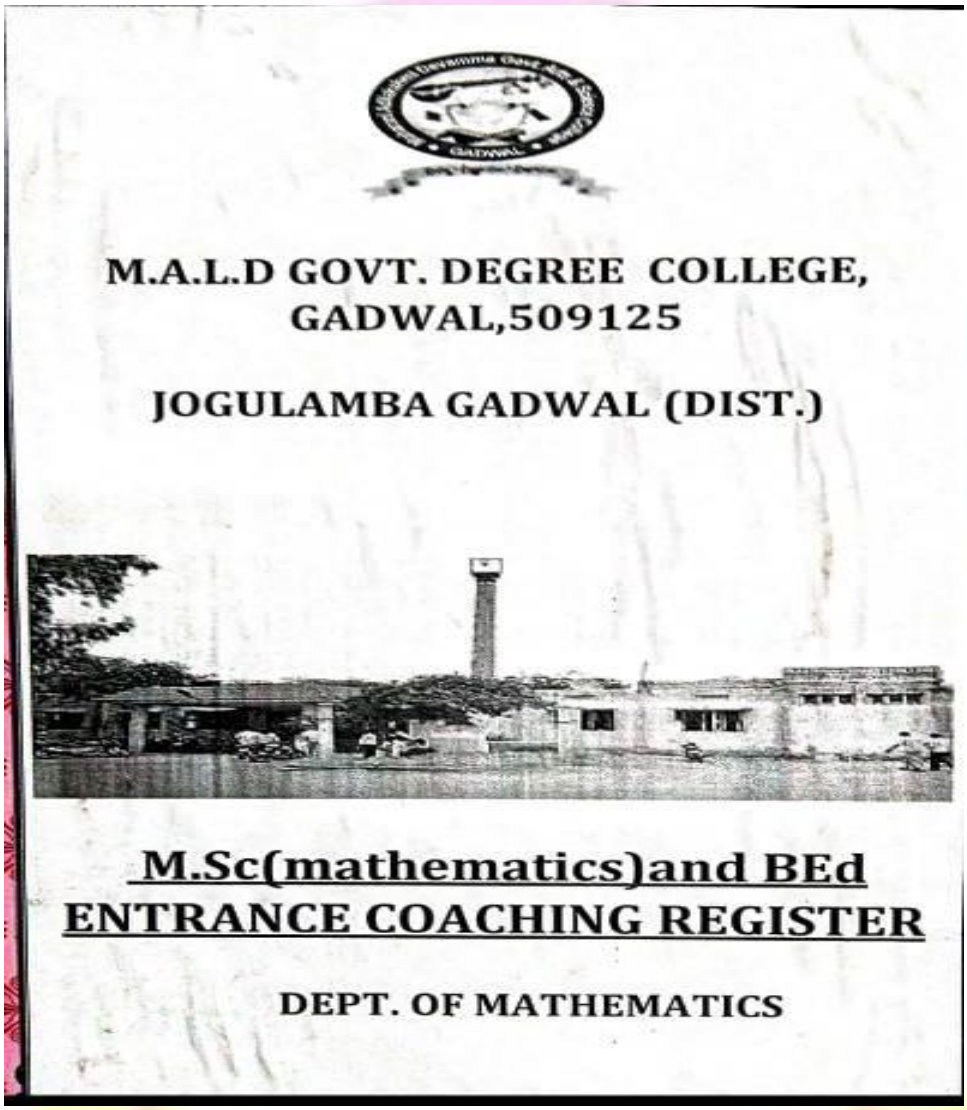
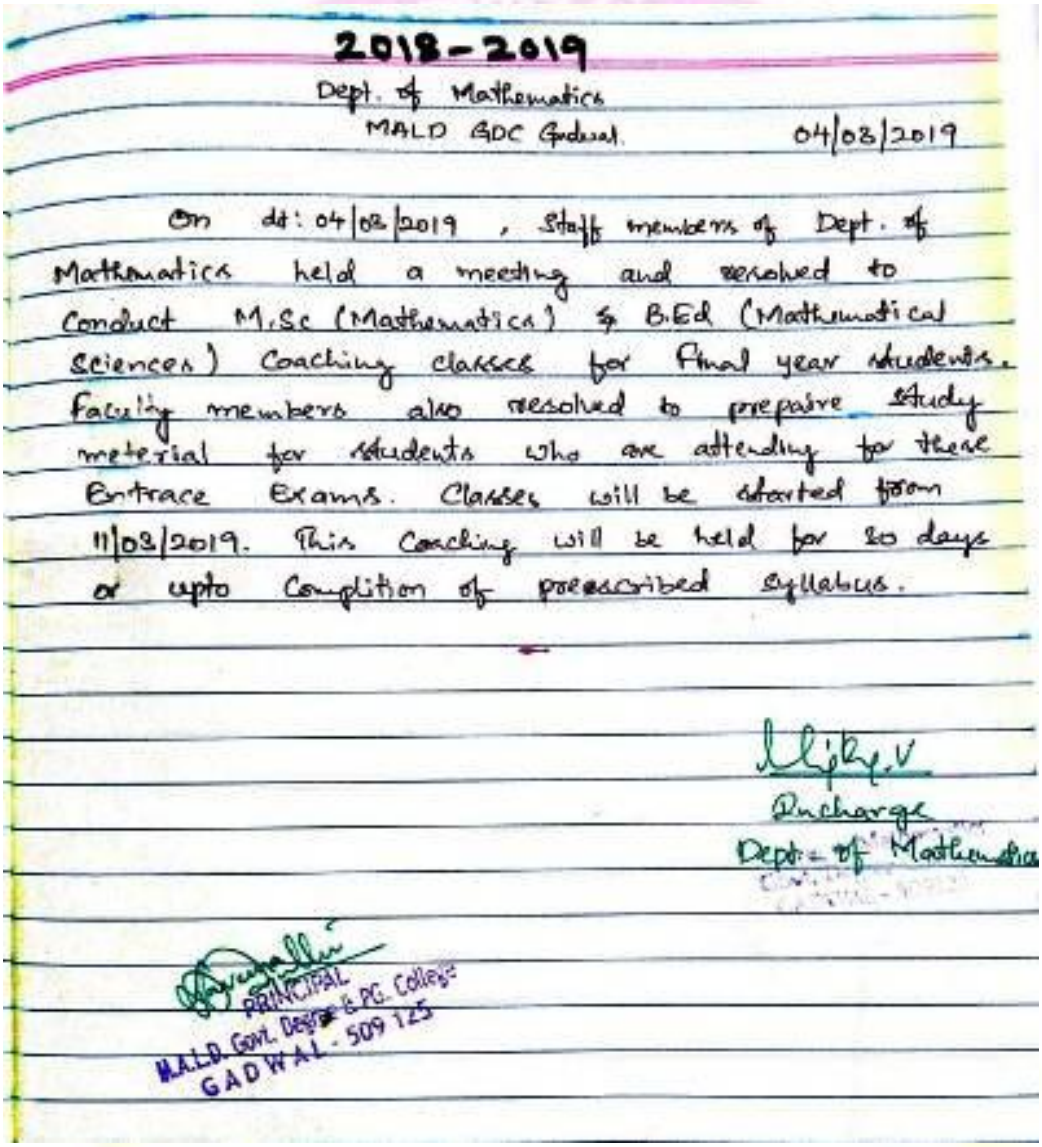
Academic Year: 2018-19





2018-2019

Dept. of Mathematics

MALD GDC Gadwal. 04/08/2019

On dt: 04/08/2019, Staff members of Dept. of Mathematics held a meeting and resolved to Conduct M.Sc (Mathematics) & B.Ed (Mathematical Sciences) Coaching classes for final year students. Faculty members also resolved to prepare study meterial for students who are attending for these Entrace Exams. Classes will be started from 11/08/2019. This Coaching will be held for 20 days or upto Completion of prescribed syllabus.

Incharge
Dept. of Mathematics

PRINCIPAL
MALD. Govt. Degree & PG. College
GADWAL - 509 125

DEPARTMENT OF MATHEMATICS

MALD GOVT. DEGREE COLLEGE, GADWAL

2018-2019

CERCULAR

It is inform to the students of B.Sc (physical science) of III year .The department of Mathematics is going to conduct **M.Sc (Mathematics) and Bed Entrance coaching** in our college from 11/03/2019.Hence the students who are willing to attend **M.Sc (Mathematics) and Bed Entrance coaching** enroll your names at **Department of Mathematics** on or before date 07/03/2019

Coaching time: 4:00pm to 5:00pm

Place: GJ Block , Room no: 01

Govt. Degree College
GADWAL - 509125

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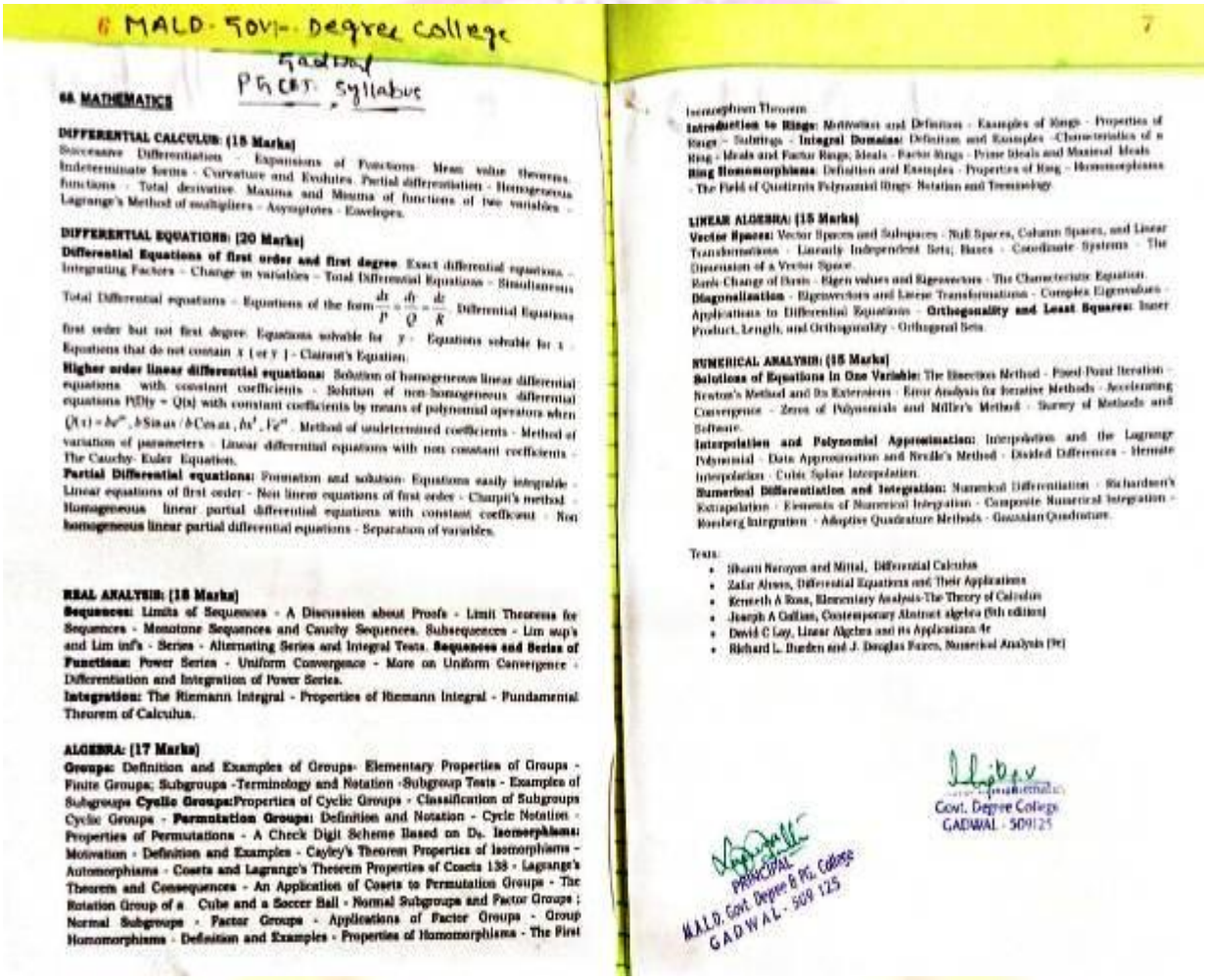
M.A.L.D. Govt. Degree & PG. College
GADWAL - 509 125



6 MALD. Govt. Degree College
Gadwal
PG CBT. Syllabus

66 MATHEMATICS

DIFFERENTIAL CALCULUS: (15 Marks)
Successive Differentiation - Expansions of Functions- Mean value theorems, Indeterminate forms - Curvature and Evolutes. Partial differentiation - Homogeneous functions - Total derivative. Maxima and Maxima of functions of two variables - Lagrange's Method of multipliers - Asymptotes - Envelopes.

DIFFERENTIAL EQUATIONS: (20 Marks)
Differential Equations of first order and first degree. Exact differential equations - Integrating Factors - Change in variables - Total Differential Equations - Simultaneous Total Differential equations - Equations of the form $\frac{dx}{P}=\frac{dy}{Q}=\frac{dz}{R}$. Differential Equations first order but not first degree. Equations solvable for y - Equations solvable for x - Equations that do not contain x (or y) - Clairaut's Equation.
Higher order linear differential equations: Solution of homogeneous linear differential equations with constant coefficients - Solution of non-homogeneous differential equations $P(D)y = Q(x)$ with constant coefficients by means of polynomial operators when $Q(x)=be^{ax}, b\sin ax/b\cos ax, bx^{k}, Ve^{ax}$. Method of undetermined coefficients - Method of variation of parameters - Linear differential equations with non constant coefficients - The Cauchy- Euler Equation.
Partial Differential equations: Formation and solution- Equations easily integrable - Linear equations of first order - Non linear equations of first order - Charpit's method - Homogeneous linear partial differential equations with constant coefficient - Non homogeneous linear partial differential equations - Separation of variables.

REAL ANALYSIS: (18 Marks)
Sequences: Limits of Sequences - A Discussion about Proofs - Limit Theorems for Sequences - Monotone Sequences and Cauchy Sequences. Subsequences - Lim sup's and Lim inf's - Series - Alternating Series and Integral Tests. **Sequences and Series of Functions:** Power Series - Uniform Convergence - More on Uniform Convergence - Differentiation and Integration of Power Series.
Integration: The Riemann Integral - Properties of Riemann Integral - Fundamental Theorem of Calculus.

ALGEBRA: (17 Marks)
Groups: Definition and Examples of Groups- Elementary Properties of Groups - Finite Groups; Subgroups -Terminology and Notation -Subgroup Tests - Examples of Subgroups **Cyclic Groups:**Properties of Cyclic Groups - Classification of Subgroups Cyclic Groups - **Permutation Groups:** Definition and Notation - Cycle Notation - Properties of Permutations - A Check Digit Scheme Based on D_3. **Isomorphisms:** Motivation - Definition and Examples - Cayley's Theorem Properties of Isomorphisms - Automorphisms - Cosets and Lagrange's Theorem Properties of Cosets 138 - Lagrange's Theorem and Consequences - An Application of Cosets to Permutation Groups - The Rotation Group of a Cube and a Soccer Ball - Normal Subgroups and Factor Groups ; Normal Subgroups - Factor Groups - Applications of Factor Groups - Group Homomorphisms - Definition and Examples - Properties of Homomorphisms - The First

7

Isomorphism Theorem
Introduction to Rings: Motivation and Definition - Examples of Rings - Properties of Rings - Subrings - **Integral Domains:** Definition and Examples - Characteristics of a Ring - Ideals and Factor Rings; Ideals - Factor Rings - Prime Ideals and Maximal Ideals
Ring Homomorphisms: Definition and Examples - Properties of Ring - Homomorphisms - The Field of Quotients Polynomial Rings- Notation and Terminology

LINEAR ALGEBRA: (15 Marks)
Vector Spaces: Vector Spaces and Subspaces - Null Spaces, Column Spaces, and Linear Transformations - Linearly Independent Sets; Bases - Coordinate Systems - The Dimension of a Vector Space.
Rank- Change of Basis - Eigen values and Eigenvectors - The Characteristic Equation.
Diagonalization - Eigenvectors and Linear Transformations - Complex Eigenvalues - Applications to Differential Equations - **Orthogonality and Least Squares:** Inner Product, Length, and Orthogonality - Orthogonal Sets.

NUMERICAL ANALYSIS: (15 Marks)
Solutions of Equations in One Variable: The Bisection Method - Fixed-Point Iteration - Newton's Method and Its Extensions - Error Analysis for Iterative Methods - Accelerating Convergence - Zeros of Polynomials and Müller's Method - Survey of Methods and Software.
Interpolation and Polynomial Approximation: Interpolation and the Lagrange Polynomial - Data Approximation and Neville's Method - Divided Differences - Hermite Interpolation - Cubic Spline Interpolation.
Numerical Differentiation and Integration: Numerical Differentiation - Richardson's Extrapolation - Elements of Numerical Integration - Composite Numerical Integration - Romberg Integration - Adaptive Quadrature Methods - Gaussian Quadrature.

Texts:
- Bhuvan Narayan and Mittal, Differential Calculus
- Zafar Ahsan, Differential Equations and Their Applications
- Kenneth A Ross, Elementary Analysis-The Theory of Calculus
- Joseph A Gallian, Contemporary Abstract algebra (8th edition)
- David C Lay, Linear Algebra and its Applications 4e
- Richard L. Burden and J. Douglas Faires, Numerical Analysis (9e)

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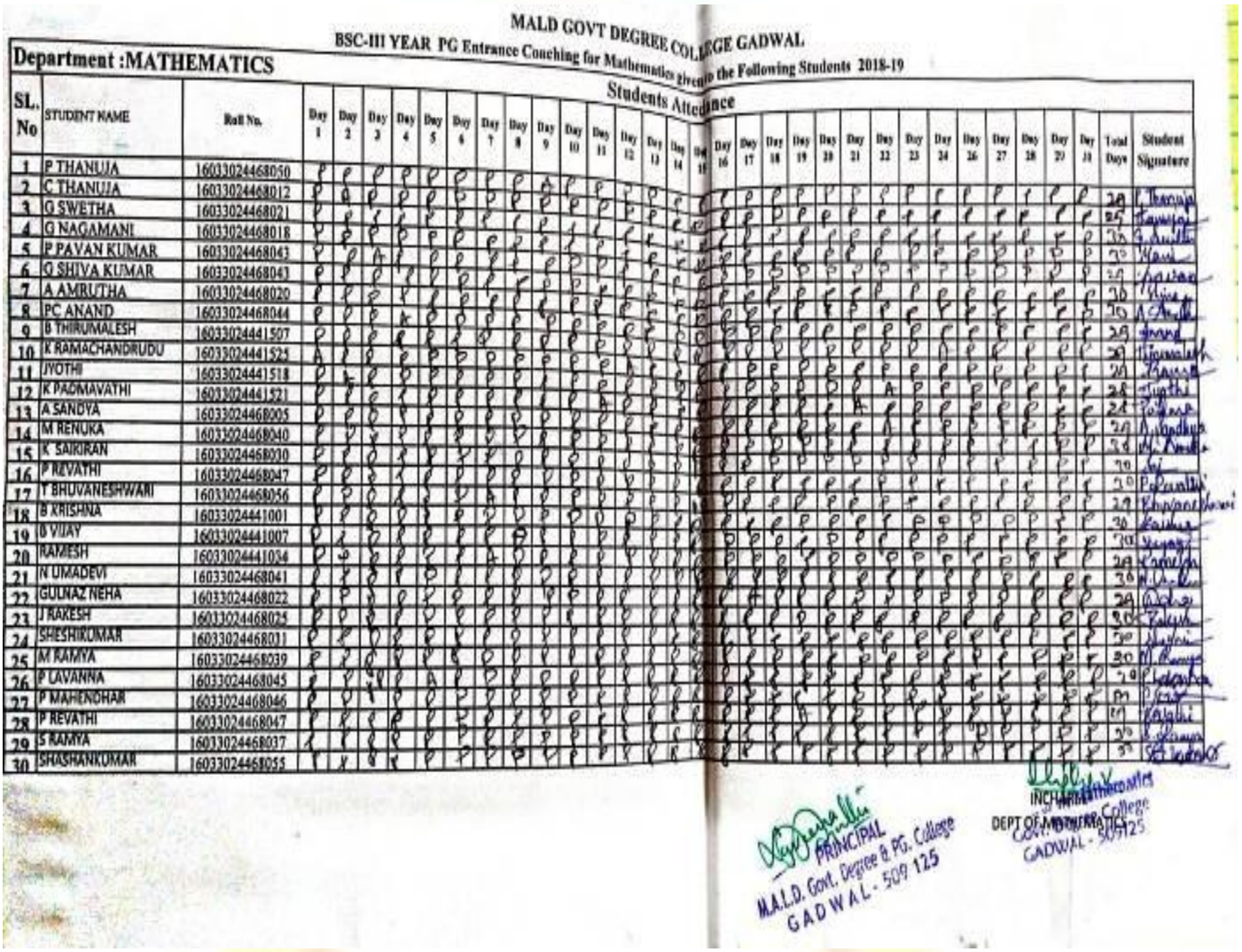
GADWAL - 509 125



MALD GOVT DEGREE COLLEGE GADWAL

BSC-III YEAR PG Entrance Coaching for Mathematics given to the Following Students 2018-19

Department :MATHEMATICS

Students Attendance

SL. No	STUDENT NAME	Roll No.	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21	Day 22	Day 23	Day 24	Day 26	Day 27	Day 28	Day 29	Day 31	Total Days	Student Signature
1	P THANUJA	160330244680S0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	P Thanuja
2	C THANUJA	160330244680I2	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	25	Thanuja
3	G SWETHA	160330244680J1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	26	G.Swetha
4	G NAGAMANI	160330244680I8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Mani
5	P PAVAN KUMAR	160330244680I3	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	27	Pavan
6	G SHIVA KUMAR	160330244680I3	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Shiva
7	A AMRUTHA	160330244680J0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Mrutha
8	PC ANAND	160330244680I4	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	A Anand
9	B THIRUMALESH	160330244415O7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Anand
10	K RAMACHANDRUDU	160330244415J5	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Ramachandrudu
11	JYOTHI	160330244415I8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Jyothi
12	K PADMAVATHI	160330244415J1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	27	Padmavathi
13	A SANDYA	160330244680O5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Sandya
14	M RENUKA	160330244680I0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	M.Renuka
15	K SAIKIRAN	160330244680J0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	K.Saikiran
16	P REVATHI	160330244680J7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Sai
17	T BHUVANESHWARI	160330244680S6	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Bhuvaneshwari
18	B KRISHNA	160330244415O1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Krishna
19	B VIJAY	160330244415O7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Vijay
20	RAMESH	160330244415J4	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Ramesh
21	N UMADEVI	160330244680I1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	N.Umadevi
22	GULNAZ NEHA	160330244680J2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Gulnaz
23	J RAKESH	160330244680J5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Rakesh
24	SHESHIKUMAR	160330244680J1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Shekhar
25	M RAMYA	160330244680J9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	M.Ramya
26	P LAVANNA	160330244680J5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Lavanna
27	P MAHENDHAR	160330244680J6	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Mahendhar
28	P REVATHI	160330244680J7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Revathi
29	S RAMYA	160330244680J7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	S.Ramya
30	SHASHANKUMAR	160330244680S5	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	Shashank

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INCHARGE
DEPT OF MATHEMATICS
Govt. Degree College
GADWAL - 509125

M.Sc Mathematics Entrance Coaching delivered by

Sri. V.Manoj Kumar Asst.Prof of Mathematics , Sri. K.Satyanna Asst. Prof of Mathematics

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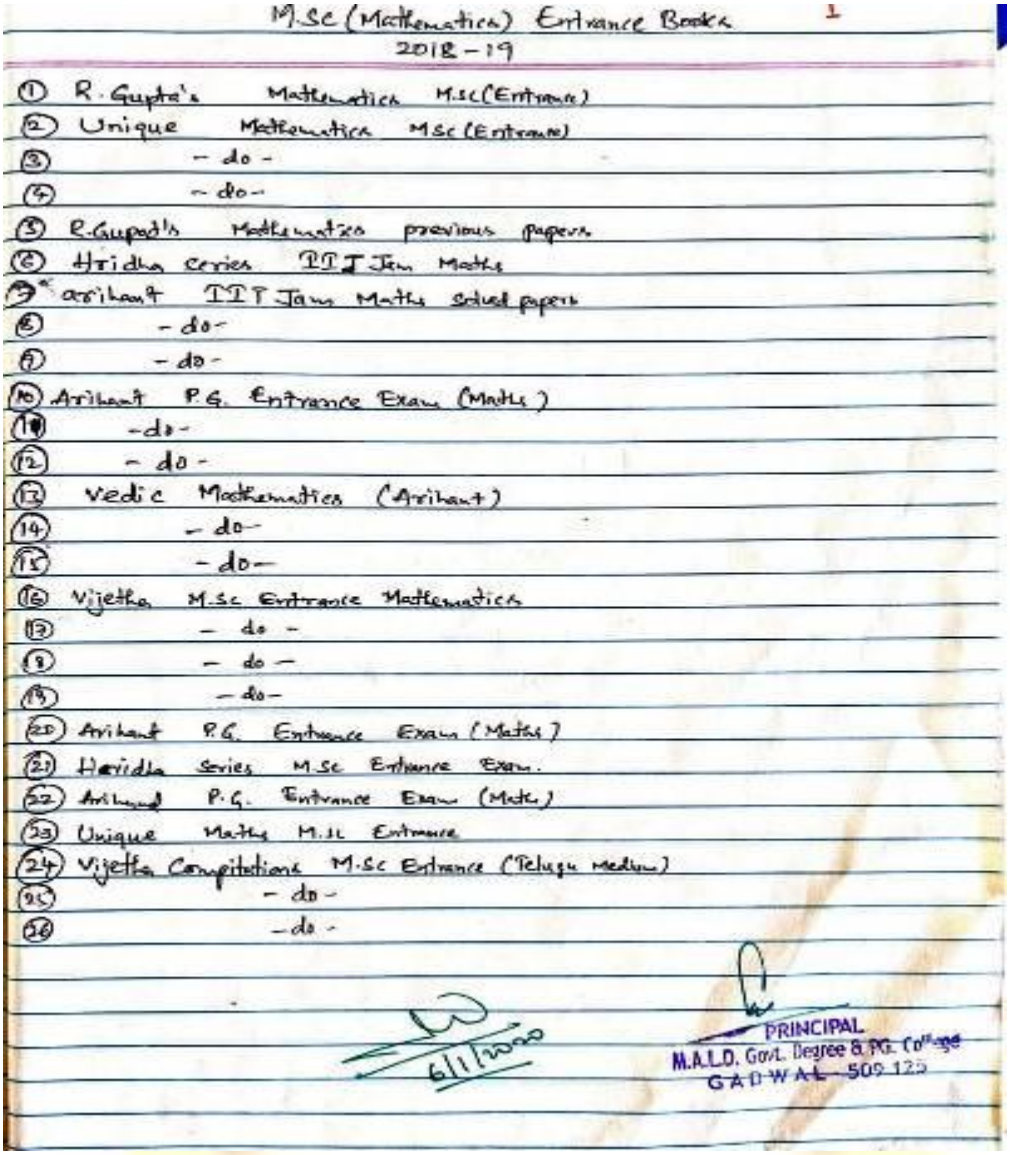
M.Sc Entrance Books Issued Register



M.Sc (Mathematics) Entrance Books 1
2018-19

1. R. Gupta's Mathematics M.Sc(Entrance)
2. Unique Mathematics M.Sc (Entrance)
3. – do –
4. – do –
5. R.Gupad's Mathematics previous papers
6. Hridha series IIT Jam Maths
7. arihant IIT Jam Maths solved papers
8. – do –
9. – do –
10. Arihant P.G. Entrance Exam (Maths)
11. – do –
12. – do –
13. Vedic Mathematics (Arihant)
14. – do –
15. – do –
16. Vijetha M.Sc Entrance Mathematics
17. – do –
18. – do –
19. – do –
20. Arihant P.G. Entrance Exam (Maths)
21. Haridha series M.Sc Entrance Exam.
22. Arihant P.G. Entrance Exam (Maths)
23. Unique Maths M.Sc Entrance
24. Vijetha Competitions M.Sc Entrance (Telugu Medium)
25. – do –
26. – do –

6/1/2020

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GADWAL-509 125

2018 – 2019

Name of the book	S.No.	Student Name and Sign.	Issue Date	Return date
① Vedic Maths ② IIT Jam	014/2019 006/2019	K. Saikiran 160330244680 30	23/5/2019	
③ Arihant IIT Jam ④ Unique Maths	009/2019 007/2019	P. Revathi 160330244680 47 (7013294903)	23/5/2019	
⑤ Vedic Math ⑥ IIT Jam	013/2019 007/2019	P. Thanuja 160330244680 30 9985212685	23/5/2019	
⑦ [Vijetha Competitions (MSC) arihanth [PG Entrance]	16/2019 05/06/2019 20/2019	C. Thanuja 160330244680 12 [8501875085]		
⑧ [Arihanth (IIT JAM)] Hridan series	008/2019	05/06/2019.	G. Swetha (160330244680 21) [7659077561]	
⑨ arihant [PG Entrance]	22/2019	A. Sandhya [7015950931]		
⑩ arihant (PG Entrance)	011/2019.	Q. Nagamani (6281362245)		
⑪ Vijetha (MSC)	18/2019	M. Renuka [9573318579]		
12) arihant [PG Entrance]	010/2019.	M. Renuka		
13. R. Gupta's (mathematics) Vijetha Competitions (PG entrence)	001/2019 19/2019	G. Shiva Kumar G. Shiva Kumar (6302322193)		
(14) Vijetha Competitions (PG entrence) UNIQUE Publishers (MSC entrence)	17/2019 002/2019	P. Pavankumar (1818609087 5) P. Pavankumar		
15. Vijetha compitions (T/M)	24/2019	K. Ramachandrudu.	29-06-2019	cell no: 9182795842

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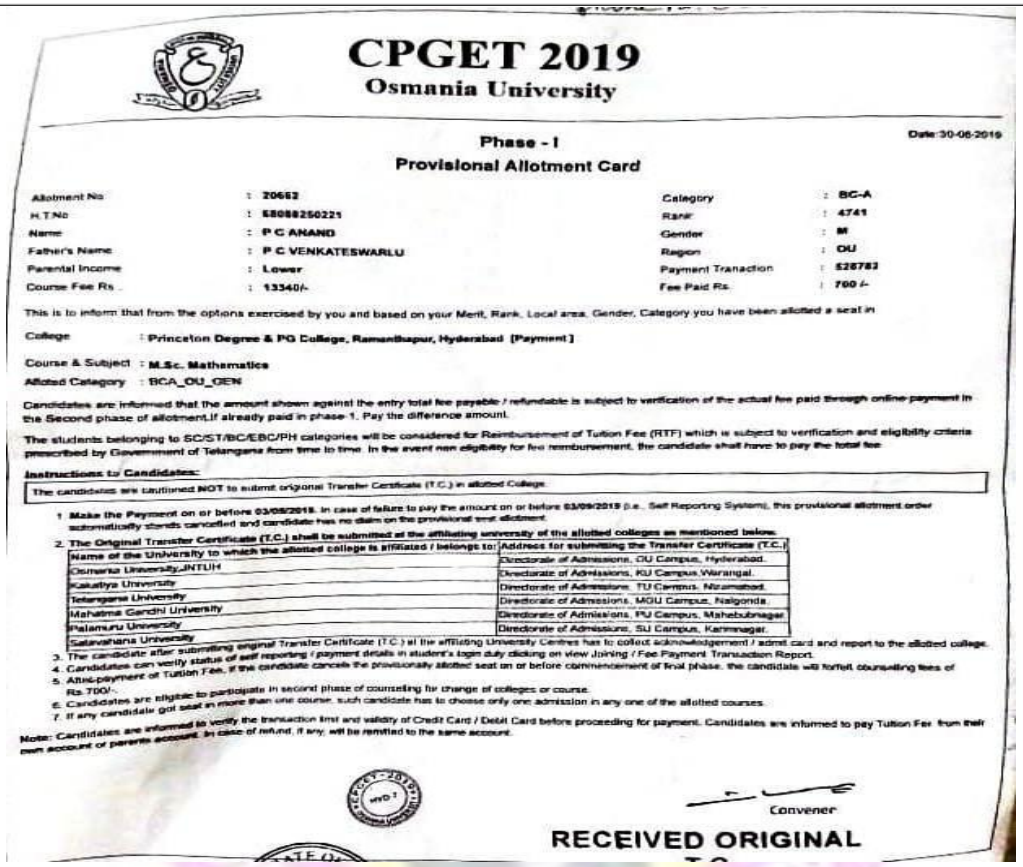
GADWAL



CPGET 2019
Osmania University

Phase - I
Provisional Allotment Card

Date:30-08-2019

Allotment No	: 20662	Category	: BC-A
H.T.No	: 580882502221	Rank	: 4741
Name	: P C ANAND	Gender	: M
Father's Name	: P C VENKATESWARLU	Region	: OU
Parental Income	: Lower	Payment Transaction	: 528782
Course Fee Rs.	: 13340/-	Fee Paid Rs.	: 700 /-

This is to inform that from the options exercised by you and based on your Merit, Rank, Local area, Gender, Category you have been allotted a seat in

College : Princeton Degree & PG College, Ramanthapur, Hyderabad [Payment]

Course & Subject : M.Sc. Mathematics

Alloted Category : BCA_OU_GEN

Candidates are informed that the amount shown against the entry total fee payable / refundable is subject to verification of the actual fee paid through online payment in the Second phase of allotment.If already paid in phase 1, Pay the difference amount.

The students belonging to SC/ST/BC/EBC/PH categories will be considered for Reimbursement of Tuition Fee (RTF) which is subject to verification and eligibility criteria prescribed by Government of Telangana from time to time. In the event non eligibility for fee reimbursement, the candidate shall have to pay the total fee.

Instructions to Candidates:

The candidates are cautioned NOT to submit original Transfer Certificate (T.C.) in allotted College.

1. Make the Payment on or before 03/09/2019. In case of failure to pay the amount on or before 03/09/2019 (i.e., Self Reporting System), this provisional allotment order automatically stands cancelled and candidate has no claim on the provisional seat allotment.
2. The Original Transfer Certificate (T.C.) shall be submitted at the affiliating university of the allotted colleges as mentioned below.

Name of the University to which the allotted college is affiliated / belongs to:	Address for submitting the Transfer Certificate (T.C.)
Osmania University,JNTUH	Directorate of Admissions, OU Campus, Hyderabad.
Kakatiya University	Directorate of Admissions, KU Campus,Warangal.
Telangana University	Directorate of Admissions, TU Campus, Nizamabad.
Mahatma Gandhi University	Directorate of Admissions, MGU Campus, Nalgonda.
Palamuru University	Directorate of Admissions, PU Campus, Mahebubnagar.
Satavahana University	Directorate of Admissions, SU Campus, Karimnagar.

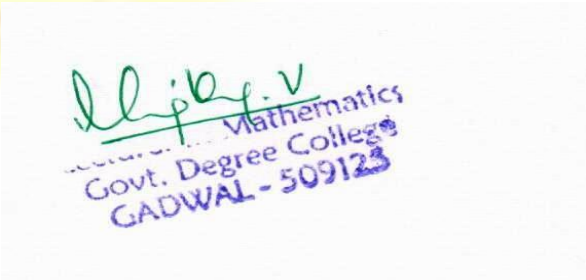
3. The candidate after submitting original Transfer Certificate (T.C.) at the affiliating University Centres has to collect acknowledgement / admit card and report to the allotted college.
4. Candidates can verify status of self reporting / payment details in student's login duly clicking on view Joining / Fee Payment Transaction Report.
5. Alloted seat on or before commencement of final phase, the candidate will forfeit counselling fees of Rs.700/-.
6. Candidates are eligible to participate in second phase of counselling for change of colleges or course.
7. If any candidate got seat in more than one course, such candidate has to choose only one admission in any one of the allotted courses.

Note: Candidates are informed to verify the transaction first and validity of Credit Card / Debit Card before proceeding for payment. Candidates are informed to pay Tuition Fee from their own account or parents account. In case of refund, if any, will be remitted to the same account.

Convener

RECEIVED ORIGINAL

Name of the Student : PC.Anand
Roll No : 16033024468044
Year of Passed : 2019



17

CENTRAL LIBRARY
Palamuru University, MAHABUBNAGAR.

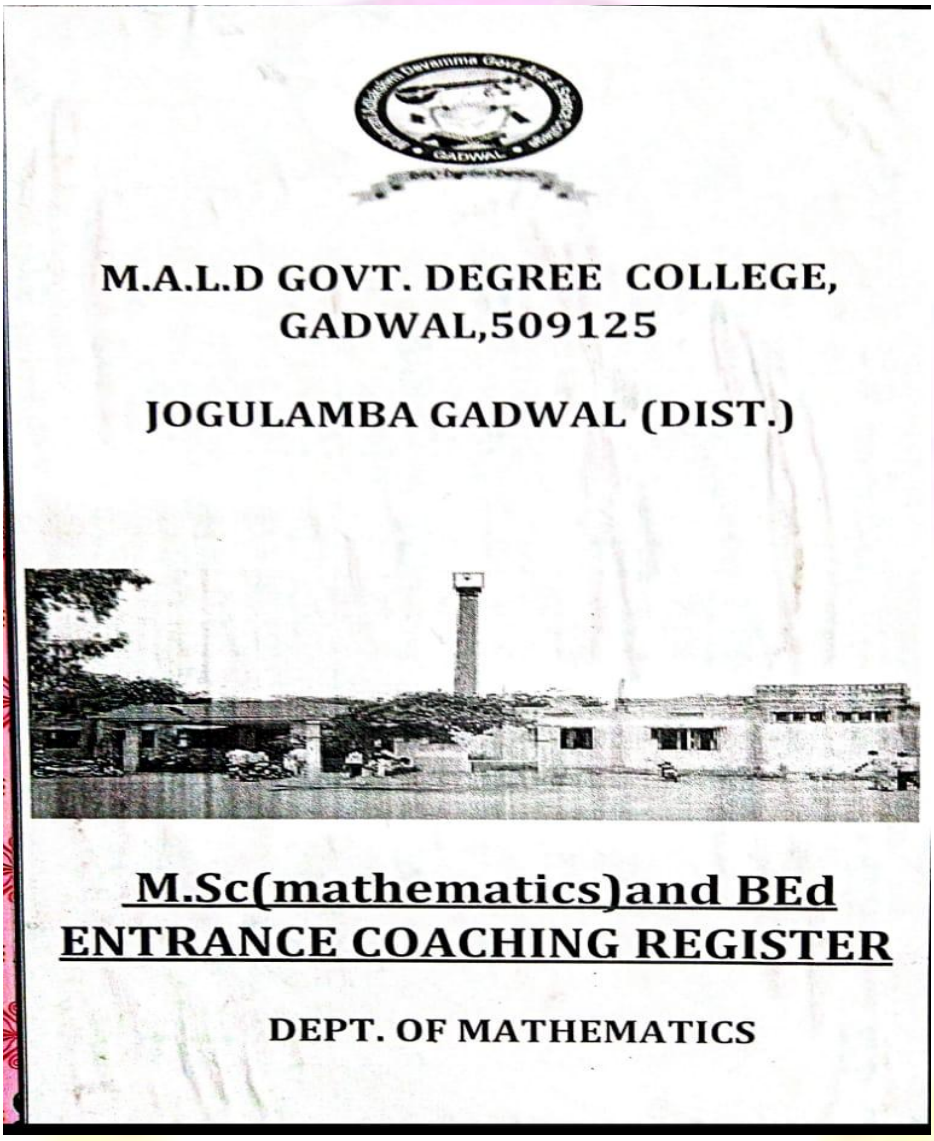
Name C. Thanuja
Course M.Sc Mathematics Roll No 016
Validity 2019-21

Library Co ordinator
Dr. K. PRAVEENA
Libray Co-ordinator

Name of the Student : C.Thanuja
Roll No : 1603302468012
Year of Passed : 2019

Mathematics
Govt. Degree College
GADWAL - 509125

Academic Year: 2019-20



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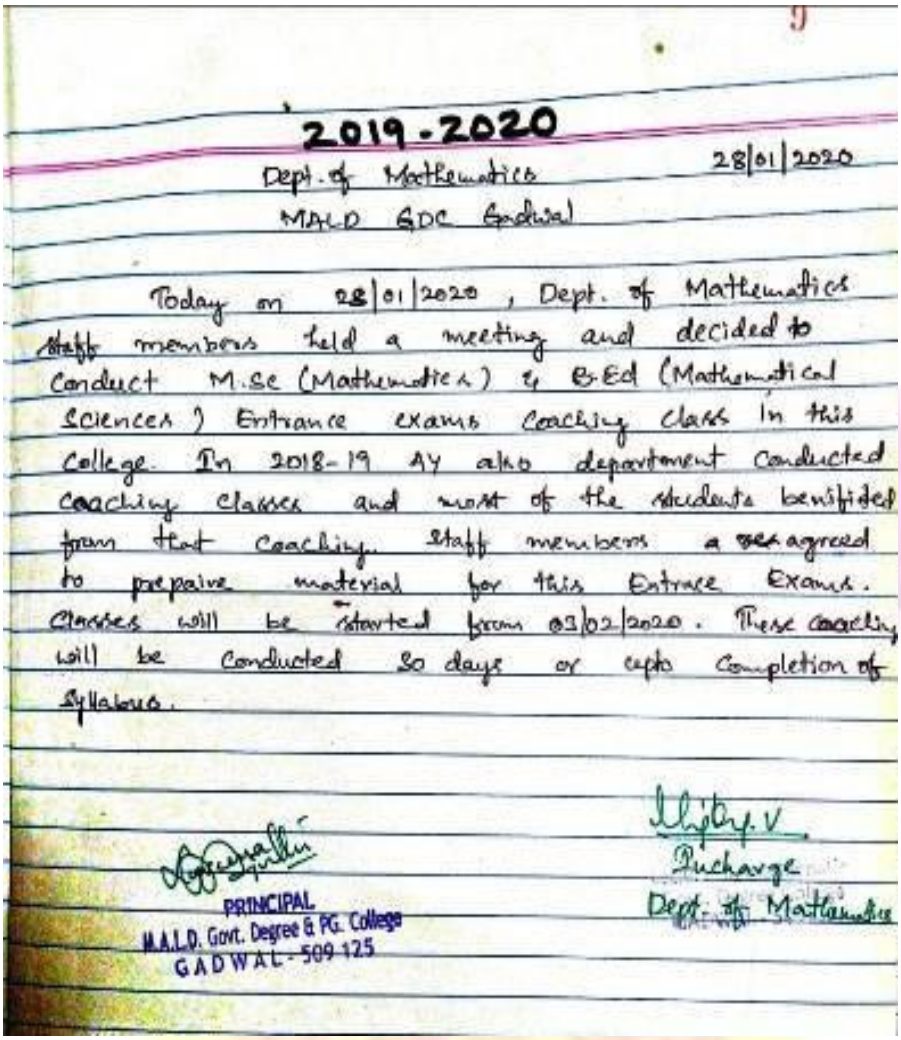


2019-2020

Dept. of Mathematics 28/01/2020
MALD GDC Gadwal

Today on 28/01/2020, Dept. of Mathematics staff members held a meeting and decided to conduct M.Sc (Mathematics) & B.Ed (Mathematical Sciences) Entrance exams coaching class in this college. In 2018-19 AY also department conducted coaching classes and most of the students benifited from that coaching. Staff members a ~~res~~ agreed to prepaire material for this Entrace Exams. Classes will be started from 03/02/2020. These coaching will be conducted 30 days or upto completion of syllabus.

PRINCIPAL
M.A.L.D. Govt. Degree & PG. College
GADWAL - 509 125

Incharge
Dept. of Mathematics

DEPARTMENT OF MATHEMATICS

MALD GOVT. DEGREE COLLEGE, GADWAL

2019-2020

CERCULAR

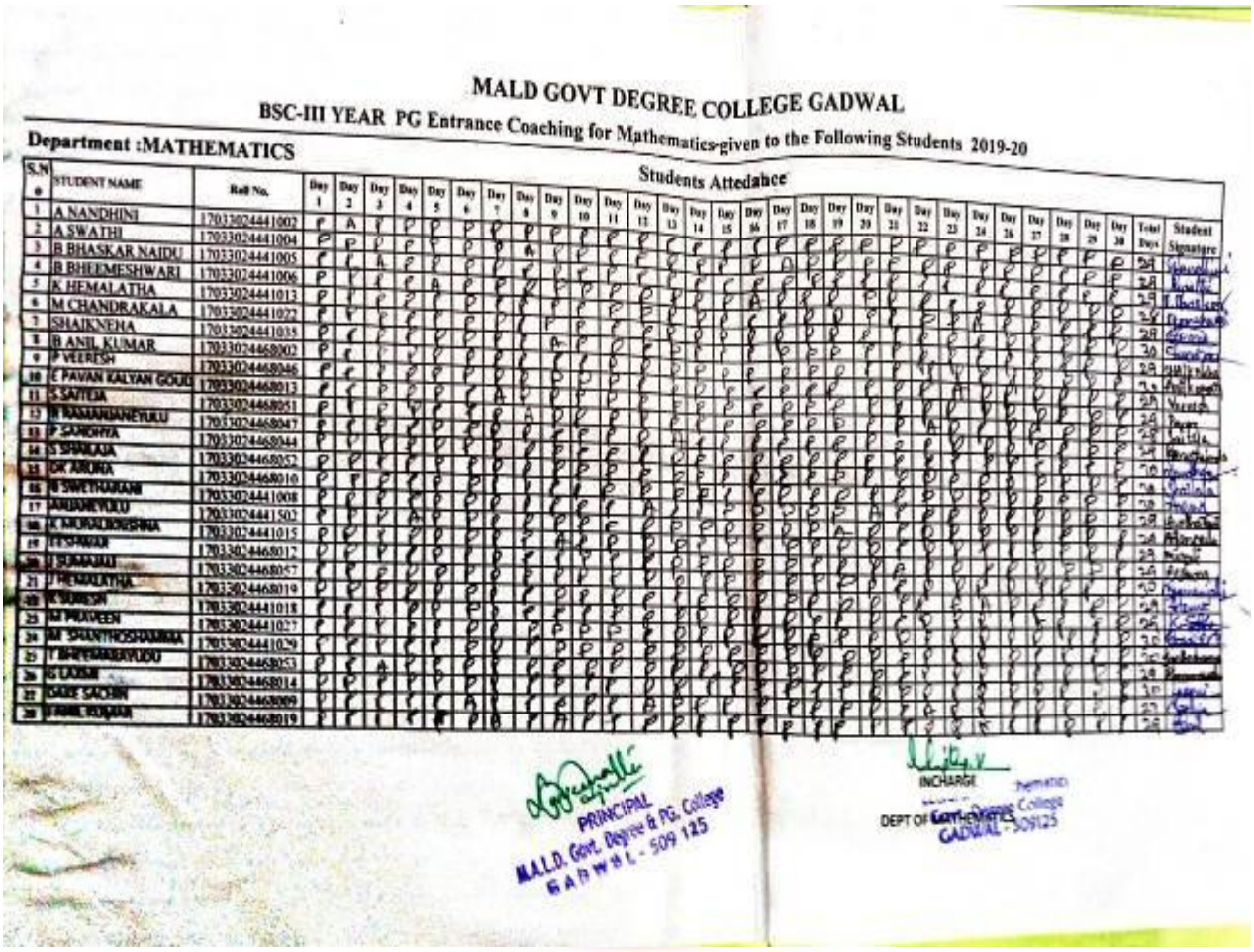
It is inform to the students of B.Sc (physical science) of III year .The department of Mathematics is going to conduct **M.Sc (Mathematics) and Bed Entrance coaching** in our college from08/01/2020Hence the students who are willing to attend **M.Sc (Mathematics) and Bed Entrance coaching** enroll your names at **Department of Mathematics** on or before date 21/01/2020

Coaching time: **4:00pm to 5:00pm**

Place: GJ Block, Room no : 2

M.A.L.D. Govt. Degree & PG. College
GADWAL - 509 125

Lecturer in Mathematics
Govt. Degree College
GADWAL - 509125



MALD GOVT DEGREE COLLEGE GADWAL

BSC-III YEAR PG Entrance Coaching for Mathematics-given to the Following Students 2019-20

Department :MATHEMATICS

S.No	STUDENT NAME	Roll No.	Students Attedance																													
			Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21	Day 22	Day 23	Day 24	Day 25	Day 26	Day 27	Day 28	Day 29	Day 30	Total Days	Student Signature
1	A NANDHINI	170330244410002	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	
2	A SWATHI	170330244410004	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
3	B BHASKAR NAIDU	170330244410005	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
4	B BHEEMESHWARI	170330244410006	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	
5	K HEMALATHA	170330244410013	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28	
6	M CHANDRAKALA	170330244410022	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	28	
7	SHAIKNEHA	170330244410035	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
8	B ANIL KUMAR	170330244680002	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
9	P VEERESH	170330244680046	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
10	E PAVAN KALYAN GOUD	170330244680013	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
11	S SAITEJA	170330244680051	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
12	B RAMANJANEYULU	170330244680047	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
13	P SUKANYA	170330244680044	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
14	S SHARAJA	170330244680052	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
15	SK ARUNA	170330244680010	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
16	B SWETHARANI	170330244410008	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
17	JANJANEYULU	170330244411502	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
18	K MURALIKRISHNA	170330244410015	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
19	T SHIVAJI	170330244680012	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
20	B SHARAJI	170330244680057	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
21	T VENKATHA	170330244680019	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
22	K SURESH	170330244410018	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
23	M PRAVEEN	170330244411027	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
24	M SHANTHOSHKUMAR	170330244411029	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
25	T BHEEMARAYUDU	170330244680053	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
26	G LAXMI	170330244680014	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
27	GADE SACHIN	170330244680009	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	
28	[illegible]	170330244680019	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	29	

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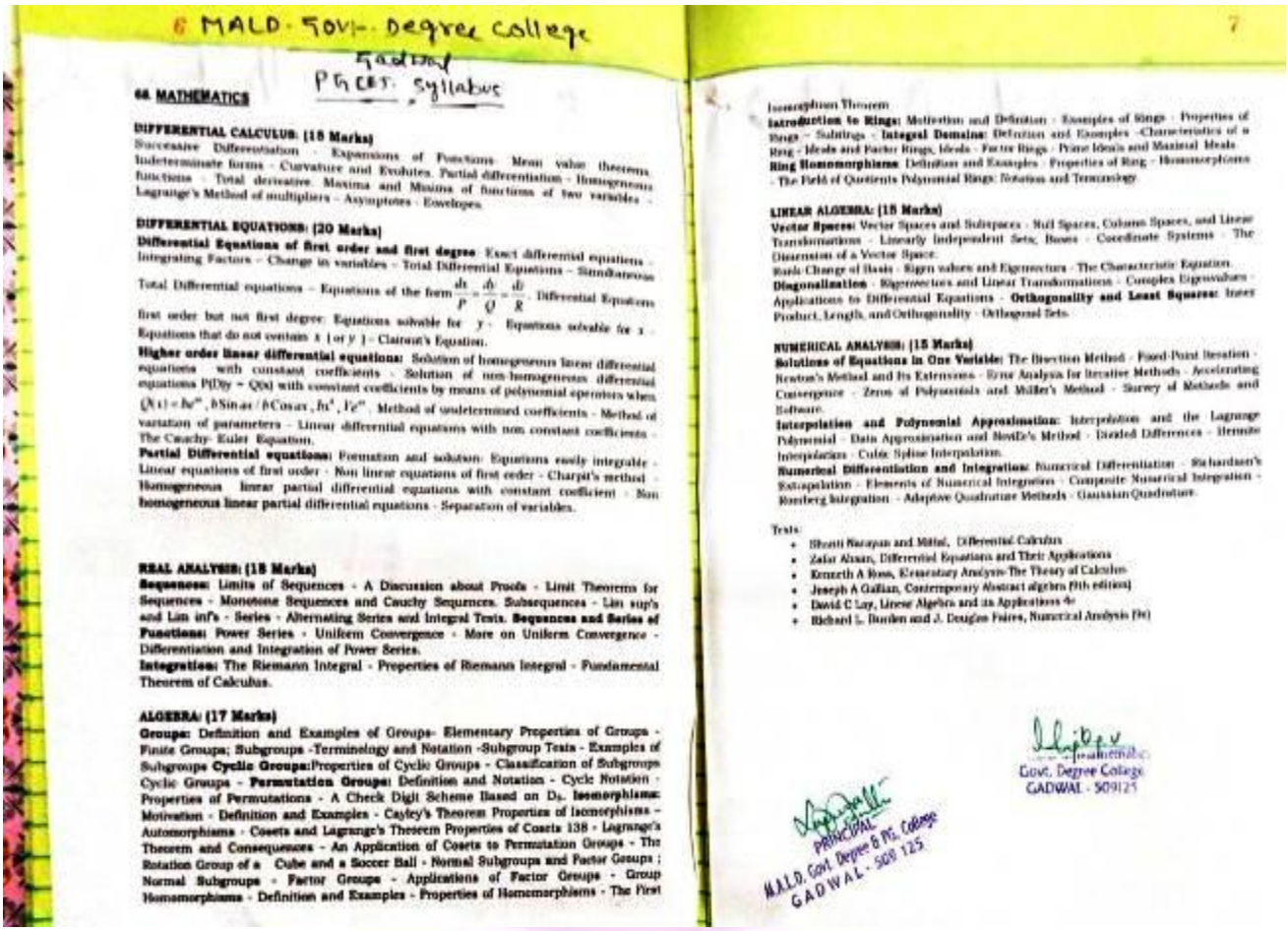

6 MALD. Govt. Degree College
Gadwal
PG CET. Syllabus

68. MATHEMATICS

DIFFERENTIAL CALCULUS: (15 Marks)
Successive Differentiation - Expansions of Functions- Mean value theorems Indeterminate forms - Curvature and Evolutes. Partial differentiation - Homogeneous functions - Total derivative. Maxima and Minima of functions of two variables - Lagrange's Method of multipliers - Asymptotes - Envelopes.

DIFFERENTIAL EQUATIONS: (20 Marks)
Differential Equations of first order and first degree: Exact differential equations - Integrating Factors - Change in variables - Total Differential Equations - Simultaneous Total Differential equations - Equations of the form $\frac{dx}{P}=\frac{dy}{Q}=\frac{dz}{R}$. Differential Equations first order but not first degree: Equations solvable for y - Equations solvable for x - Equations that do not contain x (or y) - Clairaut's Equation.
Higher order linear differential equations: Solution of homogeneous linear differential equations with constant coefficients - Solution of non-homogeneous differential equations $P(D)y = Q(x)$ with constant coefficients by means of polynomial operators when $Q(x) = be^{ax}, b\sin ax / b\cos ax, bx^{k}, Ve^{ax}$. Method of undetermined coefficients - Method of variation of parameters - Linear differential equations with non constant coefficients - The Cauchy- Euler Equation.
Partial Differential equations: Formation and solution- Equations easily integrable - Linear equations of first order - Non linear equations of first order - Charpit's method - Homogeneous linear partial differential equations with constant coefficient - Non homogeneous linear partial differential equations - Separation of variables.

REAL ANALYSIS: (15 Marks)
Sequences: Limits of Sequences - A Discussion about Proofs - Limit Theorems for Sequences - Monotone Sequences and Cauchy Sequences. Subsequences - Lim sup's and Lim inf's - Series - Alternating Series and Integral Tests. **Sequences and Series of Functions:** Power Series - Uniform Convergence - More on Uniform Convergence - Differentiation and Integration of Power Series.
Integration: The Riemann Integral - Properties of Riemann Integral - Fundamental Theorem of Calculus.

ALGEBRA: (17 Marks)
Groups: Definition and Examples of Groups- Elementary Properties of Groups - Finite Groups; Subgroups -Terminology and Notation -Subgroup Tests - Examples of Subgroups **Cyclic Groups:**Properties of Cyclic Groups - Classification of Subgroups Cyclic Groups - **Permutation Groups:** Definition and Notation - Cycle Notation - Properties of Permutations - A Check Digit Scheme Based on D_5. **Isomorphisms:** Motivation - Definition and Examples - Cayley's Theorem Properties of Isomorphisms - Automorphisms - Cosets and Lagrange's Theorem Properties of Cosets 138 - Lagrange's Theorem and Consequences - An Application of Cosets to Permutation Groups - The Rotation Group of a Cube and a Soccer Ball - Normal Subgroups and Factor Groups ; Normal Subgroups - Factor Groups - Applications of Factor Groups - Group Homomorphisms - Definition and Examples - Properties of Homomorphisms - The First

7

Isomorphism Theorem
Introduction to Rings: Motivation and Definition - Examples of Rings - Properties of Rings - Subrings - **Integral Domains:** Definition and Examples -Characteristics of a Ring - Ideals and Factor Rings, Ideals - Factor Rings - Prime Ideals and Maximal Ideals
Ring Homomorphisms: Definition and Examples - Properties of Ring - Homomorphisms - The Field of Quotients Polynomial Rings: Notation and Terminology

LINEAR ALGEBRA: (15 Marks)
Vector Spaces: Vector Spaces and Subspaces - Null Spaces, Column Spaces, and Linear Transformations - Linearly Independent Sets; Bases - Coordinate Systems - The Dimension of a Vector Space.
Rank-Change of Basis - Eigen values and Eigenvectors - The Characteristic Equation.
Diagonalization - Eigenvectors and Linear Transformations - Complex Eigenvalues - Applications to Differential Equations - **Orthogonality and Least Squares:** Inner Product, Length, and Orthogonality - Orthogonal Sets.

NUMERICAL ANALYSIS: (15 Marks)
Solutions of Equations in One Variable: The Bisection Method - Fixed-Point Iteration - Newton's Method and Its Extensions - Error Analysis for Iterative Methods - Accelerating Convergence - Zeros of Polynomials and Müller's Method - Survey of Methods and Software.
Interpolation and Polynomial Approximation: Interpolation and the Lagrange Polynomial - Data Approximation and Neville's Method - Divided Differences - Hermite Interpolation - Cubic Spline Interpolation.
Numerical Differentiation and Integration: Numerical Differentiation - Richardson's Extrapolation - Elements of Numerical Integration - Composite Numerical Integration - Romberg Integration - Adaptive Quadrature Methods - Gaussian Quadrature.

Texts:
- Shanti Narayan and Mittal, Differential Calculus
- Zafar Ahsan, Differential Equations and Their Applications
- Kenneth A Ross, Elementary Analysis-The Theory of Calculus
- Joseph A Gallian, Contemporary Abstract algebra (9th edition)
- David C Lay, Linear Algebra and its Applications 4e
- Richard L. Burden and J. Douglas Faires, Numerical Analysis (9e)

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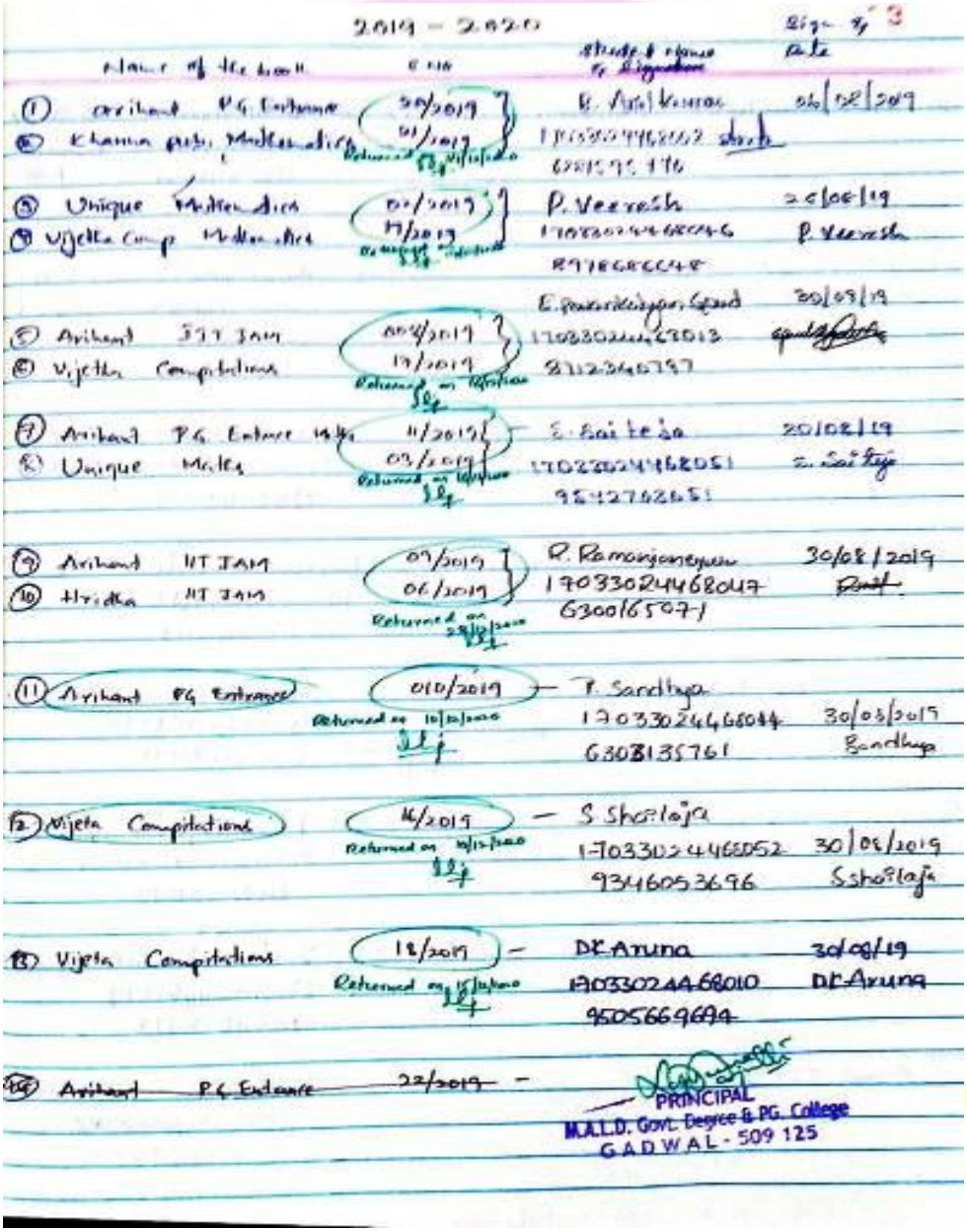
M.Sc Entrance Coaching Books Issued Register



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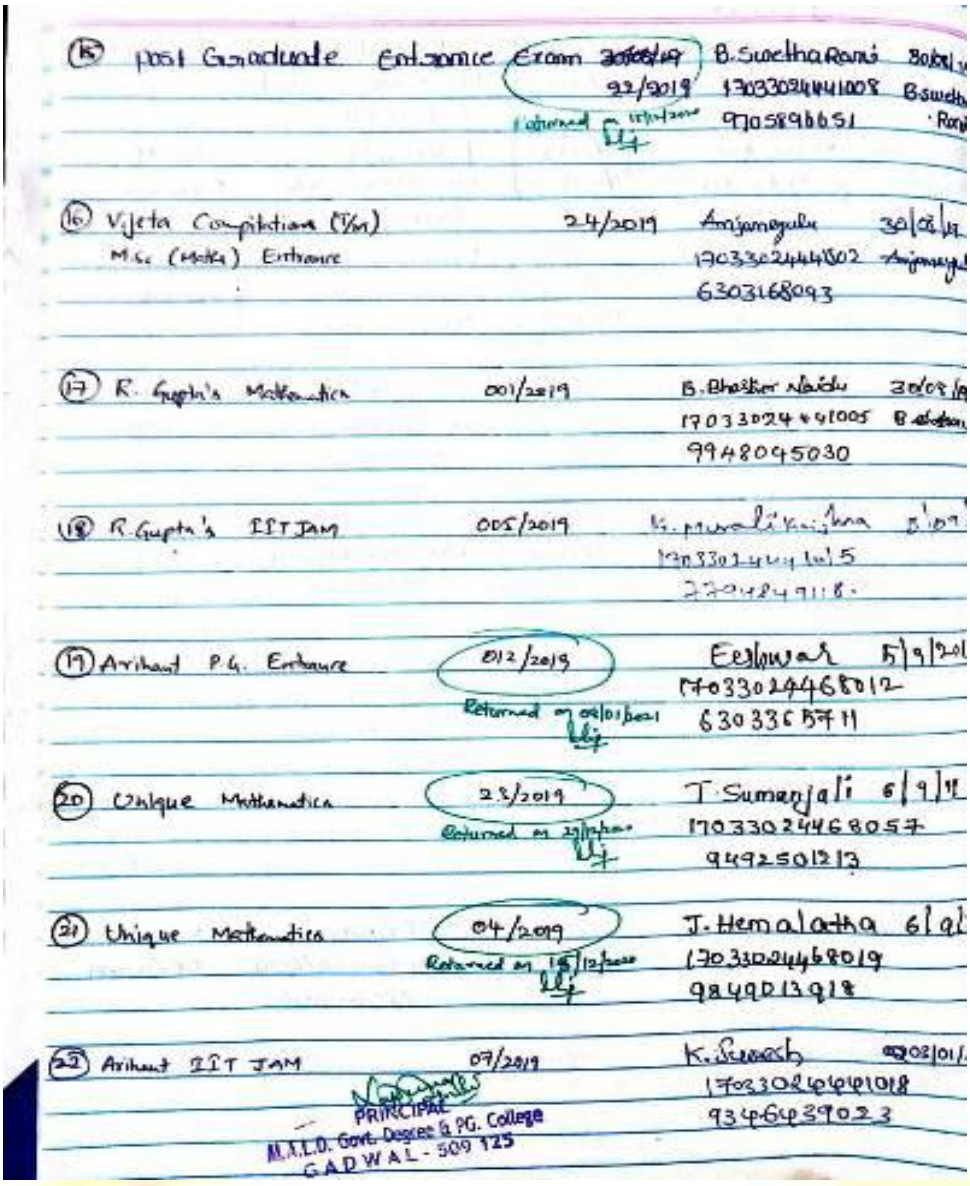

(15)	Post Graduate Entrance Exam	~~30/08/19~~ 22/2019 Returned on 15/12/2020	B.Swetha Rani 17033024441008 9705896651	30/08/19 B.Swetha Rani
(16)	Vijeta Compilations (T/M) M.Sc (Maths) Entrance	24/2019	Anjanegulu 17033024441002 6303168093	30/08/19 Anjanegulu
(17)	R. Gupta's Mathematics	001/2019	B.Bhaskar Naidu 17033024441005 9948045030	30/08/19 B.Bhaskar
(18)	R.Gupta's IIT JAM	005/2019	K.Murali Krishna 17033024441015 7794849118	5/09
(19)	Arihant P.G. Entrance	012/2019 Returned on 08/01/2021	Eeshwar 17033024468012 6303365711	5/9/201
(20)	Unique Mathematics	23/2019 Returned on 29/12/2020	T.Sumanjali 17033024468057 9492501213	6/9/19
(21)	Unique Mathematics	04/2019 Returned on 15/12/2020	J.Hemalatha 17033024468019 9849013918	6/9/
(22)	Arihant IIT JAM	07/2019	K.Suresh 17033024441018 9346439023	03/01/

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CPGET - 2020
DIRECTORATE OF ADMISSIONS : OSMANIA UNIVERSITY, HYDERABAD

RANK CARD

Hall Ticket No. 6808753018
Candidate's Name : D K ARUNA
Father's Name : D K BHEEMAIAH
Test Name : M.Sc. Mathematics
Community : BC_B
Date of Birth : 10/05/2000
Marks Obtained : 44
Rank : 491
Signature

INSTRUCTIONS TO THE CANDIDATE

Name of the Student : DK. Aruna

Roll No : 17033024468010

Year of Passed : 2020

Mathematics
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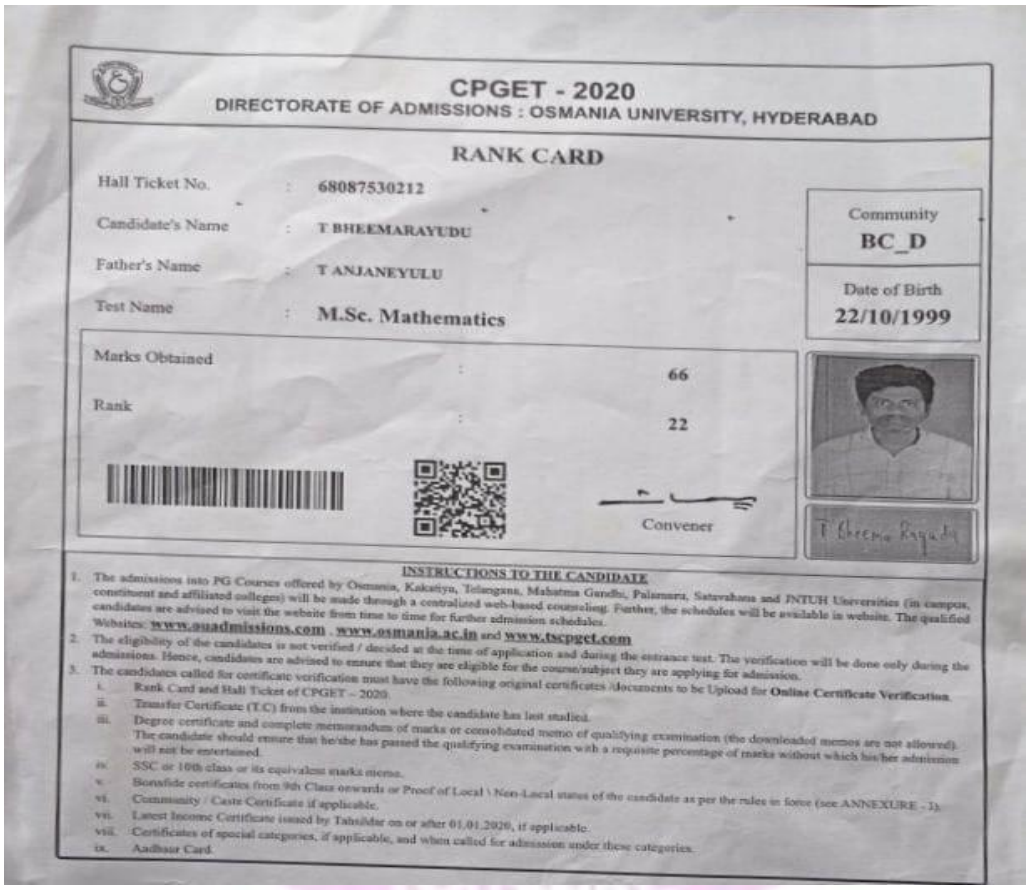
GADWAL - 509125



CPGET - 2020
DIRECTORATE OF ADMISSIONS : OSMANIA UNIVERSITY, HYDERABAD

RANK CARD

Hall Ticket No. : 68087530212
Candidate's Name : T BHEEMARAYUDU
Father's Name : T ANJANEYULU
Test Name : M.Sc. Mathematics

Community: BC_D
Date of Birth: 22/10/1999

Marks Obtained : 66
Rank : 22

Convener

INSTRUCTIONS TO THE CANDIDATE

1. The admissions into PG Courses offered by Osmania, Kakatiya, Telangana, Mahatma Gandhi, Palamuru, Satavahana and JNTUH Universities (in campus, constituent and affiliated colleges) will be made through a centralized web-based counseling. Further, the schedules will be available in website. The qualified candidates are advised to visit the website from time to time for further admission schedules.
Websites: www.quadmissions.com , www.osmania.ac.in and www.tscpget.com
2. The eligibility of the candidates is not verified / decided at the time of application and during the entrance test. The verification will be done only during the admissions. Hence, candidates are advised to ensure that they are eligible for the course/subject they are applying for admission.
3. The candidates called for certificate verification must have the following original certificates /documents to be Upload for **Online Certificate Verification**.
   i. Rank Card and Hall Ticket of CPGET – 2020.
   ii. Transfer Certificate (T.C) from the institution where the candidate has last studied.
   iii. Degree certificate and complete memorandum of marks or consolidated memo of qualifying examination (the downloaded memos are not allowed). The candidate should ensure that he/she has passed the qualifying examination with a requisite percentage of marks without which his/her admission will not be entertained.
   iv. SSC or 10th class or its equivalent marks memo.
   v. Bonafide certificates from 9th Class onwards or Proof of Local \ Non-Local status of the candidate as per the rules in force (see ANNEXURE - I).
   vi. Community / Caste Certificate if applicable.
   vii. Latest Income Certificate issued by Tahsildar on or after 01.01.2020, if applicable.
   viii. Certificates of special categories, if applicable, and when called for admission under these categories.
   ix. Aadhaar Card.

Name of the Student : T.Bheema rayudu
Roll No : 17033024468053
Year of Passed : 2020

Mathematics
Govt. Degree College
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