**SACRED HEART COLLEGE, TIRUPATTUR, VELLORE DISTRICT**

**REPORT ON THE EXTERNAL AUDIT OF**

**THE MATHEMATICS DEPARTMENT**

**1. INTRODUCTION**

**A Brief History of the Department**

 **Sacred Heart College** is an **affiliated autonomous College** of the newly formed Thiruvalluvar University (formerly affiliated to University of Madras). This is a **minority Institution of Higher Education,** established and administered by the religious congregation of the **Salesians of Don Bosco.** The Salesian province of Madras under the leadership of **Rev. Fr. Joseph Carreno SDB,** a Spanish Salesian Missionary founded this College in the year 1951. The establishment of the Department of Mathematics was a natural corollary with the birth of this College.

 Rural and backward regions in those days are rare settings in the field of Education. But Institutions of higher education are indispensable in rural areas to remove economic backwardness and intellectual poverty of the millions who live there. Such a deprived situation challenged the faculty of the Mathematics to achieve excellence in the field of higher education.

**Inception**

From the very inception of the Department of Mathematics, academic excellence was the order of the day. During the days of pre-university, in a notable way, 75% of our Department students were admitted in the Engineering Colleges. The Department achieved very good results at the University Examinations. A respectable number of university rank holders from the Department of Mathematics stands as testimony to the academic excellence achieved by the Department. In the entire Thiruvalluvar University area, this is the only recognized research center in Mathematics conducting courses leading to Ph.D.

**Growth**

1954 – Introduction of U.G. Programme

1980 – Launching of P.G. Programme

1987 – Introduction of Autonomy of the P.G. Programme

1988 – Introduction of Autonomy of the U.G.

2000 – Launching of Research Programmes

**Achievements**

 Recognizing the research activity in the Department, the UGC has sanctioned P.G. Development grant to the tune of Rs.3 lakhs during the ninth plan period and Rs.173400 during the tenth plan period

**Recognition By NBHM**

Being satisfied with the research activities of the Department of Mathematics, the National Board for Higher Mathematics (NBHM) has included our college on the mailing list of the NBHM complementary Book scheme, from the year 2004. The mailing list of our college with NBHM is S.No.194/NBHM No.1038.

**Department of Mathematics – A Catalyst**

The Department of Mathematics of our college is a unique department, which concentrated not only on its own growth but also functioned as a catalyst to the growth of other departments. One significant event in the history of the department is the starting of the Department of Mathematics. For the growth of the department of Computer Science the contribution of the Department of Mathematics is highly significant.

**Extension Activities:**

 **The Association of Mathematics Teachers,** in late 70’s and early 80’s established by the Department was an enterprise in community service, **serving the teachers of Mathematics in the schools** in the around Tirupattur. This was **a pioneering work in the entire region, which certainly enhanced the quality of teaching.** This association aimed at training of teachers in modern Mathematics through orientation courses, seminars and regular classes on the one hand and on the other kept the student communities together through quiz programmes and competitions.

 The Department has successfully conducted **two workshops in Differential Equations and Topology** in the year 1997 and 1998 to assist the Post Graduate students of neighboring districts (Vellore, Thiruvannamalai, Dharmapuri and Salem districts), in order to improve their skills on **problem solving.** About 100 students were the beneficiaries. An intercollegiate activity through Mathematics Festival by the Mathematics Department is a regular feature on all-important occasions. The Department conducted **two Mathematical exhibitions** in October 1974 and September 1976. It was open to the students of surrounding colleges and schools in and around Tirupattur. Nearly 5000 students attended each and benefited by them.

**FIP Scheme:**

The FIP scheme is being fully utilized and the following is the list of faculty members who acquired academic excellence through this scheme.

|  |  |  |
| --- | --- | --- |
| **S.No** | **Name of the Staff** | **Course** |
| 1 | Prof. M. Maria Susai Manuel  | Ph.D |
| 2 | Prof. K. Ravi | Ph.D |
| 3 | Prof. M. Reni Sagayaraj | Thesis submitted |

The retired Professors of the department T. Ragavan, A. Ramayya, R. Rajamanickam, I. Gnanapragasam also availed this scheme and benefited from it.

**Staff Profile**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No** | **Name** | **Designation** | **Qualification** | **Experience** | **Remarks** |
| 1 | M. Maria Susai Manuel | Reader | Ph.D | 29 Years |  |
| 2 | M. Reni Sagayaraj | Lecturer SG | M.Phil | 25 Years | Thesis submitted |
| 3 | K. Ravi | Reader | Ph.D | 25 Years |  |
| 4 | A. George Maria Selvam | Lecturer SG | M.Phil | 19 Years | Registered for Ph.D |
| 5 | R. Murali | Lecturer SG | M.Phil | 15 Years |  |
| 6 | G. Britto Antony Xavier | Lecturer SS | M.Phil | 12 Years | Registered for Ph.D |
| 7 | S. Joseph | Lecturer SS | M.Phil | 07+08 Years |  |
| 8 | P. Manoharan | Lecturer SS | M.Phil | 06+09 Years |  |
| 9 | S. Kalaiarasi | Lecturer S | M.Sc | 04+04 Years | M.Phil. Result awaited  |
| 10 | M. Mary Evangeline | Lecturer  | M.Phil | 02+01 Years |  |
| 11 | A. Panneer Selvam | Lecturer  | M.Sc | 07 Years | M.Phil. Result awaited |
| 12 | Mrs. Easwari Prem | Lecturer  | M.Phil | 06+06 Years | Registered for Ph.D |
| 13 | S. Arivalagan  | Lecturer  | M.Sc | 04+04 Years | M.Phil. Result awaited |
| 14 | D. Josephine | Lecturer  | M.Phil | 03+01 Years |  |

**Student Profile**

In the year 1954, the University of Madras upgraded the College as a First Grade College and Mathematics become a full-fledged degree course. The Department excelled in the University Examinations. Mathematics Department of this college feels proud of the fact that more than 15 of our students used to enter into various courses in the prestigious **Madras Institute of Technology** every year, which exceeded the number from any college in Tamil Nadu. It was a witness to the entire state, that, the Department existing in a rural college could reach the peak in academic excellence. Thus the Department of Mathematics of **Sacred Heart College** became a model for higher education in rural and backward regions.

The Student strength of the current academic year is as follows

|  |  |  |  |
| --- | --- | --- | --- |
| UG | PG | M.Phil | Ph.D |
| 210 | 38 | 12 | 04 |

**II. Curriculum**

**UG Programme**

**Course Structure offered by the Department under CBCS scheme.**

**Semester – I**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M107 | Practical Mathematics | 2 | 2 |
| M108 | Classical Algebra and Trigonometry | 4 | 4 |
| AM106 | Allied Mathematics – I | 6 | 3 |
| AM107 | Allied business statistics and operations research - I | 6 | 3 |

**Semester – II**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M207 | Calculus and differential equations | 6 | 4 |
| AM206 | Allied Mathematics – II | 6 | 3 |
| AM207 | Allied business statistics and operations research - II | 6 | 3 |

**Semester – III**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M306 | Vector Analysis | 4 | 3 |
| M307 | Advanced calculus | 4 | 3 |
| M308 | Statics  | 4 | 2 |
| AOM301 | Allied Optional – I: Mathematics for Science  | 6 | 3 |

**Semester – IV**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M406 | Analytical Geometry of three dimensions | 4 | 3 |
| M407 | Numerical methods | 4 | 3 |
| M3408 | Dynamics | 4 | 2 |
| AOM401 | Allied Optional – II: Mathematics Aptitude | 6 | 3 |

**Semester – V**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M517 | Algebraic structures  | 4 | 3 |
| M518 | Real Analysis – I | 5 | 3 |
| M519 | Complex Analysis – I | 4 | 3 |
| M520 | Mathematical Statistics | 5 | 3 |
| M521 | Mathematical Aptitude – I | 4 | 4 |
| M522 | Introduction to Graph Theory  | 4 | 2 |
| GMA501 | General Elective – I: Basic Mathematics for Arts | 3 | 2 |
| GMA502 | General Elective – II: Optimization Techniques  | 3 | 2 |

**Semester – VI**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M618 | Linear Algebra | 4 | 3 |
| M619 | Real Analysis – II | 5 | 3 |
| M620 | Complex Analysis – II | 4 | 3 |
| M621 | Operations Research | 5 | 3 |
| M622 | Mathematical Aptitude – II | 4 | 2 |
| M623 | Difference Equations | 4 | 2 |
| GMA601 | General Elective – IIII: Mathematics for Competitive Examinations | 3 | 2 |
| GMA602 | General Elective – II: Numerical methods  | 3 | 2 |

**PG Programme**

**Semester – I**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M719 | Algebra (Core) | 8 | 5 |
| M720 | Real Analysis (Core) | 7 | 5 |
| M721 | Complex Analysis (Core) | 7 | 5 |
| M722 | Differential Equations and Integral Equalization (Core) | 8 | 5 |

**Semester – II**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M819 | Topology (Core) | 8 | 5 |
| M820 | Differential Geometry (Core) | 7 | 5 |
| M821 | Mechanics (Core) | 7 | 5 |
| M822 | Mathematical Statistics (Core) | 8 | 5 |

**Semester – III**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M921 | Measure and Integration (Core) | 8 | 5 |
| M922 | Functional Analysis (Core) | 8 | 5 |
| M923 | Operations Research (Elective) | 7 | 5 |
| M924 | Graph Theory (Elective) | 7 | 5 |

**Semester – IV**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course code** | **Course title** | **Hrs** | **Credits** |
| M1023 | Number Theory and Cryptography (Elective) | 8 | 5 |
| M1024 | Difference Equations (Elective) | 8 | 5 |
| M1025 | Stochastic Process (Elective) | 7 | 5 |
| M1026 | Mathematics Modeling (Elective) | 7 | 5 |

**Innovations in curriculum design under CBCS**

 A paper (M107 Practical Mathematics) is introduced to expose the students to the history and development of Mathematics over the period of several centuries and the contributions made by important Mathematicians and their life history.

**Inter-disciplinary programmes**

Optional Allied Mathematics I and II in the second year, General Elective I, II, III and IV in the third year for the students of other discipline are the inter-disciplinary courses offered by the department.

**Relevant / job-oriented / extra-skill oriented courses**

General Elective I, II, III and IV introduced in the third year for the students of other discipline enable the students to gain specific skills in Mathematics. Also AOM 401 and GMA 602 aim at training students to appear for competitive examinations for higher studies and placements in companies.

**Special programmes for the meritorious students**

Students are motivated sufficiently to appear for SLET, GATE, NET, NBHM National Level Examinations. Faculty members guide and help the students in the preparation.

**Remedial programmes for the weak students**

In CQC, academically slow learners are identified and given additional care, special coaching programmes are also arranged.

**Academic counseling and personal follow up of students**

 The teachers in charge of the classes monitor the progress of the students. The slow learners are given counseling and they are followed up.

**Innovations in teaching methodology – by course teachers**

Faculty members use OHP in teaching and LCD for presentation. Group discussions are arranged. Students are given ample opportunities for self learning with guidance through seminars and Problem solving sessions.

**Course materials prepared by faculty**

Course materials are prepared well in advance and the materials are given to the students.

Many of our faculty members occupy high positions in various academic bodies in the college. The following is the list of faculty members and their positions.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Academic Body** | **Name of the faculty**  | **Position** |
| 1 | IQAC | Dr. M. Maria Susai Manuel | Member |
| 2 | CDC | Dr. M. Maria Susai Manuel | Member |
| 3 | CDC | Dr. K. Ravi | Member |
| 4 | College Council | Dr. M. Maria Susai Manuel | Member |
| 5 | College Council | Mr. M. Reni Sagayaraj | Member |
| 6 | College Council | Mr. A. Panneer Selvam | Member |
| 7 | Academic Council | Dr. M. Maria Susai Manuel | Member |
| 8 | Academic Council | Mr. M. Reni Sagayaraj | Member |
| 9 | Academic Council | Mr. A. George Maria Selvam | Member |
| 10 | Academic Council | Mr. G. Britto Antony Xavier | Member |
| 11 | Library Committee | Mr. M. Reni Sagayaraj | Member |

**III. EXTRA CURRICULAR ACTIVITIES**

**Association activities**

 The Department of mathematics has two associations namely, Mathematics Association for the UG students and Mathematics PG Study Circle for the PG Students and M. Phil Scholars. These two associations have one of the faculty members as President, Selected in rotation, a Secretary from UG III year and II year PG and a representative from each of the other sections to coordinate the activities of the association. It conducts programmes like Seminars, Quiz Competitions (both written and oral) and prizes are given at the valedictory of the association for the outstanding performers.

 The following table is the particulars of the Seminars organized during the last four years.

**UG Mathematics Association**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seminar by** | **2002 – 2003** | **2003 – 2004** | **2004 – 2005** | **2005 – 2006** |
| Invited talks | 1 | - | - | - |
| Faculty | 3 | 3 | 3 | 3 |
| Students | 1 | - | 6 | 4 |
| Total | 5 | 3 | 9 | 7 |

**Mathematics PG Study circle**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seminar by** | **2002 – 2003** | **2003 – 2004** | **2004 – 2005** | **2005 – 2006** |
| Invited talks | 1 | - | - | 3 |
| Faculty | 2 | 2 | 2 | 2 |
| Students | 1 | 6 | 3 | 4 |
| Total | 4 | 8 | 5 | 9 |

Visit to Kavaloor Astronomical Observatory on the birth anniversary of Dr. Vainu Pappu is a regular activity of both the associations.

 A two day training programme for Higher Secondary School teachers of Vellore district was organized on 14 and 15 September, 2001. About 150 teachers took part in the programme.

 A two day training programme for the teachers of High and Higher Secondary Schools of Tirupattur Educational District was organized during 3,4 December 2004. About 225 teachers took part in the programme and benefited out of it.

An in-service training programme for secondary grade science teachers sponsored by Tamil Nadu State Council for Science and Technology was organized during 4 – 8 January 2005. About 50 teachers participated and benefited from it.

**Other Activities**

Students are encouraged to participate in inter-collegiate competitions organized in other Institutions. Our students have fared well in such competitions. PG and M. Phil students are encouraged to participate in National and State level conferences in our department as well as in other Institutions. An educational tour for the III year students of UG and II year students of PG is a regular activity of the Department. Sufficient numbers of faculty accompany the students during tours.

**Department Meetings**

Regular department meetings are conducted to discuss the various activities of the department and the proceedings are recorded properly. Elaborate discussions took place transparently on syllabus revision, CIA components, evaluation pattern for CIA and end semester examinations.

**Faculty Improvement Programmes**

Faculty members are encouraged to participate in National and International conferences. Orientation courses and refresher courses are periodically attended by faculty members for their career advancement. In addition, faculty members are given training in order to effectively use the soft wares used for posting regular attendance of students and the like. A two day workshop on Latex was organized by the Department of Mathematics for the faculties of Mathematics, Physics, Chemistry and Computer Science during July 15 – 16, 2006.

**Healthy Practices**

 The College has a tradition of organizing in a grand manner the Silver Jubilee functions for faculty who compile 25 years of teaching in this college and the retirement function on the occasion of retirement. The Department of Mathematics separately organizes functions to honor the faculty. A family function on these occasions with all the Management representatives is a unique of the Department.

 Many of our faculty members are also involved in extension activities and the list is given below.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Organization** | **Staff involved**  | **Position** |
| 1 | IIPA | Dr. M. Maria Susai Manuel | Secretary |
| 2 | NCC | Major. M. Reni Sagayaraj | Officer |
| 3 | IGNOU | Mr. A. George Maria Selvam | Coordinator |
| 4 | Placement Cell | Mr. R. Murali | Coordinator |
| 5 | NSS | Mr. S. Joseph | Programme Officer |
| 6 | NSS | Mr. P. Manoharan | Programme Officer |
| 7 | Media Forum | Mr. G. Britto Antony Xavier | President |
| 8 | SHELTERS | Mr. S. Joseph | Coordinator |
| 9 | Red Ribbon Club | Mr. S. Joseph | Coordinator |
| 10 | Fine Arts Club | Mr. A. Panneer Selvam | President |

**IV. Research Activities**

A **Sequential Programme in M. Phil** was conducted by the Department in the year 1985 – 1986.

 The following faculty members have obtained Ph.D in various fields. The details are given below.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Name**  | **Topic**  | **Year** |
| 12 | M. Maria Susai ManuelK. Ravi | Some qualitative properties of solutions of Difference EquationsOscillatory behavior of some classes of Difference and Functional Equations. | 19972001 |

 Mr. M. Reni Sagayaraj, Mr. A. George Maria Selvam, Mr. G. Britto Antony Xavier and Mrs. Easwari Prem are at the level of completing doctoral degree and hop to receive it in the near future.

**Special Lectures by eminent personalities**

Two eminent Mathematics **Prof. B. S. Lalli and Grace Lalli of the University of Sansketeen, Canada** visited the Department during 1996 and spoke on the advancements in the field of Differential and **Difference Equations especially on Delay Differential Equations and Neutral Delay Differential Equations.**

 **Prof. Victor Anandam of Australia,** a great Mathematician in the field of **Functional Analysis** visited the department and shared with the faculty and students of the Department the research activities in Australian Universities.

 **Dr. I. P. Stauroulakis,** Professor in Mathematics, University of loannina, Greece, visited our college in December 1999 and spoke on **Delay Differential Equations.**

 **Dr. Martin. J. Beckmann,** Professor of Mathematics and Economics, West Germany, visited our college on 22.01.2003 and addressed the students on the topic **“Marriage Markets-An approach assignment problem”.**

**Research Projects**

 Following is the list of Minor Research Projects carried out by the faculty of the department.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No** | **Name of the faculty** | **Title of the project** | **Period** | **Agency** |
| 1 | M. Maria Susai Manuel | On some qualitative properties of solutions of Difference Equations | Feb 2000 – Jan 2002 | UGC |
| 2 | M. Maria Susai Manuel | Applications of the qualitative properties of solutions of difference equations in biological sciences | Mar 2004 – Mar 2006 | UGC |
| 3 | K. Ravi | On the Hyers – Ulam – Rassias stability of the quadratic cubic functional equations | Feb 2005 – Jan 2007 | UGC |

**State and National Level Conferences organized**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Topic** | **Level** | **Period** |
| 1 | Recent Advancements in Pure and Applied Mathematics | State | 5 – 7, Feb 1999 |
| 2 | Contributions of Mathematics to recent developments in Science | National | 25 – 27, Nov 2004 |
| 3 | Discrete Mathematics and Probability theory for computer science | National | 14 – 16, July 2005 |
| 4 | Recent Development in the Applications of Mathematics towards Bio-Science and Management Science | National | 29 – 30, Sep 2006 |

The following is the list of publication of articles / books / conferences attended / papers presented in conferences by the faculty of the Department

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No** | **Name** | **Articles / Books** | **Articles Submitted** | **Papers Presented** | **Seminars Attended** |
| 1 | Dr. M. Maria Susai Manuel | 18+3 Books | 5 | 10 | 12 |
| 2 | Mr. M. Reni Sagayaraj | 3 | 1 | 4 | 11 |
| 3 | Dr. K. Ravi | 14 | 3 | 10 | 12 |
| 4 | Mr. A. George Maria Selvam | 1 | 1 | 2 | 6 |
| 5 | Mr. R. Murali | - | 1 | 1 | 7 |
| 6 | Mr. G. Britto Antony Xavier | 3 | 5 | 7 | 8 |
| 7 | Mr. S. Joseph | - | - | - | 3 |
| 8 | Mr. P. Manoharan | - | - | - | 3 |
| 9 | Mrs.S. Kalaiarasi | - | 1 | 1 | 3 |
| 10 | Ms.M. Mary Evangeline | - | - | - | 3 |
| 11 | Mr. A. Panneer Selvam | - | - | 2 | 3 |
| 12 | Mrs. Easwari Prem | - | 1 | 1 | 5 |
| 13 | Mr. S. Arivalagan  | - | - | - | 3 |
| 14 | Ms. D. Josephine | - | - | - | 3 |

**Awards**

 **The American Biographical Institute**  nominated **Dr. M. Maria Susai Manuel** for the following three awards

1. Man of the year 2003
2. American Medal of honor – 2003
3. Member of the Research Board of advisors in 2004

**The American Biographical Institute** nominated **Dr. K. Ravi** for the following awards

1. Member of Research Board of advisors in 2003
2. Contemporary “Who is Who” in the year 2002 – 03
3. American Medal of honor – 2003

A certificate of appreciated for involving the NSS volunteers in desalting a well in Tirupattur town and rain water harvesting was issued to Mr. R. Murali by the Tamil Nadu government in the year 2003.

**V. EVALUATION**

**The examination system under autonomy**

There are two components in the evaluation and assessment of student, namely Continuous Assessment (CA) and Semester Examination (SE). The CA takes place during the course of the semester and the SE is conducted at the end of each semester, (ODD semester in October-November and Even semester in March-April)

 The UG Mathematics course consists of six semester and PG Mathematics course consists of four semesters.

**Continuous Assessment**

1. The maximum marks for CA is 25 for UG and 50 for PG.
2. Two written tests are conducted centrally and they were converted for 15 and 30 respectively for UG and PG by taking both the tests together. In case a student is absent for valid reason, another test may be conducted at the discretion of the Principal.
3. There is no passing minimum for CA
4. There is no provision for improvement of CA
5. Attendance marks are to be given for each paper for UG

The marks for the attendance awarded based on the percentage of attendance in each paper is as follows

76 and above but less than 80 : 1 Marks

80 and above but less than 85 : 2 Marks

85 and above but less than 90 : 3 Marks

90 and above but less than 95 : 4 Marks

95 and above : 5 Marks

**Distribution of internal marks for CIA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Programme** | **Test**  | **Problem Solving \ Assignment** | **Attendance**  | **Seminar** | **Total** |
| UG | 15 | 5 | 5 | --- | 25 |
| PG | 30 | 10 | --- | 10 | 50 |

**Semester Examinations (SE)**

1. This component carries 75 marks for each paper for UG and marks for each paper for PG. Each paper is of three hours duration.
2. There is double valuation for both UG and PG papers and both valuations are internal. The average of the two marks is taken as the final marks.
3. If there is a difference of more than 12 marks for UG papers and 8 marks for PG papers between the two valuations, a third valuation is done.
4. There is no revaluation.
5. Re-totaling is allowed with nominal fees.
6. Examination for odd semester arrears is conducted along with the odd semester regular examinations
7. Examination for even semester arrears is conducted along with the even semester regular examinations.
8. For the final year students, the examination for semester V arrears of UG, Semester III arrears of PG are conducted together with final even semester regular examinations.
9. Further, any student may be permitted to appear for the paper, which is made available in the time table to clear his arrears.
10. When the syllabus is revised, the arrear students is allowed to complete his arrears writing the examinations under the current syllabus. In case the paper are changed, the department allots a substitute paper to complete the arrear.
11. Under moderation, maximum of 2 marks is added, if it is required for a pass in each paper.

**Passing Minimum**

A student is declared to have passed in a paper if the secures:

1. 40 and above in the Semester Examination and 40% and above in the aggregate of CA and Semester Examinations for UG programme.
2. 50% an above in the Semester Examination and 50% and above in the aggregate of CA and Semester Examinations.

**Classification of successful Candidates**

If a student secures 40% and above but less than 50% in the aggregate of all the examinations under any part, he is declared to have passed in the III class in that part.

 50% and above but less than 60%: II Class 60% and above I Class