



# GOVT. DEGREE COLLEGE, BELLAMPALLY DEPARTMENT OF MATHEMATICS

## DEPARTMENTAL PROFILE

## **PROFILE OF DEPARTMENT OF MATHEMATICS**

#### **DEPARTMENT HISTORY**

The Department of MATHEMATICS was established in this college with B.Sc General Course in the year 2018-19 with a view to provide Science education to the students of this region. Eminent and well experienced faculty served at this department. In a bid to impart the computer knowledge which is the need of the hour, B.Sc(MPC&MPCs) was also introduced to cater to the needs of the English Medium students.

#### **EXECUTIVE SUMMARY:**

- Department have conducted a good number of Co-curricular activities such as Student Seminars, Assignment, Extension Lectures and MATHEMATICS Quiz etc. to increase their participant and collaborative learning.
- To leverage the technology, interestingly effectively using ICT for making the teaching learning more effective.
- Eminent, Scholastic and Rich Experienced Teachers have served at the Department and Department of MATHEMATICS valuable services in various Academic, Administrative, Extension Committee.

#### STRENGTHS, WEAKNESSES, OPPORTUNITITES & CHALLENGES:

#### Strengths:

Well ventilated and spacious classrooms.

Availability of CCTV Cameras for safety and security.

#### Weaknesses:

Less number of admissions.

#### **Opportunities:**

There is lot of potential increase for the admissions in the days to come.

P.G Course i.e., M.Sc Mathematics, can be introduced to cater to demands of this region students.

More number of Certificate and Value Added Courses can also be introduced in future.

#### Challenges:

Sever competition from private colleges which are indulging in unfair practices in admissions.

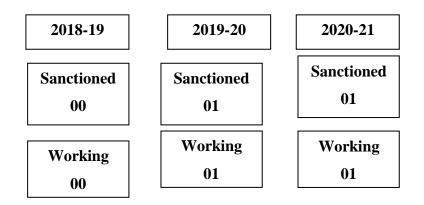
The College is suffering from location problem.

#### **BASIC INFORMATION**

#### Table 1: Academic Information (Under Graduation Level)

| Year    | Name of the<br>Programmed |         | Entry<br>Qualification | Medium of<br>Instruction | Sanctioned<br>Strength | Number of<br>Students<br>Admitted |
|---------|---------------------------|---------|------------------------|--------------------------|------------------------|-----------------------------------|
| 2020-21 | B.Sc MPC&<br>M PCs        | 3 Years | Intermediate           | English                  | 60                     | 26                                |
| 2019-20 | B.Sc MPC&<br>M PCs        | 3 Years | Intermediate           | English                  | 60                     | 33                                |

## Chart 1: Number of Teachers working against sanctioned post in Dept. of MATHEMATICS during the last five years:



| Table 2: Details of Qualification | of Teaching Faculty | v during the last five years |
|-----------------------------------|---------------------|------------------------------|
|-----------------------------------|---------------------|------------------------------|

| Year    | Name of the Teaching  | Qualification | Designation    | Experience |
|---------|-----------------------|---------------|----------------|------------|
|         | Faculty               |               |                |            |
| 2019-20 | T.Naveen Chander Raju |               | Asst.Proffesor | 14 Years   |
| 2018-19 | T.Gangaiah            |               | Asst.Proffesor | 10 Years   |

#### **CRITERION-1 CURRICULAR ASPECTS**

#### **Curricular Planning and Implementation**

The College is affiliated to Kakatiya University, Warangal and the curriculum for the B.Sc courses is prescribed by the Board of Studies, Department of MATHEMATICS of the University. The curriculum planning and implementation work is undertaken in a planned way. The Curriculum is being implemented according to the Almanac provided by the Affiliating University and Academic Calendar issued by the Commissioner of Collegiate Education, Hyderabad. The Principal of the College conducts the review meetings once in a month at their respective department to know the status of the completion of syllabus and to monitor the conduct of other co-curricular activities such as Remedial Coaching Classes, Student Seminars, Quiz Competitions, Assignments and Internal Exams etc. The faculty is encouraged to leverage the modern technology to make the teaching- learning process more effective. The Department also organizes various programs related to the academics such as Field Trips, Educational Tours, TSKC and TASK etc.

#### 2. Academic Flexibility

Introduction of CBCS: The Govt. of Telangana introduced Choice Based Credit System (CBCS) in the state as per the guidelines given by the UGC in all the Universities including the Kakatiya University to which this college is affiliated, from the academic year 2016-17. The staff members have been constantly in touch with the changes that have been brought by the Kakatiya University.

#### **1.3 Curriculum Enrichment**

According to the suggestions and guidelines of the Telangana State Council of Higher Education (TSCHE), the Affiliating University i.e., Kakatiya University, revises the curriculum from time to time to suit the industry requirements. The Department in line with College focuses on effective implementation of the Core Courses coupled with the Generic Electives and Subject Specific Electives and Skill Enhancement Courses in letter and spirit. Besides core courses, the Department also implements the Skill Enhancement Courses such as Environmental Science, Gender Sensitization, Communication Skills in English and Basic Computer Skills.

#### 1.3.1 Number of Value Added Course:

The Department of MATHEMATICS introduced Value Added Course on Arithmetic and Reasoning in MATHEMATICS during the year 2018-19 to the B.Sc students with a view to add some additional value to the existing subject knowledge and to enhance their skill.

#### **1.4 Feedback System:**

Feedback has been collected manually and online from the students on teacher's performance and has been analyzed to find out the performance of the Teachers across the parameters. It helps to find out the gaps and to make teaching learning process more effective and to meet the needs of the students in all aspects. The responses have been collected on five point rating scale ranging from Poor to Excellent from about 20 students each.

#### Table 3: Teacher-wise and Year-wise Feedback Analysis Overall Response

|     |                     | Feedback Analysis   |         |  |  |  |
|-----|---------------------|---------------------|---------|--|--|--|
| S1. | Name of the Teacher | Overall Response in |         |  |  |  |
| No  | Name of the Teacher | 69%                 |         |  |  |  |
|     |                     | 2018-19             | 2019-20 |  |  |  |
| 1   | T.Gangaiah          | 63%                 |         |  |  |  |
| 2   | T.Naveen Chander    |                     | 75%     |  |  |  |
| 2   | Raju                |                     | 7.5 70  |  |  |  |

#### **CRITERION-2: TEACHING LEARNING AND EVALUATION**

#### 2.1 Student Enrolment and Profile

#### Table 4: Year-Wise of Students

| Year &          | 2019  | 9-20 | 20   | 020-21 |
|-----------------|-------|------|------|--------|
| course          | Intk. | Adm. | Intk | Adm.   |
|                 |       |      |      |        |
| B.ScT/M&<br>E/M | 60    | 33   | 60   | 26     |

#### SOCIO-ECONOMIC STATUS OF STUDENTS:

|             |              |    | 201 | L9-20 | 20 |       |    | 20 | 20-20 | 21 |       |    | 20 | 21-20 | 22 |       |
|-------------|--------------|----|-----|-------|----|-------|----|----|-------|----|-------|----|----|-------|----|-------|
| Year        | Caste        | SC | ST  | BC    | oc | Total | sc | ST | BC    | oc | Total | SC | ST | BC    | oc | Total |
|             | Male         | 04 | 03  | 16    | 01 | 24    | 05 | 04 | 14    | 02 | 25    | 04 | 00 | 13    | 02 | 19    |
| lst year    | Female       | 03 | 03  | 09    | 03 | 18    | 04 | 01 | 13    | 01 | 19    | 04 | 02 | 08    | 00 | 14    |
|             | Total        | 07 | 06  | 25    | 04 | 42    | 09 | 05 | 27    | 03 | 44    | 08 | 02 | 21    | 02 | 33    |
|             |              |    | 201 | 19-20 | 20 |       |    | 20 | 20-20 | 21 |       |    | 20 | 21-20 | 22 |       |
|             | Caste        | sc | ST  | BC    | oc | Total | sc | ST | BC    | oc | Total | SC | ST | BC    | oc | Total |
| ll ndyear   | Male         | -  | -   | -     | -  | -     | 04 | 00 | 09    | 01 | 14    | 04 | 04 | 11    | 01 | 20    |
| ы<br>П      | Total Female | _  | -   | _     | _  | -     | 03 | 02 | 07    | 02 | 14    | 03 | 01 | 10    | 00 | 14    |
|             | Total        | _  | -   | _     | _  | -     | 07 | 02 | 16    | 03 | 28    | 07 | 05 | 21    | 01 | 34    |
|             |              |    | 201 | 19-20 | 20 | 1     |    | 20 | 20-20 | 21 |       |    | 20 | 21-20 | 22 |       |
|             | Caste        | SC | ST  | BC    | oc | Total | sc | ST | BC    | oc | Total | SC | ST | BC    | oc | Total |
| lll rd year | Male         | _  | -   | -     | _  | _     | -  | -  | -     | -  | -     | 04 | 00 | 09    | 01 | 14    |
| III         | Female       | _  | _   | _     | _  | _     | -  | -  | -     | -  | -     | 03 | 02 | 06    | 02 | 13    |
|             | Total        | _  | _   | -     | -  | -     | -  | -  | -     | -  | -     | 07 | 02 | 15    | 03 | 27    |

Category wise student strength particular of B.Sc.(MPC&MPCs)

| Year    | Class    | SC | ST | BC | OC | Total |
|---------|----------|----|----|----|----|-------|
|         | l Year   | 07 | 06 | 25 | 04 | 42    |
|         | II Year  | 00 | 00 | 00 | 00 | 00    |
| 2019-20 | III Year | 00 | 00 | 00 | 00 | 00    |
|         | Total    | 07 | 06 | 25 | 04 | 42    |
|         | l Year   | 09 | 05 | 27 | 03 | 44    |
|         | ll Year  | 07 | 02 | 16 | 03 | 28    |
| 2020-21 | III Year | 00 | 07 | 00 | 00 | 07    |
|         | Total    | 16 | 14 | 43 | 06 | 79    |
|         | l Year   | 08 | 02 | 21 | 02 | 33    |
|         | II Year  | 07 | 05 | 21 | 01 | 34    |
| 2021-22 | III Year | 07 | 02 | 15 | 03 | 27    |
|         | Total    | 22 | 09 | 57 | 06 | 94    |

#### Year wise student strength particulars of B.Sc.(M.P.C&M.P.Cs)

| Class/Year | 2  | 019-20 | )  |    | 2020-21 | [  |    | 2021-22 |    |
|------------|----|--------|----|----|---------|----|----|---------|----|
|            | м  | W      | т  | М  | W       | Т  | м  | W       | Т  |
| l Year     | 24 | 18     | 42 | 25 | 19      | 44 | 19 | 14      | 33 |
| ll Year    | -  | -      | -  | 14 | 14      | 28 | 20 | 14      | 34 |
| III Year   | -  | -      | -  | -  | -       | -  | 14 | 13      | 27 |
| Total      | 24 | 18     | 42 | 39 | 33      | 72 | 53 | 41      | 94 |

#### 2.2 Catering to Student Diversity

The Department of MATHEMATICS takes every measure possible to understand the needs and requirements of the students before the commencement of the program. Students are counseled at the time of admission and an Orientation program is organized in which students are familiarized with the course, mode of internal assessment as well as facilities available in the college. Teachers before beginning their courses informally get the pulse of the students in the class, their knowledge about the course and their comfort level with English as a medium of instruction. Teachers during class interaction identify students' potential and then devise strategies to reduce the gap in the knowledge and skills.

#### **2.3 Teaching-Learning Process**

Learning at the college has been changed from teacher centrism to the student centric after introduction of the CBCS. The experiential and participant learning are the effective and active modes of learning which are being adopted enormously at the Department of MATHEMATICS. Visits to other institutes, field and educational tours, seminars and talks by experts are organized every year. Students are given individual projects and class assignments, focusing on self-study and independent learning. They are also assigned group projects and activities which promote peer learning and team building. Classroom discussions, debates, seminars, quiz programmes, presentations by students, brain storming activities, creating mind maps facilitate participant learning. Extension activities, internships and training's ensure experiential learning for students.

#### **2.4 Academic Activities**

The staff maintains Teaching diaries, Synopsis and prepares Annual Academic plans to have more systematic approach. Departmental meetings are convened every month to discuss various issues pertaining to academic as well as administrative matters. The faculty of the department strictly adheres to the academic schedule as per the almanac furnished by the university. The time table is framed and workload is distributed among the staff as per the time table.

2.4.1 Extension Lectures Arranged to Students

The Department of MATHEMATICS Conducts Extension Lectures on latest topics in the MATHEMATICS Subjects by inviting eminent persons such as Assistant Professors from other colleges.

## **Extension lecturers**

| si.no | Name of the       | Year      | Topic                                | Address                               |
|-------|-------------------|-----------|--------------------------------------|---------------------------------------|
|       | Guest Lecturer    |           |                                      |                                       |
| 1     | D.Madhava Krishna | 2019-2020 | Partial<br>Differential<br>Equations | Govt.Degree<br>College<br>Kaghaznagar |



## **Student Seminars**

Teachers of MATHEMATICS Department have conducted a good number of Student Seminars in various topics such as Differential calculus, Differential equations, Real numbers, and Group theory to enhance the participatory learning to increase the subject knowledge and skill.

## LIST OF STUDENT SEMINARS

| SI.<br>No | Name of the<br>student | Group & Year | Торіс                     |
|-----------|------------------------|--------------|---------------------------|
| 1         | V.Raviteja             | MPC, l year  | Partial Differentitiation |
| 2         | S.Sheerisha            | MPC, I year  | Partial Differentitiation |

| 3 | P.Ramadevi | MPC, I year  | Partial Differentitiation |
|---|------------|--------------|---------------------------|
| 4 | S.Sravani  | MPC, I year  | Partial Differentitiation |
| 5 | S.Anirudh  | MPCs, I year | Partial Differentitiation |









#### MATHEMATICS QUIZ PROGRAMME

In an attempt to unfold the knowledge of the students, the Department has conducted Quiz Programmes in MATHEMATICS Subject.

Name of the activity :Quiz competition

Topic of the Quiz : General Mathematics

Proposed activity :National Mathematics day

Date : 21/12/2019

No.of students involved : 22

No.of teachers involved : 02

Objectives of the Quiz : To improve skill development of the students and to improve competitive spirit of the students.







#### PARTICIPANTS

| S.No | TEAM - A    | TEAM - B   | TEAM - C      |
|------|-------------|------------|---------------|
| 1    | S.Sravani   | N.Manasa   | V.Raviteja    |
| 2    | S.Sheerisha | P.Ramadevi | A.Bhagya      |
| 3    | J.Ramya     | R.Ravalika | J.Rahul       |
| 4    | L.Sravanthi | B.Ravi     | K.Bhavani     |
| 5    | S.Anirudh   | SK.Asma    | K.Sai Nikitha |
| 6    | P.Anjanna   | G.Varsha   | B.Sandeep     |

WINNERS : RUNNERS :

| S.No | TEAM - A    | TEAM - B   |
|------|-------------|------------|
| 1    | S.Sravani   | N.Manasa   |
| 2    | S.Sheerisha | P.Ramadevi |
| 3    | J.Ramya     | R.Ravalika |
| 4    | L.Sravanthi | B.Ravi     |
| 5    | S.Anirudh   | SK.Asma    |
| 6    | P.Anjanna   | G.Varsha   |

## **GOVERNMENT DEGREE COLLEGE BELLAMPALLY**

## **2.5 Students Group Discussion:**

For effective and efficient teaching, all the Teachers in the MATHEMATICS Department are effectively using ICT.







#### **2.6 Innovation and Creativity in Teaching-Learning:**

At Department of MATHEMATICS innovative, creative and techno oriented teaching methods are being widely adopted for making the teaching-learning process more effective. Modern teaching tools such as LCD Projectors, Smart Boards, Virtual Boards and T-SAT live presentations are widely being used. Interestingly, all the teachers are effectively using the ICT based teaching methods with the help of PPTs

The following innovative and creative Teaching-Learning techniques have been adopted:

- Subject teachers are sharing the subject and competitive information in the 'WhatsApp' group.
- All the subject teachers prepare the subject PPTs in an effective manner and teaching on smart interactive boards to create more interest on learning among students.
- For better understanding of the subject concepts group discussions and debated are organized among the students.
- To inculcate critical thinking, problem solving and research bent, students were encouraged to undertake Study Projects as part of JIGNASA program

#### **2.7 Teacher Profile and Quality**

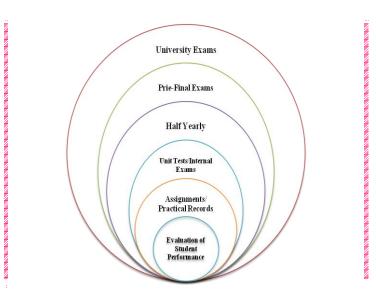
The department has contract based experienced teacher as per the existing UGC guidelines. The staff members are actively engaged in academic as well as research activities by their competencies and interests.

#### **2.8 Evaluation Process and Reforms**

Evaluation of the Students' Performance:

The department conducts slip tests and assignments regularly for all the years for assessing their performance. Marks lists are prepared and placed in a separate register. The department also conducts student tutorials particularly for final years, in which the students actively participate and the same will be recorded in a separate file. The staff also submits the reports of slip tests and assignments conducted in the department in their performance indicators.

#### **Chart 6: Evaluation Process**



Participation in Examination Work:

All the teachers of the department are extensively involving in examination duties like Paper setting, external examiner for B.Sc MATHEMATICS Lab, invigilation, observers, flying squads and as evaluators for KAKATIYA University.

#### **2.9 Reforms in Evaluation Process**

Introduction of Semester System (CBCS): The examination system for evaluating the students' performance has been changed from existing year-wise examination to semester wise examination for continuous evaluation of the students since 2016-17 onwards. Moreover, the credit system has replaced the existing awarding of marks system. The Kakatiya University, to which this college is affiliated, has introduced the new CBCS syllabus, specially designed for semester system, from the academic year 2016-17.

#### **Program Outcomes:**

Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.

- A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.
- Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- Introduction to various courses like group theory, ring theory, field theory, metric spaces, number theory.
- Enhancing students' overall development and to equip them with mathematical modeling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.
- Ability to pursue advanced studies and research in pure and applied mathematical science.

#### **Program Specific Outcomes:**

- > Think in a critical manner.
- Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.
- > Formulate and develop mathematical arguments in a logical manner.
- Acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses.
- Understand, formulate and use quantitative models arising in social science, Business and other contexts.

| <b>Course Outcomes</b> | Course |
|------------------------|--------|
|------------------------|--------|

| S.<br>No. | Semester | Course                    | Credits | Course Outcomes  |
|-----------|----------|---------------------------|---------|--|
| 1         | I        | Differential<br>Calculus  | 5       | Gain Knowledge of fundamental<br>concepts of real numbers.<br>Verify the value of the limit of a<br>function at a point using the definition<br>of the limit<br>Introduction to sequence and series.<br>Learn to check function is continuous<br>understand the consequences of the<br>intermediate value theorem for<br>continuous functions.   |
| 2         | II       | Differential<br>Equations | 5       | Student will be able to solve first<br>order differential equations utilizing<br>the standard techniques for separable,<br>exact, linear, homogeneous, or<br>Bernoulli cases.<br>Student will be able to find the<br>complete solution of a<br>nonhomogeneous differential<br>equation as a linear combination of<br>the complementary function and a<br>particular solution.<br>Student will have a working<br>knowledge of basic application<br>problems described by second order<br>linear differential equations with<br>constant coefficients. |
| 3         | III      | Real Analysis             |         | Student will be to understand differentiation and fundamental  |

| 5 | theorem in differentiation and various rules.   |
|---|---|
|   | Geometrical representation and problem solving on MVT and Rolls theorem.  |
|   | Finding extreme values of function.   |
|   | Describe fundamental properties of<br>the real numbers that lead to the<br>formal development of real analysis. |
|   | Comprehend rigorous arguments developing the theory underpinning real analysis.                                 |
|   | Demonstrate an understanding of limits and how they are used in sequences, series,                              |
|   | Construct rigorous mathematical proofs of basic results in real analysis  |

| 4 | IV | Algebra        | 5 | Learn to solve system of linear<br>equation.<br>Learn to solve Diophantine equation.<br>Learn to find roots of polynomial<br>over rational.<br>Learn to find graphs, roots and primes<br>integer using maxima software.<br>Introduction to complex analysis.<br>Understand the importance of<br>algebraic properties with regard to<br>working within various number<br>systems.<br>Extend group structure to finite<br>permutation groups (Caley Hamilton<br>Theorem).<br>Generate groups given specific<br>conditions.<br>Symmetry using group theory. |
|---|----|----------------|---|--|
| 5 | V  | Linear Algebra | 5 | Introduction to vector space and<br>subspace.<br>Use computational techniques and<br>algebraic skills essential for the study<br>of systems of<br>Linear equations, matrix algebra,<br>vector spaces, eigenvalues and<br>eigenvectors,<br>Orthogonality and Diagonalization.<br>(Computational and Algebraic Skills).  |

#### **Pass Percentage of Students**

The percentage of university results in the subject concerned is maintained. The department discusses the review of results and proper steps will be taken for the improvement of academic performance of the students.

## Academic Result OF MPC (Year wise & Paper wise)



| Academic Year : 2019-20 |          |        |            |  |
|-------------------------|----------|--------|------------|--|
| Paper                   | Appeared | Passed | Percentage |  |
| SEM-1                   | 34       | 06     | 18         |  |
| SEM-2                   | 28       | 26     | 93         |  |
| SEM-3                   | 27       | 19     | 70         |  |

### 3.4 Memorandum of Understanding (MOU):

| Sl.No | Organization with which<br>MoU is signed                   | Name of the institution/<br>industry/ corporate house      | Year of signing<br>MoU | Duration |  |
|-------|--|--|------------------------|----------|--|
| 1     | HireMee  | HireMee  | 2018-19                | 1 Year   |  |
| 2     | Naandi Foundation  | Naandi Foundation  | 2018-19                | 1 Year   |  |
| 3     | Spoken Tutorial  | Spoken Tutorial  | 2018-19                | 1 Year   |  |
| 4     | Career Graph   | Career Graph   | 2018-19                | 1 Year   |  |
| 5     | Education Matters,<br>Global Education<br>and Career Forum | Education Matters, Global<br>Education<br>and Career Forum | 2017-18                | 1 Year   |  |

Table 7: Memorandum of Understandings (MOUs) by CCE

Department has encouraged the students to attend the interviews and job trials in the aforesaid Companies with whom Commissioner of Collegiate Education inked Memorandum of Understandings.

## **CRITERION-4: INFRASTRUCTURE AND LEARNING RESOURCES**

#### **4.1 Physical Facilities**

Spacious Class Rooms

The department is located in the ground floor of the main building of the college. It has one classroom with proper electrification, lights and fans, latest green boards, dual desks, spacious and fully ventilated classrooms in the first floor.

#### 4.2 Departmental Library as a Learning Resource

There is no separate departmental library for the MATHEMATICS students, they use the college main library.

The library is having 11 books in the concerned subjects for reference both for staff and students to facilitate teaching and learning. English Medium Books: 20.

#### 4.3 IT Infrastructure

CCTV Camera and Surveillance

Presently, there is a CC Cameras installed in the corridor of the ground floor where the department is located and installed in the classrooms covering the students and staff movements to enhance the protection from untoward incidents.



### **CRITERION-6:GOVERNANCE, LEARDERSHIPAND MANAGEMENT**

#### 6.1 Institutional Vision and Leadership

The Staff and Students of the Department of MATHEMATICS strive hard with heart and soul to fulfill the Vision and Mission of the college. **Vision** 

To impart quality education to the socially and economically backward students and to develop self confidence, self reliance, communication and employability skills and to inculcate knowledge, wisdom, and values of democracy, justice, liberty, fraternity and humanism.

#### Mission

- To cater to the academic needs of all the sections of the society and to mould the students as responsible citizens with social awareness.
- To achieve academic excellence by involving well qualified, abundant experienced and dedicated teaching fraternity.
- To adopt the student-centric and outcome based learning methods coupled with ICT to equip the students with required knowledge and skills.
- > To expand the infrastructural and academic facilities required for advanced learning.
- To provide with advanced learning resources of ICT and Virtual Classrooms for a potential knowledge base.
- To develop life skills, employability skills and to strive for all-round development of the students by utilizing the institutional resources.
- To educate and empower the students to face the modern age challenges in pursuit of their goals.
- To promote social awareness, humanism and imbibing moral, human values and professional ethics.
- To provide greater access to all those who deserve and desire higher education in general and to rural, marginalized sections of society in particular.

#### **6.2 Strategy Development and Deployment**

The College prepares the perspective/strategic plan and deployment document based on the quality Indicators mentioned in the seven criterion's of the SSR and keeping in view the vision & mission of the college. The vision of the institution is "to impart quality education to the socially and economically backward students and to develop self-confidence, self-reliance, communication and employability skills and to inculcate wisdom, knowledge and values of democracy, justice, liberty, fraternity and humanism'. The mission is "to cater to the academic needs of all the sections of the society and to mould the students as responsible citizens with social awareness".

The highlights of the strategic plan and deployment document of the Department of MATHEMATICS are as follows:

The Department of MATHEMATICS of the college has been contemplating to improve the admissions by adopting the 'Door to Door Admission Campaign' practice which yielded surge in the admissions as compared to the last year.

- Sincere efforts are underway to introduce more Certificate and Value Added Courses to enrich the student's skills and knowledge to expand the learning horizons.
- As there are no PG courses sanctioned in any of the colleges in entire Bellampally Mandal, it is felt that there is a dire need to introduce the PG Course i.e., M. Sc as most of the students are going far-away places for pursuing their PG Course.
- The Department will endeavor to introduce Certificate Courses in future to equip the students with skills required to get employment opportunities.
- More students will be encouraged and motivated to progress to higher education by providing the coaching in the concerned subjects.

## Table 8: Participation of Department Teachers in various Committees (CurrentYear)

| Sl. | Name of the Teacher   | Designation    | Committees            | Responsibility |
|-----|-----------------------|----------------|-----------------------|----------------|
| No  |                       |                |                       |                |
|     |                       |                | Scholarship Committee | In-charge      |
|     |                       |                | WEC                   | In-charge      |
| 1   | T.Naveen Chander Raju | Asst.Proffesor | Mana TV               | In-charge      |
|     |                       |                | Yuvatarungam          | In-charge      |
|     |                       |                | Examination Branch    | In-charge      |

#### 6.3 Performance Appraisal System

#### 6.3.1 Performance Appraisal of the Teaching Staff

The IQAC appraises the performance of the teaching staff by adopting two methods such as Feedback System and Self-Appraisal Forms (API).

**Feedback System:** The performance of the Teachers is assessed based on the feedback received from the students. The feedback is collected annually through a structured questionnaire, across various teaching quality parameters and analyzed to assess the performance and to take necessary steps to plug the loopholes if any. The Feedback from the students, Peer and the Principal is also collected and analyzed for sending the proposals for the Best Teacher award under the Yuvatharangam Program organized by the CCE, Hyderabad.

## 6.8 Incremental improvements registered by Department of MATHEMATICS during Post accreditation period:

- Quality in Teaching-Learning Evaluation has been improved.
- ICT Classroom has been created.

### **CRITERION 7 - INSTITUTIONAL VALUES AND BEST PRACTICES**

#### 7.1 Plan of Action for the Next Five Years

- > Department will strive hard to improve the admissions in the ensuing academic year.
- Planning to conduct National Seminar/ Workshop.
- Introduction of Certificate Courses and Value Added Courses to add value to existing knowledge.
- Planning to conduct more Field Visits and Study Tours in order to give first hand exposure.
- Students will be encouraged to undertake more study projects as part of JIGNASA Student Study Project program.
- > Department will forge to have linkages with Industries and Academia.
- Department will contemplate to arrange more number of extension lectures on latest and current topics related to MATHEMATICS and Business Management by inviting expert speakers in the concerned field.
- Department strives to introduce P.G. Course in MATHEMATICS i.e., M.Sc in the days to come with a view to satisfy the demand from the students of this region.
- Department will try it level best to provide innovative teaching-learning methods for effective teaching. Planning to provide coaching for P.G Entrance and Competitive Examinations related to the MATHEMATICS.

APPENDIX-1: TEACHERS' PERSONAL PROFILES APPENDIX-2: DEPARTMENTAL TIME-TABLE (CURRENT YEAR) APPENDIX-3: B.SC (CBCS) SYLLABUS AND STRUCTURE

### **APPENDIX-1: FACULTY PROFILE**

| Name | :T.NaveenChander RajuPhoto |
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**Qualifications** : M.Sc., MATHEMATICS,

**Post Held** : Assistant Professor in Mathematics

#### Service Particulars:

| S. No | Duration                        | College   | University/<br>Board   | Teaching for                 | Remarks        |
|-------|---------------------------------|---|------------------------|------------------------------|----------------|
| 1     | 27-05-2011<br>to 01-9-<br>2017  | Govt. Degree College,<br>Jammikunta, T.S.                       | Kakatiya<br>University | 6 yrs                        | Asst.Professor |
| 2     | 02-09-2017<br>to 16-10-<br>2020 | Govt.Degree College ,<br>Kakatiya Govt. Degree<br>College, T.S. | Kakatiya<br>University | 3 yrs                        | Asst.Professor |
| 3     | 17-10-2020<br>to till date      | Govt .Degree.College,<br>Bellampalli,T.S.                       | Kakatiya<br>University | 1 year 1<br>month 15<br>days | Asst.Professor |

| Date of Joining   | : 17-10-2020                                      |  |  |
|-------------------|---|--|--|
| Permanent Address | ss : H.No: 20-3/1,                                |  |  |
|                   | Old Bazar, Bellampally                            |  |  |
|                   | Dist: Mancherial,                                 |  |  |
|                   | <b>PIN:</b> 504251, T.S.                          |  |  |
| Mobile number     | : 9030956515                                      |  |  |
| Email             | : naveen.tumiki@telangana.gov.in                  |  |  |
| Experience        | : Intermediate : 10 years UG – 10 years PG : Nil. |  |  |

#### Seminars/Workshops:

FDP in Basic Linear Algebra in MOOCs (NPTEL Online Certification)

Duration :8 weeks

Other FDPs : 8

#### **Examination Works:**

1) Invigilation Duty for University Exams

2) External & Internal Examiner for Practical Examination

3) Observer for Theory Examinations

#### Participation in Social Activities:

1) Actively participated in Swachh Bharath Programme at College Level.

 Participated in Telanganaku Haritha Haram (THH), the flagship programme launched by the Govt. of Telangana at College Level.
 Participated in NSS.

#### Papers Published in International Journals:

#### 1) INTUITIONISTIC FUZZY METRIC SPACES COMMON FIXED POINT THEOREMS

International Journal of Mathematical Archive-5(5), 2014, 17-22 Available online through www.ijma.info ISSN 2229 – 5046 (Received on: 29-04-14; Revised & Accepted on: 07-05-14)

### 2) GENERALIZED COMMON FIXED POINT THEOREMS AND INTUITIONISTIC FUZZY METRIC SPACES

International Research Journal of Pure Algebra -4(5), 2014, 520-525 Available online through www.rjpa.info ISSN 2248–9037 (Received on: 29-04-14; Revised & Accepted on: 07-05-14)

### 3) FIXED POINT THEOREM IN INTUTIONISTIC FUZZY METRIC SPACE USING ABSORBING FUNCTIONS

International J. of Math. Sci. & Engg. Appls. (IJMSEA) ISSN 0973-9424, Vol. 10 No. II (August, 2016), pp. 31-41

#### 4) ON SOME COMMON FIXED POINT RESULTS IN MENGER SPACES

Available online at http://scik.org J. Math. Comput. Sci. 11 (2021), No. 5, 5318-5326 https://doi.org/10.28919/jmcs/6035 ISSN: 1927-5307 Published on April 15, 2021

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