Student profile according to programmes of study, gender, region etc

The ratio of (Male/Female) the students who are joining.

i) M.Sc. Programme is 3:2
ii) Ph.D Programme is 5:1
iii) M.Phil programme is 3:2

- Around 96% of the students are from Telangana (Local region) and others are non-locals
- During 2003-08, 10 research papers were published by research scholars; one scholar was awarded Ph.D. and 11 students were awarded M.Phil. Degrees.

Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes

- Changes are made in curriculum of M.Sc. and Ph.D programmes during 2008-09 academic year. All the faculty members have deeply involved in the process of updating the syllabus in the courses pertaining to the above programmes.
- Faculty members have also suggested the syllabus for some interdisciplinary and job oriented electives in III and IV semesters which will commence during the next academic year.

Trend in the success rate and drop out rate of students during the last five years

- Success rate of the students in M.Sc. lies between 92-95 percentage and in M.Phil the success rate is 100%. The drop out rate in both the programmes is almost 5%.

Learning resources of the department like library, computers, laboratories and other such resources

- The departmental library consists of 1036 standard texts and reference books.
- The computer laboratory consists of 20 computers and equipped with soft-ware like Java, C,C++, Pascal, dbase, lotus, visual basic and MS Office.
- One LCD projector and one OHP are being used by the faculty members in the lecture halls.
- Internet facility is also there in the laboratory.

Enhancement of the learning resources during the past five years

- One LCD projector and one OHP are procured during the last five years.
- Large number of (latest editions) books has been added to the departmental library
- Internet facility is provided.

Modern Teaching methods in practice other than the lecture method

- Lectures through power point presentation method are in practice.

Participation of teachers in academic and personal counseling of students
Teachers are put on the job of academic and professional counseling of students. This will help the students in choosing the right profession or continuing the higher studies in proper professional courses.

**Participation of teachers in academic activities other than teaching and research**

- Teachers of the department have participated as resource persons in the programmes, viz, Workshops, Training Programmes for U.G/P.G teachers of affiliated colleges. (see annexure 1,2,3,4.).
- Teachers have participated in the preparation of books for the course material of M.Sc. through distance education.( see annexure -7)
- Teachers have also participated in the writing/editing of text books for intermediate Education (see Annexure –

**The thrust areas of the department**

1. Mathematical theory of elasticity.
2. Algebra.
3. Performance study of Internet Router – Matrix Geometric techniques.

**Participation of the department in the extension activities of the university.**

- Students of the department usually participate in NSS Programme and Blood donation camps.

**Method of continuous student assessment**

- The semester system with internal assessment will facilitate the student to go for two internal assessment tests and one end examination during each semester. This method provides the continuous evaluation of the students’ performance and in turn it will help the student to be active during his studies.

**Placement record of the past students and the contribution of the department to the student placements**

- During the campus interviews on 6-5-2008, 12 students were selected for mentor posts in “Rajiv Gandhi University of knowledge technologies”. One student has got the position of teaching assistant at Jawaharlal Nehru Technological University

**Significant achievements of the department or faculty or students during the past five years**

- One student of the department got through the NET examination and has been doing research at IIT, Madras.
- One student of the department got through the GATE examination and is doing M.Tech. (Computer Science) course at IIT Khargpur.
- 12 students got jobs in campus interviews for first time
- Two faculty members have presented their research papers in the international conference, held at Chennai and Coimbatore.
- One faculty member has presented two research papers in the international conference, held at New York.
- One faculty member has written four text books for intermediate education, published by Telugu academy.
- Department conducted one departmental conference, two workshops for U.G teachers and three training programmes for P.G teachers of affiliated colleges. Due to these programmes, the teachers of affiliated colleges can update their knowledge, teaching skills, and improve their quality of teaching and they can impart the quality education in the class rooms. So, this kind of efforts will reduce the quality gaps between good and average colleges so that there will be an over all improvement in the quality of higher education, and not limited to few institutions.
- Department organized a Research conference (XV congress of A.P. society for mathematical
sciences) during 11-13 Aug. 2006, due to this, the Teachers and research scholars have been benefited a lot from the deliberations took place in the conference.

DEPARTMENTAL CONFERENCE


- Programme Director: Prof. K. Sambaiah
- One day Departmental Conference for U.G Teachers was conducted on revised first year U.G (Mathematics) syllabus.
- 100 U.G Teachers attended this conference
- An accurate Method of conduct of practical classes in Mathematics was evolved.

WORKSHOP ON REAL ANALYSIS,

Oct. 27-28, 2005

- Programme Director: Prof. S. Raj Reddy
- Two-day Workshop for U.G Teachers was conducted on “Real Analysis”, which is part of U.G second year revised Mathematical syllabus.
- 140 U.G Teachers attended this conference
- Eight lectures were arranged on the following topics.
  i. Sequences          ii. Infinite series
  iii. Limits            iv. Continuity
  v. Differentiation  vi. Maxima & Minima
  vii. Properties of Riemann integrable functions
  viii. Fundamental theorem of integral calculus

WORKSHOP ON RINGS AND LINEAR ALGEBRA,

July 13-14, 2006

- Programme Director: Dr. T. Srinivas
- Two-day Workshop for U.G Teachers was conducted on “RINGS AND LINEAR ALGEBRA”, which is in the curriculum of U.G third year revised syllabus.
- 150 U.G Teachers attended this workshop
- Eight lectures were arranged on the following topics.
  i. Essentials of rings and fields
  ii. Factorization of Polynomials
  iii. Vector spaces-Bases and dimension
  iv. Matrix Representation of a linear transformations
  v. System of linear equations
  vi. Eigenvalues and Eigenvectors
  vii. Diagonalization
  viii. Operators on inner product spaces

TRAINING PROGRAMME TO P.G TEACHERS OF AFFILIATED COLLEGES - Jan. 2-6, 2007

(Sponsored by APSCHE, Hyd.)
Five-day Training Programme was conducted for P.G Teachers to update their knowledge in the subject contents pertaining to the syllabus of II, IV Semesters of M.Sc. (Mathematics).

36. P.G Teachers attended the programme.

16 lectures were arranged on the following.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Title of the lecture</th>
<th>Name of the Resource person</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Automorphism groups, fixed fields and separable, normal extensions</td>
<td>Dr. T. Srinivas</td>
<td>2-1-2007</td>
<td>2.00-3.30 pm</td>
</tr>
<tr>
<td>2.</td>
<td>Fundamental theorem of Galois theory and fundamental theorem of Algebra</td>
<td></td>
<td>2-1-2007</td>
<td>3.30-5.00 pm</td>
</tr>
<tr>
<td>3.</td>
<td>Examples on Galois theory</td>
<td></td>
<td>3-1-2007</td>
<td>10.00-11.30 am</td>
</tr>
<tr>
<td>4.</td>
<td>Topology of the real line</td>
<td>Prof. B. Ramabrahman</td>
<td>3.1.2007</td>
<td>11.30-1.00 pm</td>
</tr>
<tr>
<td>5.</td>
<td>Separation axioms</td>
<td></td>
<td>3.1.2007</td>
<td>2.00-3.30 pm</td>
</tr>
<tr>
<td>6.</td>
<td>Bolzano-weier stress theorem</td>
<td></td>
<td>3.1.2007</td>
<td>3.30-5.00 pm</td>
</tr>
<tr>
<td>7.</td>
<td>Conformal mapping</td>
<td>Prof. T. Ram Reddy</td>
<td>4.1.2007</td>
<td>10.00-11.30 am</td>
</tr>
<tr>
<td>8.</td>
<td>Normal families</td>
<td></td>
<td>4.1.2007</td>
<td>11.30-1.00 pm</td>
</tr>
<tr>
<td>9.</td>
<td>Riemann mapping theorem</td>
<td></td>
<td>4.1.2007</td>
<td>2.00-3.30 pm</td>
</tr>
<tr>
<td>10.</td>
<td>Bilinear transformations</td>
<td></td>
<td>4.1.2007</td>
<td>3.30-5.00 pm</td>
</tr>
<tr>
<td>11.</td>
<td>Graphs</td>
<td>Prof. S. Raj Reddy</td>
<td>5.1.2007</td>
<td>10.00-11.30 am</td>
</tr>
<tr>
<td>12.</td>
<td>Four color problem</td>
<td></td>
<td>5.1.2007</td>
<td>11.30-1.00 pm</td>
</tr>
<tr>
<td>13.</td>
<td>Applications of network flows</td>
<td></td>
<td>5.1.2007</td>
<td>2.00-3.30 pm</td>
</tr>
<tr>
<td>14.</td>
<td>Elementary functions</td>
<td></td>
<td>5.1.2007</td>
<td>3.30-5.00 pm</td>
</tr>
<tr>
<td>15.</td>
<td>Fourier series</td>
<td></td>
<td>6.1.2007</td>
<td>10.00-11.30 am</td>
</tr>
<tr>
<td>16.</td>
<td>The Gamma function</td>
<td></td>
<td>6.1.2007</td>
<td>11.30-1.00 pm</td>
</tr>
</tbody>
</table>
Programme Director: Prof. S. Raj Reddy

Four-day Training Programme was conducted for P.G Teachers to update their knowledge in the subject of TOPOLOGY

30. P.G Teachers attended the programme.
13 lectures were arranged on the following
lecture notes was supplied to all the participants.

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Speaker</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is Topology?</td>
<td>By Prof. I.Rama Bradhra Sharma</td>
<td>8-3-2008</td>
<td>11.30-1.00p.m</td>
</tr>
<tr>
<td>2</td>
<td>Topological Spaces</td>
<td></td>
<td>8-3-2008</td>
<td>2.00-3.30p.m</td>
</tr>
<tr>
<td>3</td>
<td>Open Bases and open sub bases.</td>
<td>By Sri. K.Rajagopal Rao</td>
<td>8-3-2008</td>
<td>3.30-5.00pm</td>
</tr>
<tr>
<td>4</td>
<td>Compactness</td>
<td></td>
<td>9-3-2008</td>
<td>10.00-11.30a.m</td>
</tr>
<tr>
<td>5</td>
<td>Product Spaces</td>
<td>By Prof. P.Veeramani</td>
<td>9-3-2008</td>
<td>11.30-1.00p.m</td>
</tr>
<tr>
<td>6</td>
<td>Compactness for Metric Spaces</td>
<td>By Prof. B.Ramabrahmam</td>
<td>9-3-2008</td>
<td>2.00-3.30p.m</td>
</tr>
<tr>
<td>7</td>
<td>Some Examples on Totally bounded Metric Spaces</td>
<td></td>
<td>9-3-2008</td>
<td>3.30-5.00pm</td>
</tr>
<tr>
<td>8</td>
<td>Separation</td>
<td>By Dr. T.Srinivas</td>
<td>10-3-2008</td>
<td>10.00-11.30a.m</td>
</tr>
<tr>
<td>9</td>
<td>Theorems on Hausdorff Spaces</td>
<td>By Dr. T.Srinivas</td>
<td>10-3-2008</td>
<td>11.30-1.00p.m</td>
</tr>
<tr>
<td>10</td>
<td>Completely regular spaces and normal spaces</td>
<td>By Prof. T.Ram Reddy</td>
<td>10-3-2008</td>
<td>2.00-3.30p.m</td>
</tr>
<tr>
<td></td>
<td>Remarkable Theorems in Normal spaces</td>
<td></td>
<td>10-3-2008</td>
<td>3.30-5.00p.m</td>
</tr>
<tr>
<td>11</td>
<td>Connected</td>
<td></td>
<td>11-3-2008</td>
<td>10.00-11.30a.m</td>
</tr>
<tr>
<td></td>
<td>Totally Disconnected Spaces</td>
<td>By Dr. C.Goverdhan</td>
<td>11-3-2008</td>
<td>11.30-1.00p.m</td>
</tr>
<tr>
<td></td>
<td>Locally connected spaces</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Five-day Training Programme was conducted for P.G Teachers on the subjects related to the syllabus I,III Semesters of M.Sc. (Mathematics).

26. P.G Teachers attended the programme.

16 lectures were arranged on the following.

Lecture notes was supplied to all the participants.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Title of the Lecture</th>
<th>Name of the Resource Person</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Hahn-Banach theorem</td>
<td>Dr.T.Srinivas, K.U.</td>
<td>01-07-08</td>
<td>2.00-3.30</td>
</tr>
<tr>
<td>2</td>
<td>Application of Hahn-Banach theorem</td>
<td>Dr.T.Srinivas, K.U.</td>
<td>01-07-08</td>
<td>3.30-5.00</td>
</tr>
<tr>
<td>3</td>
<td>Normal series</td>
<td>Dr C. Goverdhan, O.U</td>
<td>02-07-08</td>
<td>10.00-11.30</td>
</tr>
<tr>
<td>4</td>
<td>Solvable Groups</td>
<td>Dr C. Goverdhan, O.U</td>
<td>02-07-08</td>
<td>11.30-1.00</td>
</tr>
<tr>
<td>5</td>
<td>The Natural Imbedding of N in N**</td>
<td>Prof. B.Ramabrahmam, K.U.</td>
<td>02-07-08</td>
<td>2.00-3.30</td>
</tr>
<tr>
<td>6</td>
<td>The Spectral theorem</td>
<td>Prof. B.Ramabrahmam, K.U.</td>
<td>02-07-08</td>
<td>3.30-5.00</td>
</tr>
<tr>
<td>7</td>
<td>Transition From Riemann Integration To Lebesgue Integration</td>
<td>Dr. P. Malla Reddy, K.U</td>
<td>03-07-08</td>
<td>10.00-11.30</td>
</tr>
<tr>
<td>8</td>
<td>Comparison of Lebesgue and Riemann Integral</td>
<td>Dr. P. Malla Reddy, K.U</td>
<td>03-07-08</td>
<td>11.30-1.00</td>
</tr>
<tr>
<td>9</td>
<td>Open Mapping Theorem</td>
<td>Prof. T. Ram Reddy, K.U</td>
<td>03-07-08</td>
<td>2.00-3.30</td>
</tr>
<tr>
<td>10</td>
<td>Closed Graph Theory</td>
<td>Prof. T. Ram Reddy, K.U</td>
<td>03-07-08</td>
<td>3.30-5.00</td>
</tr>
<tr>
<td>11</td>
<td>Sylow theorems</td>
<td>Prof. K. Satyanarayana, O.U</td>
<td>04-07-08</td>
<td>10.00-11.30</td>
</tr>
<tr>
<td>12</td>
<td>Application of Sylow theorems</td>
<td>Prof. K. Satyanarayana, O.U</td>
<td>04-07-08</td>
<td>11.30-1.00</td>
</tr>
<tr>
<td>13</td>
<td>Solution of boundary value problems.</td>
<td>Prof.K.Sambaiah,, K.U</td>
<td>04-07-08</td>
<td>2.00-3.30</td>
</tr>
<tr>
<td>14</td>
<td>A Non measurable set</td>
<td>Prof. S. Raj Reddy, K.U</td>
<td>04-07-08</td>
<td>3.30-5.00</td>
</tr>
<tr>
<td>15</td>
<td>Group action on a set</td>
<td>Prof. U.M.Swamy Andhra University</td>
<td>05-07-08</td>
<td>10.00-11.30</td>
</tr>
<tr>
<td>16</td>
<td>Applications of G sets to counting</td>
<td>Prof. U.M.Swamy Andhra University</td>
<td>05-07-08</td>
<td>11.30-1.00</td>
</tr>
</tbody>
</table>
XV CONGRESS of
ANDRAHA PRADESH SOCIETY FOR MATHEMATICAL SCIENCES
Aug. 11-13, 2006 - (Sponsored by KU and U.G.C)

- Organizing Secretary : Dr. T. Srinivas
- Presidential address by Prof. U. M. Swamy,
  GALOIS CONNECTIONS
- Keynote Address by Prof. T. K. V. Iyengar,
  STATE SPACE APPROACH TO A PROBLEM IN FLUID DYNAMICS

- 130 members attended this Three-day Conference.
- 50 Research papers were presented.
- 7 Endowment lectures were arranged on the following topics.
  i. On the Banach Algebra of a class of Analytic functions Prof. I. H. Naga Raja Rao
  ii. The Characterization of Assosymmetric Rings Prof. K. Surarna
  iii. Polynomials that do not obey commutative law Prof. V. Kannan
  iv. Triangle geometry, N. Vijaya Prasad.
  v. Fermat’s little theorem-function-theoretic Proofs, Prof. V. Siva Rama Prasad
  vii. Statistics as a Technology for 21st century, Prof. K. U. S. Sarma

Books Published by the faculty (Prof. K. Sambaiah)

PREPARATION OF COURSE MATERIAL M.SC (MATHEMATICS)
SCHOOL OF DISTANT LEARNING AND CONTINUING EDUCATION

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Name of the Teacher</th>
<th>Name of the subject of the course material</th>
</tr>
</thead>
</table>
3. Prof. K. Sambaiah
   ii) Numerical Analysis (2007)

4. Dr. T. Srinivas
   i) Algebra (2006)

5. Sri. K. Rajagopal Rao

6. Prof. T. Ram Reddy (Retd. 2007)
   i) Measure and Integration (2007)

List of candidates who passed NET/GATE
2. Balaji, GATE : 2008

List of papers presented in conferences/workshop by faculty

<table>
<thead>
<tr>
<th>No</th>
<th>Name of the Teacher</th>
<th>Title of the Paper presented</th>
<th>Name of the conference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. T. Srinivas</td>
<td>In this Conference, Sri A.K.S.Chandrashekar Rao (Research Scholar working for Ph.D under the supervision of Dr. T. Srinivas, presented a paper entitled “SS-Elements, Ideals of group Algebra”.</td>
<td>XIV Congress of Andhra Pradesh Society for Mathematical Sciences</td>
</tr>
<tr>
<td>2</td>
<td>Prof. T. Ram Reddy</td>
<td>“Neighbourhoods of certain of subclass of SP(B)”,</td>
<td>International Conference on Geometric function theory, special functions and applications</td>
</tr>
<tr>
<td>3</td>
<td>Dr. T. Srinivas</td>
<td>In this Seminar, Sri A.K.S.Chandrashekar Rao (Research Scholar working for Ph.D under my supervision) presented a paper entitled “On Semi Simplicity of a class of Group Algebras”</td>
<td>National Seminar on Algebra and its applications</td>
</tr>
<tr>
<td>4</td>
<td>Prof. S. Raj Reddy</td>
<td>Propogation of transverse surface waves between two nonlocal elastic media</td>
<td>XV Congress of Andhra Pradesh Society for Mathematical Sciences</td>
</tr>
<tr>
<td>5</td>
<td>Dr. T. Srinivas</td>
<td>Characterization of n-dimensional normed near-algebras</td>
<td>XV Congress of Andhra Pradesh Society for Mathematical Sciences</td>
</tr>
</tbody>
</table>
6. Dr. T. Srinivas
   A note on Normed subnear-algebras of continuous self maps
   XIV Ramanujan Symposium, International Conference on Non-Commutative Rings, Group Rings, Diagram Algebras and Applications

7. Dr. P. Malla Reddy
   An Efficient Approximate Markovian Model for Optical Packet Switches Employing Partial Buffer Sharing Mechanism under Self-Similar Traffic
   IEEE Workshop on High Performance Switching and Routing (HPSR-2007)

8. Dr. P. Malla Reddy
   Performance Analysis of WDM Optical Packet Switches Employing Wavelength Conversion under Markovian Modeled Self-Similar Traffic Input
   IEEE Workshop on High Performance Switching and Routing (HPSR-2007)

Conferences and Workshops Conducted
1. Departmental conference, 13 October, 2004
2. Workshop on Real Analysis, 27-29 October, 2005.
6. Training Programme on Topology for P.G. Teacher’s of affiliated colleges, March 8-11, 2008 (Sponsored by UGC)

Research Publications of the Faculty

Dr. T. Srinivas
8. Kurosh-Amitour Right Jacobson Radical of Type – 1 and 2 for right near, rings by Ravi


Dr. P. Malla Reddy


24. Shou-Kuo Shao, Meng-Guang Tsai, Hen-Wai Tsao, Paruvelli Sreedevi, Malla Reddy Perati and


Prof. T. Ram Reddy


Mr. E. Satyanarayana


I. List of candidates selected for Mentor Posts at Rajiv Gandhi university of
1. D.Balaji.
2. D.jyothi Laxmi
3. B.Rama Krishna
4. K.Sravani
5. K.Kalpana
6. L.Trahai
7. D.Praveen kumar
8. S.Ravi
9. Tirupathi Rao
10. V.Suman Kumar
11. P.Santhosh
12. G.Jayasree

II. Candidate selected for two position of teaching assistant at Jawaharlal Nehru Technological University(JNTU)
1. J.Murali Kumar