

## Action Taken Report

Programme UG Mathematics

Year of Revision 2016

### I & II Syllabus and Curriculum

Alumni	<ul style="list-style-type: none"><li>• To design the syllabi in such a manner that students should get deep and wide knowledge of the subjects.</li><li>• So many subjects in each course can be avoided.</li><li>• Practical dissemination between school and college curriculum at the UG level.</li><li>• Identify the courses that impart and improve the mathematical aptitude of students to enable them to get employability at UG level.</li></ul>
Parents	<ul style="list-style-type: none"><li>• To incorporate certain courses in the curriculum to inculcate social and ethical values in their life.</li><li>• Students must be prepared to acquire soft skills to face the outside world courageously.</li><li>• Holistic growth of the students must be prioritized.</li></ul>
Faculty	<ul style="list-style-type: none"><li>• Curriculum has a strong base for higher studies and employability.</li><li>• Student-Teacher relationship is very good.</li><li>• To update the syllabi to suit the modern day needs of the students' learning.</li></ul>
Industrial Experts	<ul style="list-style-type: none"><li>• To tie up with the industries so that students must be exposed to real time projects.</li><li>• To hire industry people to teach the relevant courses which have more employability.</li></ul>
Employers	<ul style="list-style-type: none"><li>• Critical and logical thinking to be enhanced.</li><li>• Inculcating problem solving techniques in the mind of students.</li></ul>
Action Taken	<ul style="list-style-type: none"><li>• Courses on spoken and written English with the help of English department are conducted.</li><li>• Quiz is conducted at various levels to improve their mathematical aptitude.</li><li>• Counseling for academically less focused students and slow learners is effectively done.</li><li>• Placement cell is offering many training sessions to improve their employability skills.</li><li>• Remedial classes are conducted for less focused and slow learners.</li><li>• Students develop social and moral values through the OUTREACH program.</li><li>• Students attend Industry Institution Interaction program in their third year.</li></ul>

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<b>III Teaching Methodologies</b>	
Alumni	<ul style="list-style-type: none"> <li>• A lacuna in bridging higher secondary and graduation level education.</li> <li>• An extensive bridge course for all I UG students is needed</li> </ul>
Parents	<ul style="list-style-type: none"> <li>• Encourage students to bold enough to present their opinions in every aspects</li> </ul>
Faculty	<ul style="list-style-type: none"> <li>• Stimulates thinking to open discussion</li> <li>• One idea can spark off their other ideas</li> <li>• Develops analytic and logical skills to solve problem.</li> <li>• Interpersonal relationship between staff and students, elevates teaching</li> <li>• Opportunities to explore difficult and complex issues</li> </ul>
Industrial Experts	<ul style="list-style-type: none"> <li>• Students should be more professional</li> <li>• Chance to reflect on experience should be given.</li> </ul>
Employers	<ul style="list-style-type: none"> <li>• Increased learning and innovation skills are being recognized</li> </ul>
Action Taken	<ul style="list-style-type: none"> <li>• Enhanced with the knowledge to master in ICT technologies</li> <li>• Widened and strengthened the knowledge in preparing e-content and e-resources.</li> <li>• Updated in respective subjects with the support of ICT technologies whenever necessary.</li> </ul>
<b>IV Learning Methodologies &amp; Learning Environment</b>	
Alumni	<ul style="list-style-type: none"> <li>• An obstacle in exploring few papers (UG level) as the student to pursue their higher studies in other universities</li> </ul>
Parents	<ul style="list-style-type: none"> <li>• Encourage systematic self-regulated learning</li> </ul>
Faculty	<ul style="list-style-type: none"> <li>• Conducive student and staff ratio</li> <li>• Multi-dimensional approach in evolving concepts</li> <li>• Progression of acquainted knowledge of what they learn and how they learn</li> <li>• Blended learning system</li> <li>• Ambiance excellent of classroom atmosphere</li> </ul>
Industrial Experts	<ul style="list-style-type: none"> <li>• The ideal vision of learning has to be broad, deep, fast, precise and practically relevant</li> <li>• Identify professional development opportunities.</li> </ul>
Employers	<ul style="list-style-type: none"> <li>• creativity, critical thinking,</li> </ul>



	communication and collaboration and are considered essential to prepare learners for the future.
Action Taken	<ul style="list-style-type: none"> <li>• a time-tested method to identify every young student's creative ability and their contributions.</li> <li>• Encouraged different ideas that give them the freedom to explore</li> <li>• Given time for brainstorming sessions in classrooms</li> <li>• Set a great platform for students to voice their thoughts without having to worry about right or wrong.</li> <li>• Efforts taken to make them what to learn</li> </ul>
<b>V Evaluation</b>	
Alumni	<ul style="list-style-type: none"> <li>• Conceptual understanding only adequate</li> <li>• Careless mathematical errors present (for example, algebra, arithmetic); some logical steps lacking; incomplete solution/response</li> </ul>
Parents	<ul style="list-style-type: none"> <li>• Teachers can ask students to paraphrase briefly the key points or essence of a discussion or lecture</li> </ul>
Faculty	<ul style="list-style-type: none"> <li>• encourages and rewards effective teaching practices on the basis of student learning outcomes</li> <li>• enables students to identify their own strengths and weaknesses</li> <li>• to determine the kinds of information they need to correct in their learning deficiencies and misconceptions.</li> <li>• improving teaching methods and guiding and motivating students to be actively involved in their own learning</li> <li>• to indicate, students how successfully they have mastered the course content they are expected to assimilate</li> <li>• approach to emphasize and focus on what and how students learn</li> </ul>
Industrial Experts	<ul style="list-style-type: none"> <li>• Present an in-depth look at a range of career topics.</li> <li>• Explores the pace of change to the global employment</li> </ul>
Employers	<ul style="list-style-type: none"> <li>• more to know about the job market, the more you can build career resilience.</li> </ul>
Action Taken	<ul style="list-style-type: none"> <li>• The types and numbers of students they serve, and the educational traditions they represent in classroom</li> </ul>

  
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teaching.

- faculty and departments are indeed promoting student learning
- Need to concentrate on conceptual understanding
- easiest way to find out whether students understand what is being said and to ask them directly



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Programme PG Mathematics

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### I & II Syllabus and Curriculum

Alumni	<ul style="list-style-type: none"><li>• Text books and reference books with lots of problems to understand the concepts clearly can be included in syllabus.</li><li>• Identify the courses which are useful for clearing competitive examinations can be added.</li></ul>
Parents	<ul style="list-style-type: none"><li>• To incorporate certain courses in the curriculum to inculcate social and ethical values in their life.</li><li>• Holistic growth of the students must be prioritized.</li><li>• Training sessions for clearing NET/SET or any competitive examination can be organized.</li></ul>
Faculty	<ul style="list-style-type: none"><li>• Curriculum has a strong base for higher studies and employability.</li><li>• Student-Teacher relationship is very good.</li><li>• Syllabus offered is on par with the best among the pioneering colleges in the country.</li><li>• Courses that are 'Applied' in nature and expose the students to the emerging technologies in general and Information Technology in particular are included.</li></ul>
Industrial Experts	<ul style="list-style-type: none"><li>• To tie up with the industries so that students must be exposed to real time projects.</li><li>• To hire industry people to teach the relevant courses which have more employability.</li></ul>
Employers	<ul style="list-style-type: none"><li>• Critical and logical thinking to be enhanced.</li><li>• Inculcating problem solving techniques in the mind of students.</li></ul>
Action Taken	<ul style="list-style-type: none"><li>• Quiz is conducted at various levels to improve their mathematical aptitude.</li><li>• Counseling for academically less focused students and slow learners is effectively done.</li><li>• Placement cell is offering many training sessions to improve their employability skills.</li><li>• Students are encouraged to participate many competitions conducted in different colleges and Institutes.</li><li>• Students are motivated to Research activities by assigning individual projects.</li><li>• Students are encouraged to take seminars using ICT facilities available to improve their teaching skills</li><li>• Students develop social and moral values through the OUTREACH program they undergo</li><li>• Summer Internship program is organized for all the PG students to acquire the employability skills</li></ul>

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### III Teaching Methodologies

Alumni	<ul style="list-style-type: none"><li>• Well-thought-out lesson plans and opportunities for guided and independent practice of concepts are also part of effective teaching strategies.</li></ul>
Parents	<ul style="list-style-type: none"><li>• Along with the ability to explain well, teachers also require the ability to punctuate teaching sessions with questions that encourage student interaction.</li></ul>
Faculty	<ul style="list-style-type: none"><li>• A qualitative approach to focus on perceptions of elementary concepts</li><li>• A major impact is created on students to understand the concepts.</li><li>• Teachers are competent in their knowledge of the subject they teach.</li><li>• Teachers with a strong grasp of the subject are in a better position to answer student queries with confidence and accuracy.</li></ul>
Industrial Experts	<ul style="list-style-type: none"><li>• Complement your academic studies by providing another way of learning outside the classroom.</li><li>• Students must develop technical skills and knowledge of a degree discipline.</li></ul>
Employers	<ul style="list-style-type: none"><li>• Value skills such as communication, team-working and problem solving must be developed.</li><li>• Student 'shadows' an experienced professional.</li></ul>
Action Taken	<ul style="list-style-type: none"><li>• A teacher audio-visual aids, computer technology, activities and games to supplement the oral explanation manages to effectively engage student attention.</li></ul>

### IV Learning Methodologies & Learning Environment

Alumni	<ul style="list-style-type: none"><li>• A variety of learning tasks that engage students, including student discussion etc., need to occur in order that a meaningful learning takes place.</li><li>• Teachers should motivate students through displaying their own enthusiasm, encouraging students and providing interesting, enjoyable and active classes</li><li>• Curriculum design should ensure that aims, concepts, learning activities and assessment are consistent with achieving learning outcomes related to future student needs.</li></ul>
Parents	<ul style="list-style-type: none"><li>• Assessment must be consistent with the desired learning outcomes and</li></ul>

	develop authentic tasks for the discipline or profession.
Faculty	<ul style="list-style-type: none"> <li>• Learners must work individually.</li> <li>• A particular competency or skill, through a test or some form of prior learning assessment.</li> <li>• Under graduation learning be recognized, or for those learners wanting to develop specific skills but not wanting a full program of studies.</li> <li>• Students will take both formative and summative exams.</li> <li>• For some students, it speeds up time to complete a qualification by enabling prior learning.</li> </ul>
Industrial Experts	<ul style="list-style-type: none"> <li>• Focuses on immediate employer needs and is less focused on preparing learners with the flexibility needed for a more uncertain future.</li> </ul>
Employers	<ul style="list-style-type: none"> <li>• It does not suit subject areas where it is difficult to prescribe specific competencies or where new skills and new knowledge need to be rapidly accommodated.</li> </ul>
Action Taken	<ul style="list-style-type: none"> <li>• In developing the post-graduation level, more abstract knowledge and skills requiring creativity, high-level problem-solving and decision-making and critical thinking.</li> <li>• Approaches to assessment and feedback that foster independent learning.</li> <li>• Support for the development of students as individuals.</li> <li>• Consequently, increased interest in individual teachers and teams of teachers to engage heterogeneous students.</li> </ul>
<b>V Evaluation</b>	
Alumni	<ul style="list-style-type: none"> <li>• Students need to be actively and continuously involved in all assessment</li> </ul>
Parents	<ul style="list-style-type: none"> <li>• Concerned with assessing the effectiveness of teaching, teaching strategies, methods and techniques.</li> </ul>
Faculty	<ul style="list-style-type: none"> <li>• Class performance of the students need to be enhanced by the teacher.</li> <li>• Lead to professional growth.</li> <li>• To improve students 'knowledge and learning.</li> <li>• Learners have to analyze and interpret information.</li> </ul>
Industrial Experts	<ul style="list-style-type: none"> <li>• Support for student Internships, Experiential Learning, service</li> </ul>

  
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	<p>Learning.</p> <ul style="list-style-type: none"> <li>• Professional development and Innovation around teaching and industry.</li> <li>• Instructional Delivery: including quality, amount, and level of classroom instruction.</li> </ul>
Employers	<ul style="list-style-type: none"> <li>• The evaluation system adopted is credible and acceptable.</li> <li>• The students should determine their method for effective learning.</li> </ul>
Action Taken	<ul style="list-style-type: none"> <li>• Provide feedback to the teachers about their teaching and the learners about their learning.</li> <li>• Improve the professional resources required to deliver effective instruction.</li> <li>• Department take responsibility for developing their own evaluation methods and evaluation criteria that can be flexible to accommodate diversity in instructional methods.</li> </ul>

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