	-
<b><u>T</u> <u>H</u> <u>U</u></b>	1	-	-	-	-	-	-	
	2	-	-	<b><u>MAT</u></b>	-	-	-	
	3	-	<b><u>M</u> <u>AT</u></b>	-	-	-	-	
<b><u>F</u> <u>R</u> <u>I</u></b>	1	-	-	-	-	-	-	
	2	<b><u>MAT</u></b>	-	-	<b><u>M</u> <u>AT</u></b>	<b><u>MAT</u></b>	-	
	3	-	-	-	-	-	-	
<b><u>S</u> <u>A</u> <u>T</u></b>	1	<b><u>MAT</u></b>	-	-	-	-	-	
	2	-	-	<b><u>MAT</u></b>	-	-	-	
	3	-	-	-	-	<b><u>MAT</u></b>	<b><u>MAT</u></b>	

### Department workload particulars: 2021-22

Program B.Sc.	Paper	Theory	Hours	Tutorial	Total
1 <sup>st</sup> Year	I	5	1	1	6
	II	5	1	1	6
2 <sup>nd</sup> Year	III	5	1	1	6
	SEC 2	2	1	-	2
	IV	5	1	1	6
	SEC 2	2	1	-	2
3 <sup>rd</sup> Year	V	5	1	1	6
	VI	5	1	1	6
					40 (per week)

\* For either even semester or odd semester, the above workload is 20 hours (per week) .

\* **All Science students in III Semester will must choose SEC paper Bio-Statistics .The workload of this paper is 2 hours per week and this paper taught by Department of Mathematics.**

## CRITERION II

### TEACHING, LEARNING & EVALUATION

Each faculty member in the department prepares a teaching plan of the course. As per the Almanac of the University, there are 15 weeks or 90 working days in each semester. Teaching plans and semester plans will be in such a way that entire course shall be covered within available time. Faculty members are recording in the teaching diaries whatever they taught and do some curricular activities. We are maintaining Digital Teaching Diary from 2020-21 onwards. Digital Teaching Diary is the part of CAIMS (College Administration Information Management System) which is provided by the commissionerate of collegiate education, Telangana. Department used to review coverage of syllabus from time to time and gives instruction accordingly. Faculty members are encouraged to take up student centric activities viz, Quiz, Debating, Elocution, Assignments, Student Seminars, Group Discussions, Student Study projects. The faculty member in the department is trained in ICT tools. ICT enabled teaching is being done in blended modes through different platforms as shown below

- Online classes
- YouTube channels
- Google classrooms
- Best quality animated PPTs

Evaluation of students is done through two internal exams and one semester end exam that will be conducted by the university. 20% of weightage is given to Internal Assessment examination and 80% of weightage is given to semester end exam. A student has to score 40% of total marks including internal and external to pass in a course. Average of two internal assessments will be considered for internal marks. Grades are given according to the following table from academic year 2019-20 onwards.

<b>Range of Marks</b>	<b>Grade Letter</b>	<b>Grade point</b>
≥ 85 to 100	O	10
≥ 70 to < 85	A	9
≥ 60 to < 70	B	8
≥ 55 to < 60	C	7
≥ 50 to < 55	D	6
≥ 40 to < 50	E	5
< 40	F	0
Absent	AB	--

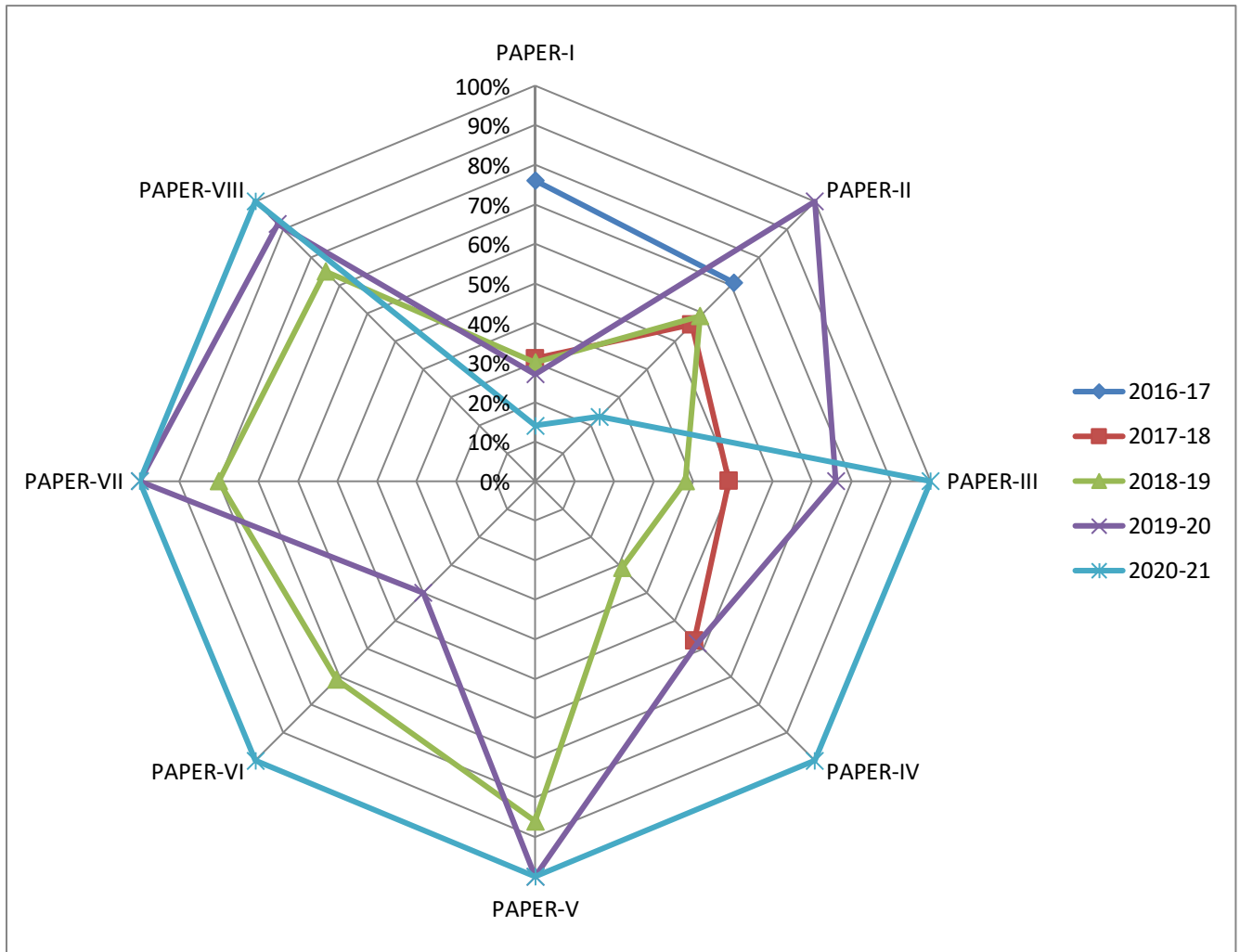
## **RESULT ANALYSIS**

After publication of results by university, Department will do result analysis immediately and it will plan for the remedial classes for the failed student.

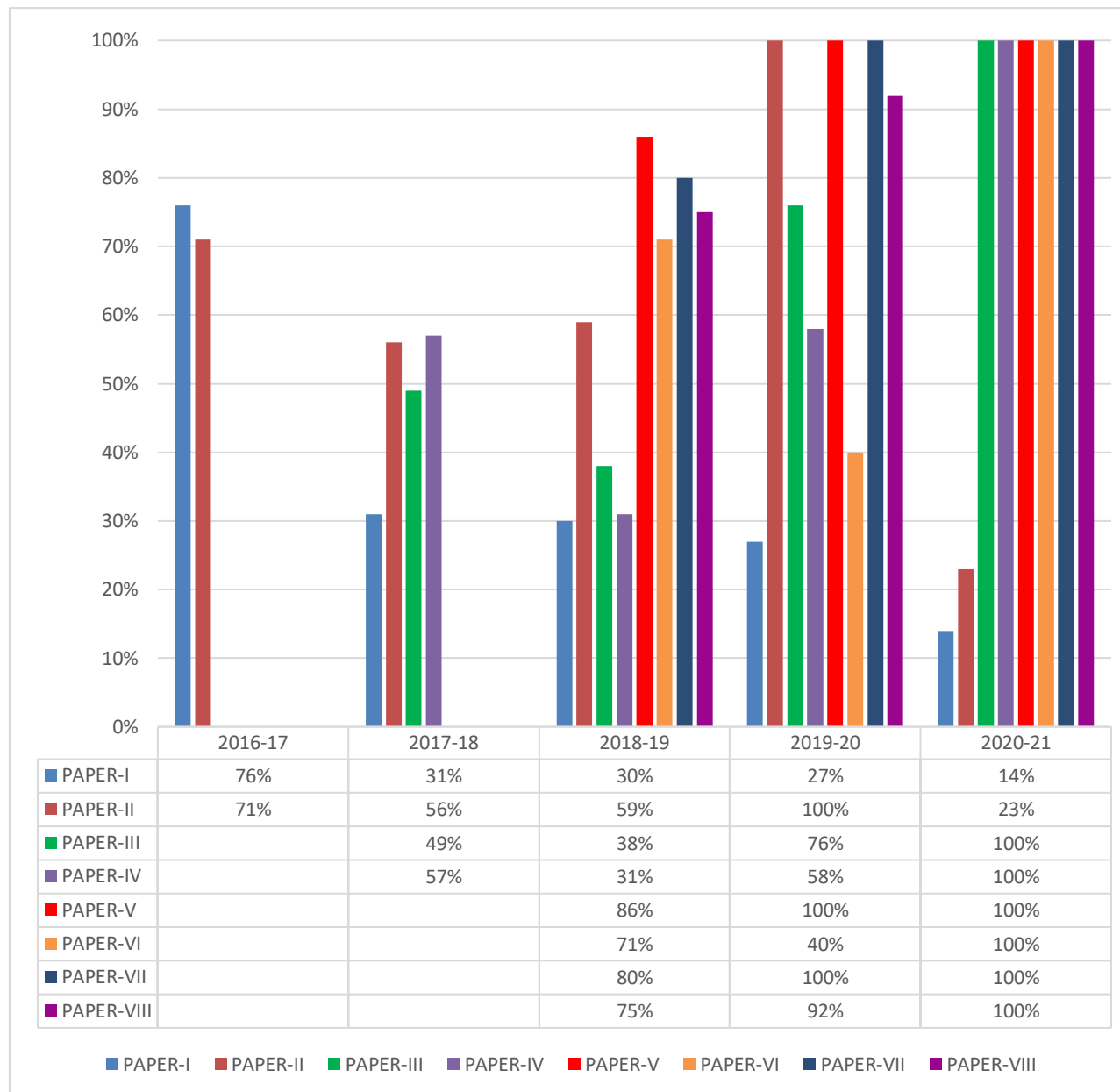
### **I. SEMESTER WISE RESULT ANALYSIS:**

<b>ACADEMIC YEAR</b>	<b>SEM</b>	<b>PAPER</b>	<b>APPEARED</b>	<b>PASS</b>	<b>PASS%</b>
2016-17	SEM I	PAPER-I	21	16	76%
	SEM II	PAPER-II	21	15	71%
2017-18	SEM I	PAPER-I	16	05	31%
	SEM II	PAPER-II	16	09	56%
	SEM III	PAPER-III	21	09	49%
	SEM IV	PAPER-IV	21	12	57%
2018-19	SEM I	PAPER-I	33	10	30%
	SEM II	PAPER-II	32	19	59%
	SEM III	PAPER-III	16	06	38%
	SEM IV	PAPER-IV	16	05	31%
	SEM-V	PAPER-V	21	18	86%
		PAPER-VI	21	15	71%
	SEM-VI	PAPER-VII	20	16	80%
PAPER-VIII		20	15	75%	
2019-20	SEM I	PAPER-I	33	09	27%
	SEM II	PAPER-II	31	31	100%
	SEM III	PAPER-III	29	22	76%
	SEM IV	PAPER-IV	26	15	58%
	SEM-V	PAPER-V	15	15	100%
		PAPER-VI	15	06	40%
	SEM-VI	PAPER-VII	13	13	100%
PAPER-VIII		12	11	92%	
2020-21	SEM I	PAPER-I	35	05	14%
	SEM II	PAPER-II	35	08	23%
	SEM III	PAPER-III	29	29	100%
	SEM IV	PAPER-IV	28	28	100%
	SEM-V	PAPER-V	26	26	100%
		PAPER-VI	26	26	100%
	SEM-VI	PAPER-VII	26	26	100%
PAPER-VIII		26	26	100%	

## SEMESTER WISE RESULT ANALYSIS:



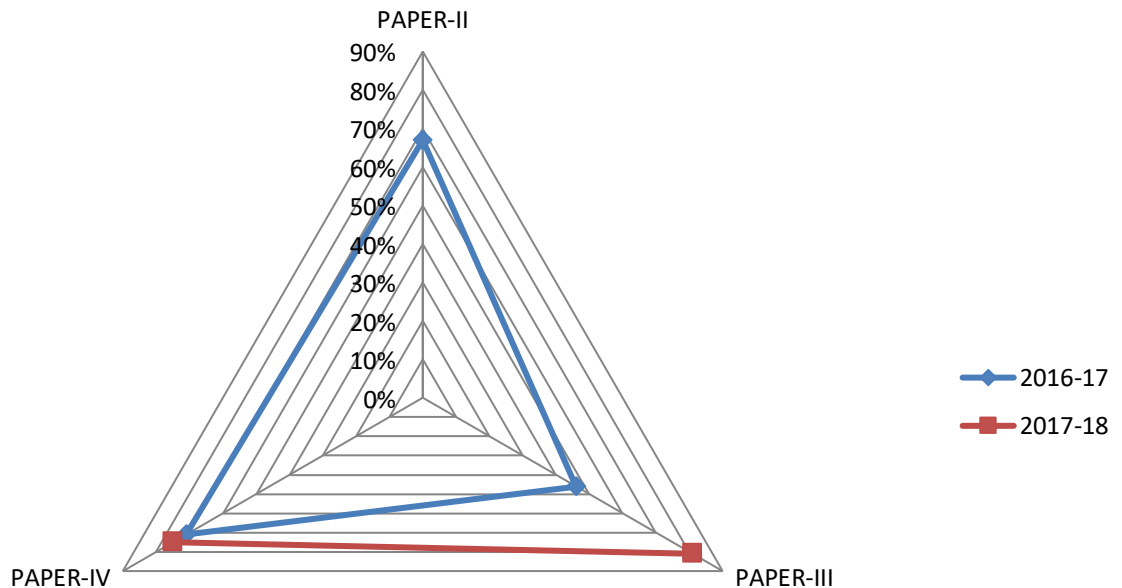
## SEMESTER WISE RESULT ANALYSIS :BAR DIAGRAM



## II. YEAR WISE RESULT ANALYSIS :

ACADEMIC YEAR	YEAR	PAPER	APPEARED	PASS	PASS %
2016-17	II YEAR	PAPER-II	21	14	67%
	III YEAR	PAPER-III	24	11	46%
		PAPER-IV	24	17	71%
2017-18	III YEAR	PAPER-III	16	13	81%
		PAPER-IV	16	12	75%

## YEARWISE RESULT ANALYSIS PICTORIAL:





## **COCURRICULAR AND EXTRACURRICULAR ACTIVITIES**

Department of Mathematics is encouraging students to participate in co-curricular activities viz., quiz, elocution, ,essay writing, assignments, student seminars, group discussions, experiential learning , study projects, Science day, and National Mathematics day celebrations , extension lectures.

### **QUIZ:**

Department of Mathematics is organizing quizzes for students. The offline quiz is for few participants only. Quiz competitions also creates curiosity in students.

### **Objectives:**

- It increases knowledge
- It creates competitive attitude in students.
- It increases listening skills.
- It increases thinking ability.
- .It increases response speed.

S.No	Academic Year	No of Quizzes	Number of Students participated
1	2020-21	2(1 offline+1 online)	15 + 252 = 267
2	2019-20	2	30
3	2018-19	2	31
4	2017-18	2	30
5	2016-17	3	45

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# E-QUIZ - NATIONAL MATHEMATICS DAY

JVR GOVT. DEGREE COLLEGE, SATHUPALLY

**\*Required**

Email address \*

Your email address

Next

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Google Forms

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## E-QUIZ - NATIONAL MATHEMATICS DAY

Questions Responses **252** Total points: 40

### 252 responses

Accepting responses

Summary Question Individual

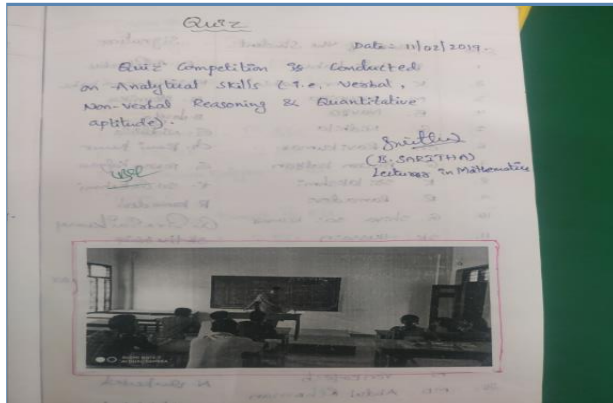
### Insights

<b>Average</b> 24.43 / 40 points	<b>Median</b> 24 / 40 points	<b>Range</b> 2 - 38 points
-------------------------------------	---------------------------------	-------------------------------

**Total points distribution**

Points scored	# of respondents
2	1
5	2
10	5
12	8
14	12
16	18
18	22
20	25
22	32
24	28
26	25
28	18
30	22
32	25
34	18
36	5
38	2

## QUIZ(OFFLINE)



Topic: Analytical Skills  
Date: 11.02.2019



Topic: Arithmetic & Reasoning  
Date: 21.12.2021





## Essay writing competitions :



## STUDENT SEMINARS:

Department of Mathematics is organizing student seminars. In these seminars students are allowed to deliver a topic chosen by them selves. They have to work on the topic thoroughly, this enables them to increase their content knowledge on the topic.

### Objectives:

- Builds up self-confidence in students.
- Increases public speaking skills
- Decreases inferiority complex

S.No.	Academic Year	Number of seminars conducted	Number of Students participated
1	2020-21	05	05
2	2019-20	05	05
3	2018-19	07	07
4	2017-18	00	00
5	2016-17	08	08

### List of the students participated in seminars: 2016-17 to 2020-21

S.NO	NAME OF THE STUDENT	NAME OF THE TOPIC	GROUP	DATE	ACADEMIC YEAR
1	Md. Riyazuddin	Lagranges Theorem	II BSc[MPC]	26.07.2016	2016-17
2	B. Vijay kumar	Curvature	I BSc[MPC]	30.06.2016	2016-17
3	Madar Basha	Cayley Hamilton Theorem	III BSc[MPC]	05.08.2016	2016-17
4	Upendar	Bisection Method	III BSc[MPC]	10.08.2016	2016-17
5	Sk. Dadesha	Exact differential equations	I BSc[MPCs]	03.01.2017	2016-17
6	Manga	Cauchy Mean Value Theorem	II BSc[MPC]	04.01.2017	2016-17
7	B. Srinu	Green's Theorem	III BSc[MPCs]	09.01.2017	2016-17
8	K. Ravi Teja	Picards Method	III BSc[MCCs]	19.01.2017	2016-17
9	G.Siva Saikumar	Convergent Sequence	II BSc[MCCs]	30.07.2018	2018-19
10	Sk. Nissar Maidi	Partial Differential Equation	I BSC	13.08.2018	2018-19
11	T.Nagamani	Characteristic Equations	III BSc[MPCs]	23.10.2018	2018-19
12	B. Vijay Kumar	Cylinder	III BSc[MPC]	20.09.2018	2018-19
13	Sk. Ijaz	Differential Equations	I BSC	19.01.2019	2018-19
14	K. Srilaxmi	Groups	II BSc[MPCs]	07.02.2019	2018-19
15	M. Ramya	Interpollation	III BSc[MPCs]	04.03.2019	2018-19
16	B. Mounika	Eigen values & Eigen Vectors	III BSc[MPCs]	23.10.2019	2019-20
17	R. Ramadevi	Cylinder	III BSc[MPCs]	12.09.2019	2019-20
18	B. Sairam	Centre of Curvature	I BSC	28.08.2019	2019-20
19	S. Rajesh	Riemann Integrals	II BSc[MPC]	01.11.2019	2019-20
20	G. Pavan Kalyan	Line Integral	III BSc[MPCs]	01.03.2020	2019-20
21	Md. Rehaman	Normal Subgroups	II BSc[MPC]	24.03.2021	2020-21
22	S. Venkateswara Rao	Exact differential equations	I BSc[MPC]	24.03.2021	2020-21
23	P. Sagarika	Homogeneous Functions	I BSc[MPC]	25.03.2021	2020-21
24	K. Sanjay	Maxima and Minima	I BSc[MPC]	22.03.2021	2020-21
25	B.Bhojya Nayak	Monotonic Sequence	II BSc[MPC]	23.03.2021	2020-21





DATE:22.03.2021  
 NAME:K. SANJAY  
 GROUP:I BSC  
 SEMESTER:I  
 TOPIC:  
 MAXIMA&MINIMA



DATE:23.03.2021  
 NAME:B.BHOJYA  
 GROUP: II BSC  
 SEMESTER: III  
 TOPIC: MONOTONIC  
 SEQUENCE



DATE: 25.03.2021  
 NAME:P.SAGARIKA  
 GROUP:I BSC  
 SEMESTER: I  
 TOPIC:  
 HOMOGENEOUS  
 FUNCTIONS

### Student Seminars - IV

Date : 20/09/2018

Topic : Cylinder

Presenter : B. Vijay Kumar

Class : III B.Sc (MPC)

Paper : VA (Solid Geometry)

HT.No : 032174102



Date : 30/07/2018

Topic : Convergent Sequence

Presenter : G. Siva Sai Kumar

Class : II B.Sc (MCCS)

Paper : III

HT No : 032184401



Date : 23/10/2019.

Topic : Eigen values & Eigen vectors

Presenter : B. Mounika.

Class : III B.Sc (MPCs)

Paper : V

HT.No : 032184101



Date : 19/01/2019.

Topic : Differential Equation

Presenter : SK. Sjaz

Class : I B.Sc

Paper : II

HT.No : 032194207





## ELOCUTION:

Department of Mathematics is encouraging students to participate in elocutions. Faculty gives certain topics and students speak on those topics. This enables students to enhance their communication skills when they speak publicly.

### Objectives:

- Builds up self-confidence in students.
- Creates social awareness
- Increases public speaking skills
- Decreases inferiority complex

S.NO.	Year	No.ofElocution conducted	No. of students participated
1	2021-22	01	05

Name of the Topic: “Life history of Srinivasa Ramanujan”DATE: 18.04.2022



### PARTICIPATED LIST:

S.NO	NAME OF THE STUDENT	GROUP	POSITION	WINNER
1.	SK. AKHIL	I BSC	II	II PRIZE
2.	P. SAGARIKA	II BSC	I	I PRIZE
3.	K. SANJAY	II BSC	III	
4.	V. KEERTHIPRIYA	I BSC	V	
5.	S. VENKATESH	III BSC	IV	

### JUDGES:

1. Dr. VINOD KUMAR Asst. prof of Economics
2. D. BANGARI Asst . prof of English

## GROUP DISCUSSIONS:

Department of Mathematics is encouraging students to participate in debating. Faculty forms groups instantly in an unbiased manner and gives certain topics which are trending or burning issues in those days.

### Objectives:

- Increases critical thinking
- Increases team spirit
- Increases leadership skills
- Increases analytical skills

**Topic: Cyclic groups**



**Number of teams participated: 03**

**Total Number of Students participated: 09**

**Date: 24.05.2022**

## STUDENT WEBINAR

NAME OF THE STUDENT: Md. A. Rahman

SEMESTER:IV

H. T. NUMBER:032194107

TOPIC:Fundamental Theorem of Homomorphism

DATE:11.05.2020

DATE: 11.05.2020

## STUDENT WEBINAR

DEPARTMENT OF MATHEMATICS

TOPIC: FUNDAMENTAL THEOREM OF HOMOMORPHISM

PRESENTED BY :  
MD.A.RAHMAN  
II BSC (MPC)  
HT NO:032194107

### CONTENTS:

- BASIC DEFINATIONS:
- HOMOMORPHISM
- ISOMORPHISM
- KERNEL, RING OF HOMOMORPHISM &
- FUNDAMENTAL THEOREM OF HOMOMORPHISM.

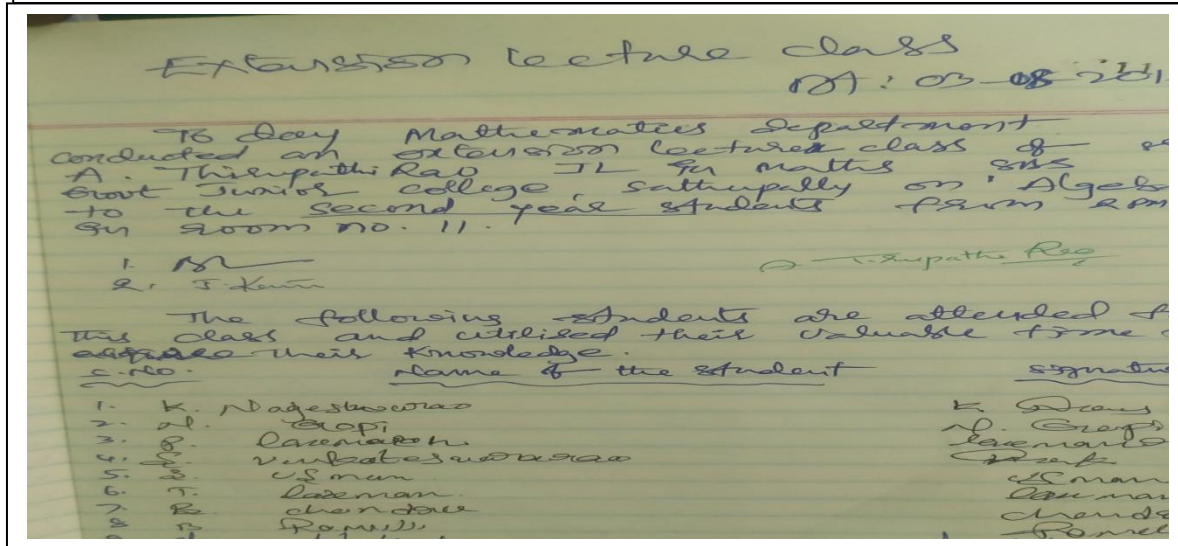
**EXTENSION LECTURE:**

Department invites Resource persons from different areas. It creates awareness in emerging latest technologies .Students get familiarized with various career paths in the subject area.

**DETAILS OF EXTENSION LECTURE:**

S.NO	DATE	TOPIC	PAPER	PRESENTED BY	WORKING PLACE	NO. OF STUDENTS ATTENDED
1.	03.08.2016	ALGEBRA	IV	A. THIRUPATHI RAO LECTURER IN MATHEMATICS	SBS GOVT. JUNIOR COLLEGE - SATHUPALL	15
2.	17.08.2016	INNER PRODUCT SPACE	V	B. THIRUPATHI RAO LECTURER IN MATHEMATICS	SBS GOVT. JUNIOR COLLEGE - SATHUPALL	16
3.	12.11.2018	UNIFORM CONVERGENCE	III	B.VENKATESWARA RAO ASST.PROF OF MATHEMATICS	SR&BGNR GOVT.DEGREE COLLEGE- KHAMMAM	28
4.	25.02.2020	GROUPS	IV	B.VENKATESWARA RAO ASST.PROF OF MATHEMATICS	SR&BGNR GOVT.DEGREE COLLEGE - KHAMMAM	44
5.	29.04.2022	THE CONICOID	VI	B.VENKATESWARA RAO ASST.PROF OF MATHEMATICS	SR&BGNR GOVT.DEGREE COLLEGE- KHAMMAM	20

1. TOPIC: ALGEBRA  
 PAPER: IV  
 RESOURCE PERSON: A. THIRUPATI RAO  
 DATE: 03.08.2016

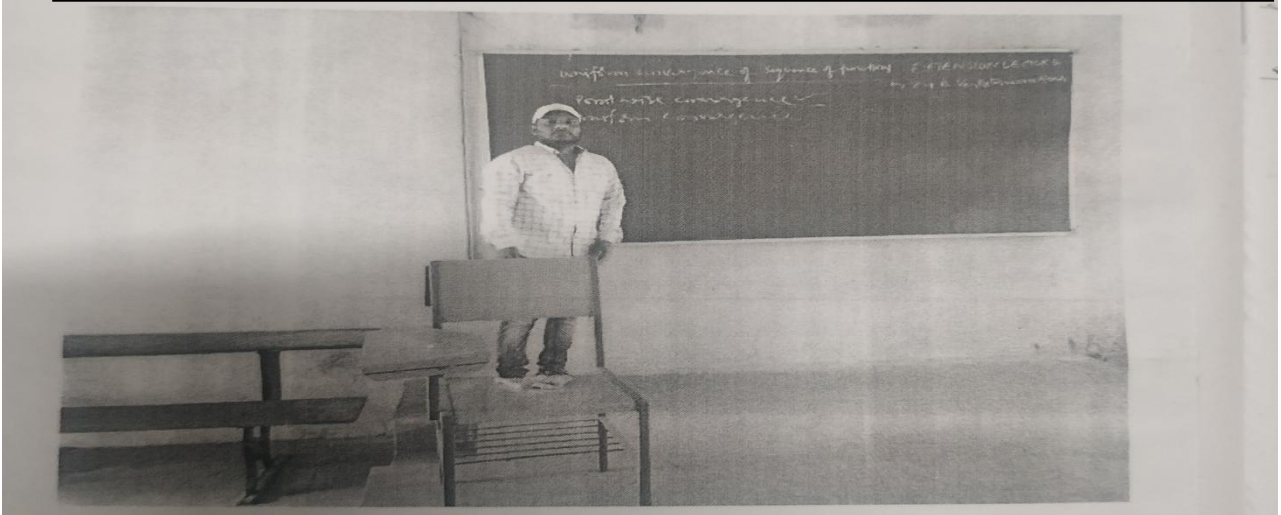


2. TOPIC: INNER PRODUCT SPACE  
 PAPER: V  
 RESOURCE PERSON: A. THIRUPATI RAO  
 DATE: 17.08.2016





3. TOPIC: UNIFORM CONVERGENCE  
 PAPER: III  
 RESOURCE PERSON: B. VENKATESWARA RAO  
 DATE: 12.11.2018



4. TOPIC: GROUPS  
 PAPER: IV  
 RESOURCE PERSON: B. VENKATESWARA RAO  
 DATE: 25.02.2020



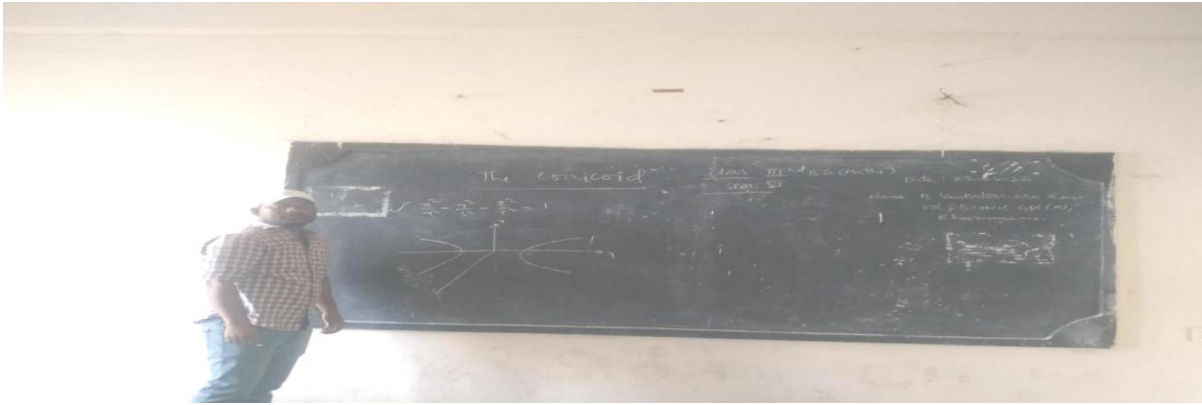
5.

TOPIC: THE CONICOID

PAPER: VI

RESOURCE PERSON: B. VENKATESWARA RAO

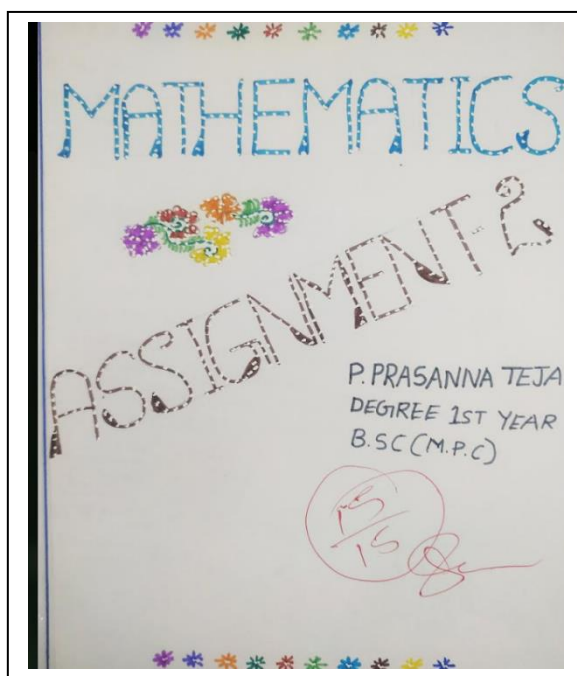
DATE: 29.04.2022



## ASSIGNMENTS:

Faculty give assignments to students mostly on subject topics and sometimes on current issues related to Mathematical science. These assignments are aimed at improving the skills of reading, writing and problem-solving. However, marks obtained in these assignments are not added in the final grading of the students.

S.NO.	SEMESTER	NO. OF ASSIGNMENTS CONDUCTED
1	SEM-I	02
2	SEM-II	02
3	SEM-III	02
4	SEM-IV	02
5	SEM-V	02
6	SEM-VI	02



JVR GOVT DEGREE COLLEGE  
SATHUPALLY

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DEPARTMENT OF MATHEMATICS

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ASSIGNMENT

---

ON

\* partial Differentiation

---

2020-2021

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BY

T. Srinlekha  
I<sup>st</sup> BSc (m.p.c)



## NATIONAL MATHEMATICS DAY CELEBRATIONS:

### I. National Mathematics day: 2021-22

2021-22 ①


**JVR GOVERNMENT COLLEGE, SATHUPALLY,  
KHAMMAM DT. TS**


**DEPARTMENT OF MATHEMATICS  
NATIONAL MATHEMATICS DAY**  
Academic Year: 2021-22

Department of mathematics celebrated "National Mathematics Day" on 22.12.2021 in the College Seminar Hall.

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	22.12.2021
5	Name of the Event Co-ordinator	B. Saritha
6	Course/Class/Group Participated	All Science Students of JVR College
7	No. of the Students Participated	106
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To know importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students are known about the contribution of SrinivasaRamanujan.
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No Yes

  
 Signature of the Coordinator  
 Head  
 Department of Mathematics  
 J.V.R. GOVT. COLLEGE  
 SATHUPALLY, KHAMMAM DT.

  
 Signature of the Principal  
 J.V.R. GOVT. COLLEGE  
 SATHUPALLY, KHAMMAM DT.


**JVR GOVERNMENT COLLEGE, SATHUPALLY,  
KHAMMAM DT. TS**


**DEPARTMENT OF MATHEMATICS  
PHOTO GALLERY**





  
 Head  
 Department of Mathematics  
 J.V.R. GOVT. COLLEGE  
 SATHUPALLY, KHAMMAM Dt.

  
 PRINCIPAL  
 J.V.R. GOVT. COLLEGE  
 SATHUPALLY-KHAM DT

## II. National Mathematics day :2020-21

2020-21.




**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
NATIONAL MATHEMATICS DAY**


Academic Year: 2020-21

Department of mathematics celebrated "National Mathematics Day" on 22.12.2020 in the College Room no:54

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	22.12.2020
5	Name of the Event Co-coordinator	B.Saritha
6	Course/Class/Group Participated	All Science Students of JVR College
7	No. of the Students Participated	36
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To raise awareness among people about the importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students known about contribution of Srinivasa Ramanujan.
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No Yes




Signature of the Co-ordinator  
**Head**  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.





Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT.

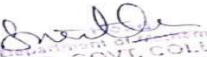
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**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
PHOTO GALLERY**



Signature of the Co-ordinator  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.




Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT.

### III. National Mathematics day :2019-20

KHAMMAM DT. TS

2019-20




**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**


**DEPARTMENT OF MATHEMATICS**  
**NATIONAL MATHEMATICS DAY**  
Academic Year: 2019-20

Department of mathematics celebrated "National Mathematics Day" on 21.12.2019 in the College Seminar Hall.

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	21.12.2019
5	Name of the Event Co-coordinator	B.Saritha
6	Course/Class/Group Participated	All Science Students of JVR College
7	No. of the Students Participated	46
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To raise awareness among people about the importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students known about contribution of Srinivasa Ramanujan.
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No Yes




Signature of the Co-ordinator  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam DL





Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT


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**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS**  
**PHOTO GALLERY**



Head  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.



**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT



**iv. National Mathematics day : 2018-19**

2018 - 19

**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
NATIONAL MATHEMATICS DAY**

Academic Year: 2018-19  
Department of mathematics celebrated "National Mathematics Day" on 22.12.2018 in the College Seminar Hall.

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	22.12.2018
5	Name of the Event Co-coordinator	B. Saritha
6	Course/Class/Group Participated	All Science Students of JVR College
7	No. of the Students Participated	38
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To raise awareness among people about the importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students known about contribution of Srinivasa Ramanujan
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No Yes

Signature of the Coordinator  
**Head**  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.

Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT

**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
PHOTO GALLERY**

Signature of the Coordinator  
**Head**  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.

Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT

**v. National Mathematics day :2017-18**

2017 - 18



**J.V.R. GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
NATIONAL MATHEMATICS DAY**


Academic Year: 2017-18

Department of mathematics celebrated "National Mathematics Day" on 22.12.2017 in the College Seminar Hall.

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	22.12.2017
5	Name of the Event Co-coordinator	B. Venkateswara Rao
6	Course/Class/Group Participated	All Science Students of JVR College
7	No .of the Students Participated	34
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To raise awareness among people about the importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students known about contribution of Srinivasa Ramanajun
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No




Signature of the Coordinator  
**Head**  
Department of Mathematics  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, Khammam Dt.



Signature of the Principal  
Principal  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT.

## vi. National Mathematics day : 2016-17

2016-17




**JVR GOVERNMENT COLLEGE. SATHUPALLY,  
KHAMMAM DT. TS**

**DEPARTMENT OF MATHEMATICS  
NATIONAL MATHEMATICS DAY**


Academic Year: 2016-17

Department of mathematics celebrated "National Mathematics Day" on 22.12.2016 in the College Seminar Hall.

Sl. No	Particulars	Details of the Event
1	Name of the Department	Department of Mathematics
2	Name of the Event Organized	"National Mathematics Day"
3	Title of the Event	"National Mathematics Day"
4	Date of the Event Organized	22.12.2016
5	Name of the Event Co-coordinator	B. Venkateswara Rao
6	Course/Class/Group Participated	All Science Students of JVR College
7	No. of the Students Participated	36
8	Name of the Resource Person	<b>Principal and staff members.</b>
9	Objectives of the Event	To raise awareness among people about the importance of Mathematics for the development of humanity.
10	Outcome of the Event	Students known about contribution of Srinivasa Ramanajun
11	News Published in News Papers (if YES) Attach the News Paper Clippings. Photo Gallery. (Use Separate Page for Photos)	No



Signature of the Coordinator  
**Head**  
Department of Mathematics  
**J.V.R. GOVT. COLLEGE**  
SATHUPALLY, Khammam Dt.



Signature of the Principal  
**PRINCIPAL**  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT



## NATIONAL SCIENCE DAY :



## HARITHAHARAM PROGRAMME:



## FACULTY LEARNING

Faculty undergoes faculty development programs to upgrade their skills. Faculty updates their knowledge through online platforms (SWAYAM, NPTEL,..).

### 1. NAME OF THE LECTURER : B. SARITHA



### 2. NAME OF THE FACULTY: P. SRINIVAS







### CRITERION III

## RESEARCH, INNOVATIONS AND EXTENSION

To develop research attitude in the students, Department is guiding students to do projects. Students are motivated to do research in the form of quality research work. A team of five or six students come together and identify a problem in a particular area of interest and they will do project on that problem. Advanced learners are encouraged to take up this task. From the academic year 2021-22, University has incorporated projects in syllabus. As per the instruction of KU-Warangal, a student can choose optional paper or a project in any one of the optional subjects. Project works can be allotted to group of students and there can be a maximum of 4 students in a group.

#### List of Student study projects:

S.No.	Name of the Study Project	No.of students participated	Supervisor	Academic year
1.	Mathematics in Daily Life	04	B. Venkateswara Rao	2016-17
2.	Iterative Methods to solve system of equations	04	B. Venkateswara Rao	2016-17
3.	Applications of Differential Equations to Physics	01	J. Kavitha	2017-18
4.	Solutions of Algebraic equations	04	B. Venkateswara Rao	2017-18
5.	Magic with Numbers	04	B. Saritha	2018-19
6.	Mathematicians	04	B. Saritha	2018-19
7.	Basic Mathematics	04	B. Saritha	2019-20
8.	Radius of Curvature	04	B. Saritha	2019-20
9.	A study on Mathematical competencies in Non -Maths students at JVR govt. degree college	05	B. Saritha	2021-22
10.	Cyclic Groups	04	P. Srinivas	2021-22

**JVR GOVERNMENT COLLEGE  
SATHUPALLY, KHAMMAM DT**

Affiliated to KAKATIYA UNIVERSITY, WARANGAL

**STUDENT STUDY PROJECT**

**CERTIFICATE**

This is certify that the following students submitted the  
ct work on Mathematics in daily life Under the guidance of  
Venkateswara Rao.

NAME OF THE STUDENT	HTNO	GROUP
S. Vijay Kumar	032174102	I MPC
T. Satish	032174004	I MPC
B. Prameela	032174201	I MPCs
M. Ramya	032174109	I MPC

  
Signature of the Lecturer

  
Signature of the Principal  
PRINCIPAL  
J.V.R. GOVT. COLLEGE  
SATHUPALLY, KMM DT

**JVR GOVERNMENT COLLEGE  
SATHUPALLY, KHAMMAM DT**

Affiliated to KAKATIYA UNIVERSITY, WARANGAL

**STUDENT STUDY PROJECT**

ON

TOPIC NAME Mathematics in Daily life  
2016 - 17

NAME OF THE STUDENT	HALLTICKET NUMBER	GROUP
B. Vijay Kumar	032174102	I-M.P.C
T. Satish	032174004	I-M.P.Cs
B. Prameela	032174201	I MPCs
M. Ramya	032174109	I MPC

SUBMITTED TO THE DEPARTMENT OF MATHEMATICS as  
PARTIAL FULFILL MENT OF THE I SEMESTER

DEPARTMENT OF MATHEMATICS  
J.V.R GOVERNMENT COLLEGE  
SATHUPALLY, KHAMMAM DT, TS-507303

**CRITERION - IV**  
**INFRASTRUCTURE AND LEARNING RESOURCES**

**Infrastructure:**

The department is established with one staff room along with Humanities Department with sufficient equipment and physical facilities for Teaching and learning viz., classrooms , Computing equipment and Internet facility for Staff and students.

**Following equipment are available in the department:**

S. No.	Name of the item	Quantity
1	Staff room	1
2	Computer	1
3	Almirahs	2
4	Tables	2

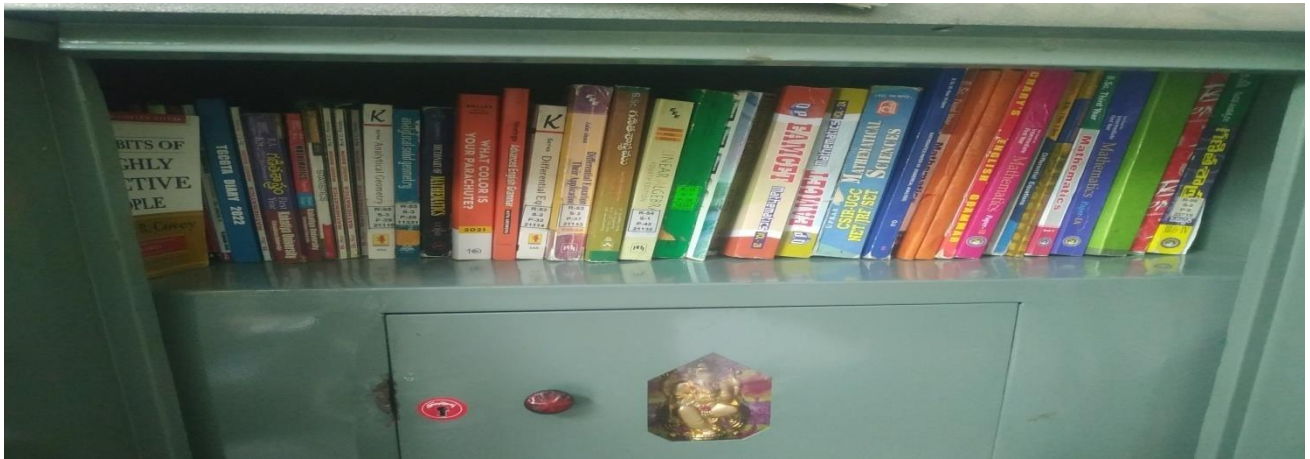
**DEPARTMENTAL LIBRARY:**

- Central library is being used by the students to take the books. In addition to that, we have Departmental Library through which guided text book reading is made possible.
- Departmental library has 40 text books and reference books.
- The department has subscribed for The Journal “The Mathematics Student”
- Our college is registered in N-LIST portal through which students can access journals also.
- Free study material is supplied to the students
- Free internet facility available for students and Staff

**DEPARTMENT**



**DEPARTMENTAL LIBRARY**



**CENTRAL LIBRARY**





## CRITERION V

### STUDENT SUPPORT AND PROGRESSION

Faculty sometimes financially supports the poor students who approach the faculty. Department conducts Set Your Goal, Career Guidance and Counselling sessions. Faculty provides study material to students. Department of Mathematics is encouraging students to pursue higher education in Mathematics. To make this into reality department is organizing PG entrance coaching classes for enrolled student. Department conduct remedial classes to failed students. Department support the students in celebrating freshers and farewell parties which increases the communication, leadership and personality development skills of students.

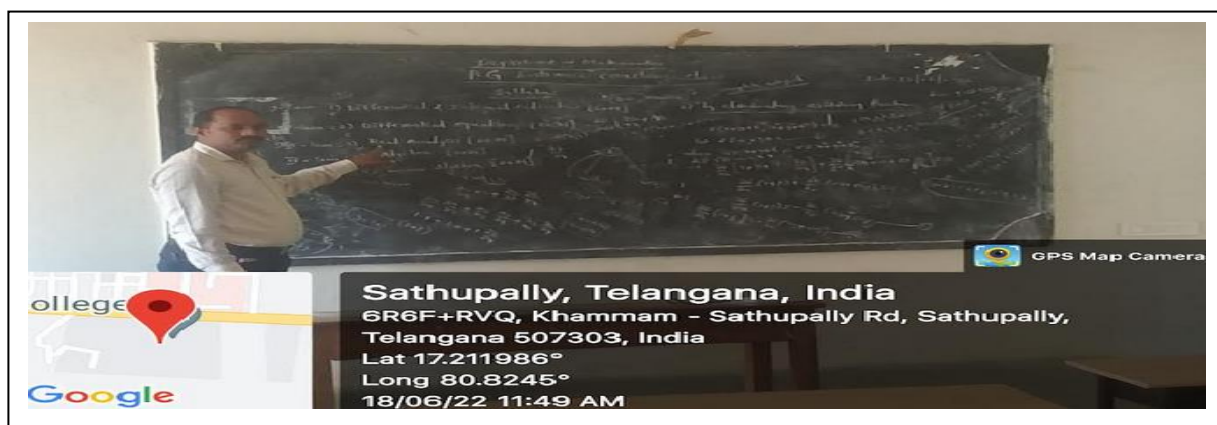
#### 1. Financially support to the poor students:

The Head of the Department paid the PG[ Central university] entrance examination fee for two students Rs.625 for each in the academic year 2021-22.

Name of the Students: 1. S. Venkatesh

2. B. Sairam

#### 2. PG[MATHEMATICS] COACHING FOR THE ACADEMIC YEAR 2021-22 :





### 3. LUNCH AND STUDY:

#### A) LUNCH



#### B) STUDY HOUR



## CRITERION VI

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### DEPARTMENTAL MEETINGS:

At the Department level, Department faculty members meet under the chairmanship of Principal periodically on convenient dates to discuss academic matters like distribution of the syllabus among the faculty, Course Outcomes, review of coverage of syllabus, Result Analysis and, National Mathematics day , National science day celebrations, ICT knowledge sharing .

#### STAFF COUNCIL

At the college level, staff council is the apex body of the college in which important decisions related to academic or non-academic matters are made and executed. In charge of every department is a member of this body. The Department of Maths staff members are actively participating in the meetings.

#### COORDINATOR/MEMBER OF VARIOUS COMMITTEES

Every faculty member is member of at least one committee. He/she does fulfil the work assigned by the coordinator of the committee.

Following table depicts responsibilities taken up by Department faculty members for the academic Year 2021-22.

S.NO	YEAR	Name of the faculty	Convener in the Committee	Member for the Committee
1	2016-17	B.VENKATESWARA RAO	Discipline	Time-table
				Remedial coaching
				Audio-Visual education
				Science Association
			Gymnasium	Grievance Redressal cell
				Swach Bharath
				Physical education
				Youth Redcross
NCC				



S.NO	YEAR	Name of the faculty	Convener in the Committee	Member for the Committee
	2016-17	I. KAVITHA	Magazine	House Exams
				MANA TV
				Career Guidance & Placement
				Grievance Redressal Cell
			College Website	
			Gold Medals	Science Association
				Audio-Visual education
				Student Counseling
Equal Opportunity Centre				
2.	2017-18	B.VENKATESWARA RAO	Discipline	Anti Ragging
		J. KAVITHA		Magazine
		J. KAVITHA	Magazine	College Website
3.	2018-19	B.SARITHA	Hobby Day & Skill Development	Bhagya Health & Hygiene
				Anti Ragging Cell
				Grievance & Redressal Cell
				Women Empowerment cell & ICC
				Science Association
4.	2019-20	B.SARITHA	Hobby Day & Skill Development	Hobby Day & Skill Development
				Bhagya Health & Hygiene
				Anti Ragging Cell
				Grievance & Redressal Cell
				Women Empowerment cell & ICC
5.	2020-21	B.SARITHA	Hobby Day & Skill Development	Anti Ragging Cell
				Grievance & Redressal Cell
				Women Empowerment cell & ICC
				Science Association

## MENTOR MENTEE SYSTEM:

In each academic year, Principal will allot mentor for each group. Mentor conducts election of Class Captain (CC), Class Representatives (CR-I, CR-II), Executive Council (EC-I, EC-II). Mentor takes responsibility of whole group. Mentor coordinate the whole class in different activities through CRs or CCs. Mentor will guide the students in academic aspects like Examinations, Fee payment, Feedback on marks obtained, maintaining decorum and advise them on issues on Scholarships. Mentors are mentoring students through Career Guidance and Counselling.

Mentor-Mentee details for the academic years: 2016-17 to 2021-22

S.No	Name	Designation	Academic Year	Group	Roll Numbers From - To	Number of Students
1	B. Venkateswara Rao	Assist.Prof	2016-17	MPC-III	032154101 - 4108	07
2	J.Kavitha	Assist.Prof	2016-17	MPC-III	0321154201-4103	13
3	B. Venkateswara Rao	Assist.Prof	2017-18	MPC-III	032164204-4301 032164001-4005	15
4	J.Kavitha	Assist.Prof	2017-18	MPC-III	032164102-4203	15
5	B.Saritha	Lecturer	2018-19	MPC - II & III	032184101-4111 032184001-4007 032174001-4006	24
6	B.Saritha	Lecturer	2019-20	MPC - II & III	032184101-4111 032194001-4011	36
7	B.Saritha	Lecturer	2020-21	I BSC(M)	0322141014-4115 032214201-4221 032214001-4006	42
8.	P. Srinivas	Asst. Prof	2021-22	I BSC(M)	032224001-4007 032224201 -4217 032224101 -4121	45

**ACADEMIC YEAR : 2021-22****The Mentor given the instruction about the examination system**

## CRITERION VII

### INSTITUTIONAL VALUES AND BEST PRACTICES

#### USE OF ICT TOOLS IN TEACHING

Department faculty has left no stone unturned in usage of ICT in teaching. The member of the department is trained in ICT tools. The crisis of COVID-19 has opened up new trends in teaching and learning process.

**ONLINE CLASSES:** During Carona pandemic lockdown situation teaching and learning are continued through online classes using ZOOM, GOOGLE MEET platforms.

#### Details of ICT enabled Education

##### I. Abstract of recorded video lessons on YouTube

S. No.	Name of the Faculty	No. of videos
1	P.Srinivas	25
2	B.Saritha	20

**Link for youtube videos lessons: pending**

##### II. Abstract of PPT presentations

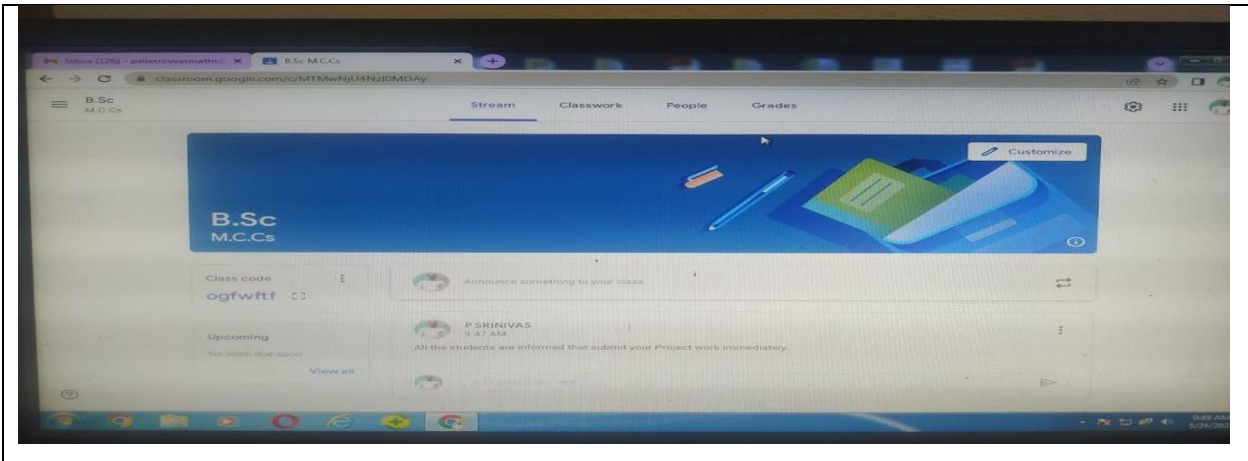
S. No.	Name of the Faculty	No. of PPTS	Total No of Slides
1	P.Srinivas	38	125

##### III. Abstract of Google Classrooms

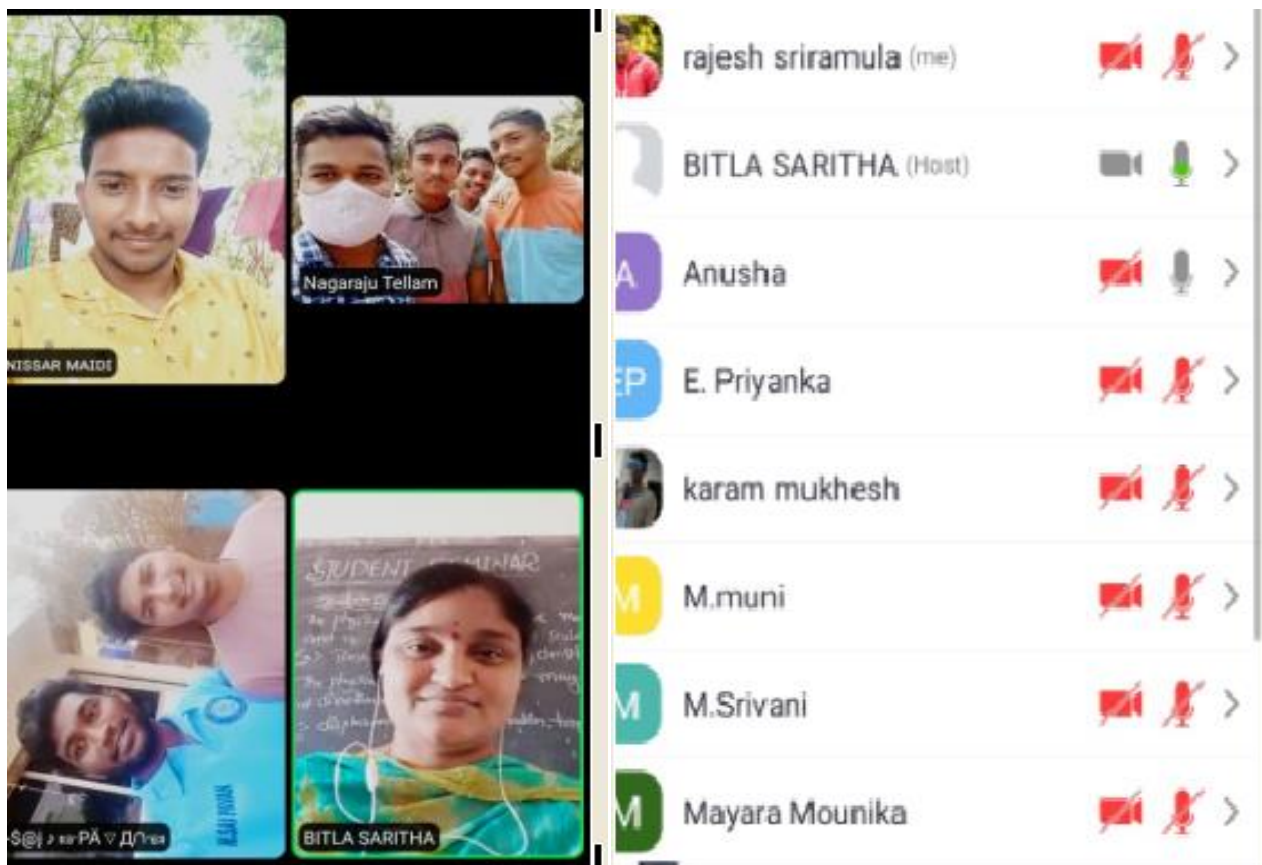
S. No.	Name of the Faculty	No. of Google Classrooms
1	P.Srinivas	03

## GOOGLE CLASSROOM:

Google classroom is an important app provided freely by google company. Google classroom is helpful for teacher to connect with his/her students through online. It enables teachers to post study materials. Assignments and quizzes can be conducted through this app. Following image share screen shots of google classroom of P.Srinivas, Assistant Professor of Mathematics .



## ZOOM CLASSES:

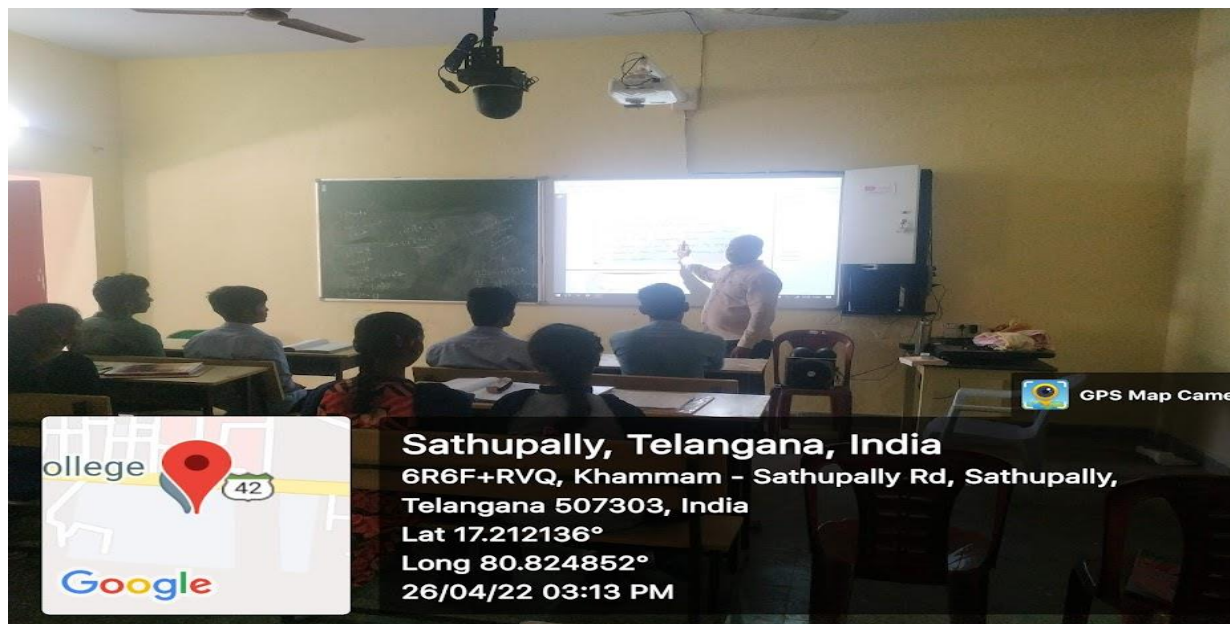




## POWERPOINT PRESENTATIONS:

Our faculty is preparing PPTs with good images. Some classrooms in our college is equipped with ICT devices. The following image is screen shots of few PPTs.

### PPT on Differential Equations for II Semester Students:



### PPT ON LINEAR ALGEBRA FOR V SEMESTER STUDENTS

## VIDEO LECTURES & YOUTUBE CHANNELS:

The faculty member of the department has created and uploaded videos of lectures on YouTube channel. These video lecture links are available in department website for access to students. .

The screenshot displays a YouTube Studio interface for the channel 'Vas Maths UG classes'. The main content area shows a video titled 'INNER PRODUCT, LENGTH OF VECTOR AND UNIT VECTOR AND DISTANCE BETWEEN TWO VECTORS' with a duration of 50:28. The video thumbnail features a slide with the following text:

**ORTHOGONALITY AND LEAST SQUARES**  
**INNER PRODUCT**  
**Definition:** Let  $\vec{u}, \vec{v}$  be vectors in  $\mathbb{R}^n$  regarded as  $n \times 1$  matrices. The number  $\vec{u}^T \vec{v}$  is called the Inner Product of  $\vec{u}$  and  $\vec{v}$ . It is written as  $\vec{u} \cdot \vec{v}$  and also referred as dot product.  
 $\vec{u} \cdot \vec{v} = \vec{u}^T \vec{v}$

If  $\vec{u} = \begin{bmatrix} u_1 \\ u_2 \\ \vdots \\ u_n \end{bmatrix}$  and  $\vec{v} = \begin{bmatrix} v_1 \\ v_2 \\ \vdots \\ v_n \end{bmatrix} \in \mathbb{R}^n$ , then

$$\vec{u} \cdot \vec{v} = \vec{u}^T \vec{v} = [u_1, u_2, \dots, u_n] \begin{bmatrix} v_1 \\ v_2 \\ \vdots \\ v_n \end{bmatrix}$$

$$\vec{u} \cdot \vec{v} = u_1 v_1 + u_2 v_2 + \dots + u_n v_n$$

The video is listed in the 'Channel content' section with the following details:

Video	Visibility	Restrictions	Date	Views	Comments	Likes (vs. dislikes)
INNER PRODUCT, LENGTH OF VECTOR ... MATHEMATICS, KNMGDC	Public	None	Aug 18, 2022 Published	9	0	100.0% 1 like
LINEAR ALGEBRA PYTHOGOREAN THEOREM AND PARALLELOGRAM THEOREM AND...	Public	None	Aug 18, 2022 Published	46	0	-
student study project	Unlisted	None	Dec 21, 2021 Uploaded	0	0	-
SEMESTER -III DIFFERENTIATION AT A ... KNMGDC - MIRYALGUDA	Unlisted	None	Jan 21, 2021 Uploaded	33	0	75.0% 3 likes
NORMAL SUBGROUPS	Unlist...	None	Aug 19, 2020 Uploaded	3	0	100.0% 1 like
Vector calculus Mathematics, KNMG Govt degree college	Unlisted	None	Aug 18, 2020 Uploaded	8	0	100.0% 1 like

## DEPARTMENT WEBSITE:

Department is maintaining its own website. Syllabus, Text books, study material, previous question papers, video lessons and co-curricular activities are available in the website at student disposal.

## **BEST PRACTICE**

### **1. TITLE OF THE PRACTICE: ONE DAY – ONE FORMULA**

### **2. OBJECTIVES OF THE PRACTICE:**

- To build a comprehensive knowledge on Maths formulae and their applicability.
- To know the conceptual clarity based upon formula.
- To know the relevance and applicability in day to day life.
- To enable student to student interaction.

### **3. CONTEXT OF THE PRACTICE:**

- Current relevance of formulae in problem solving.
- Susceptible to forget formulae by this we initiative we can control or conclude the issue of forget.
- Likeliness towards the subject.
- Conceptual clarity-easy understanding.
- It will enhance problem solving capability of a student by discussion or peer to peer interaction.
- Enhance teacher student interactions.

I. For example in Numerical Analysis generally students face the issues of interchanging signs (confuse) therefore the problem may be an error.

II. Generally some of the students unable to differentiate between partial differentiation and ordinary differentiation.

III. Students get confused for differentiation and integration formulae.

### **4. PRACTICE :**

In Academic or Competitive the relevance of formula is widespread it tentacles to various purposes. So we (I & students) took up the project named “One Day-One Formula” to achieve success in academics and future. As per schedule every student should take involve to project formula should say its relevance and if possible show in which problem its applicable, that will increase peer-peer interaction.

A **Formula** is a concise way of expressing information symbolically, as in a mathematical formula . The plural of *formula* can be either *formulas* (from the most common [English plural noun form](#)) or, under the influence of [scientific Latin](#), *formulae* (from the [original Latin](#)). In a general context, formulas are a manifestation of mathematical model to real world phenomena, and as such can be used to provide solution (or approximated solution) to real world problems, with some being more general than others

During this practice, each student is given the reference material (websites to refer etc.) and asked to come up with their understanding on this subject.

### **5. EVIDENCE OF SUCCESS:**

Generally for solving problems in mathematics we use formulas, with the help of formula we can solve problem easily. Students got good results with the help of this practice.



## 1. ONE DAY - ONE FORMULA



## 2. Teaching Aids-Scientific calculator



## ACTION PLANS

DEPARTMENT OF MATHEMATICS ACTION PLAN -2019-2020					
Month	Semester	Curricular Activity	Co-curricular Activity	Extra-curricular Activity	Remarks
June	1	Admission Campaign	Departmental Meeting		
	3	Sequences			
	5	Vector spaces			
	5	Sphere			
July	1	Partial Differentiation	Bridge Classes	Haritha Haram	
	3	Sequences			
		Monotone Sequences			
	5	Vector spaces			
	5	Sphere			
August		Slip test	Student Study Project, Assignment	Swachh Bharat, Independence day	
	1	Homogeneous functions			
		Total Differentials, Maxima and minima			
	3	Cauchy sequences			
		Subsequences			
	5	Basis Eigenvalues and eigenvectors University			
	5	Cone			
September		Slip test, Unit test1	Student seminar on Center of Curvature, Student seminar on Cylinder	Celebrations of "Bhathukamma"	
	1	Lagrange's Method of multipliers			
		Curvature			
	3	Alternating series Power series			
	5	Diagonalization			
		Applications to differential equations			
	5	Cylinder			
		Conicoid			
	Slip test, Internal Assessment 1				

JVR GOVT. COLLEGE, SATHUPALLY DEPARTMENT OF MATHEMATICS ACTION PLAN -2018-2019					
Month	Semester	Curricular Activity	Co-curricular Activity	Extra-curricular Activity	Remarks
June	1	Admission Campaign	Departmental Meeting		
	3	Sequences			
	5	Vector spaces			
	5	Sphere			
July	1	Successive differentiation	Bridge Classes, Student seminar on sequences	Haritha Haram	
		Expansion of Functions			
	3	Limit of Sequences			
		Monotone Sequences			
	5	Subspaces			
August		linearly independent sets	student seminar on P.D.E, Student Study Project, Assignment	swachh Bharat, Independence day	
	5	Sphere			
		Slip test			
	1	Mean value theorem			
		Indeterminate forms curvature			
	3	Cauchy sequences			
		Subsequences			
September	5	Basis Eigenvalues and eigenvectors University	Student seminar on Cylinder, Self Government Day	Celebrations of "Bhathukamma"	
	5	Cone			
		Slip test, Unit test1			
	1	Evolutes, Partial differentiation			
		Total Derivative			
	3	Alternating series Power series			
	5	Diagonalization			
		Applications to differential equations			
5	Cylinder				



## SWOC Analysis

### Strengths:

- Faculty member is regular , qualified and experienced.
- The College has hostel for Girls.
- The ideal student and teacher ratio.
- Mid day meals for Day scholar students

### Weaknesses:

- Most of the students are economically and socially poor.
- Less number of Students joined in B.Sc(Physical Science)group.
- Most of the students are slow learners as they come up from illiterate family background.
- There is no hostel building for boys in the college premises.

### Opportunities:

- To increase results and quality in education if Boys hostel is provided to college
- Potential for starting Msc (Mathematics)
- Potential for scoring Central University seats

### Challenges:

- Intermediate Maths students opting for Engineering Groups and Unethical competition of private Engineering colleges
- Promoting to higher education because of getting marriages during or immediately after B.Sc.
- Stopping students from daily journey.
- 

## FUTURE ACTION PLAN

- To encourage students to join in certificate courses related to Mathematics those are offered in MOOCS (Swayam) platforms .
- To conduct industrial field trips for experiential learning.
- To Organize National level Seminar / Workshop



**Thank you!**

**“If you cut a tree, you kill a life. If you save a tree, you save a life. If you plant a tree, you plant a life.”**