SRI RAMAKRISHNA MISSION VIDYALAYA
COLLEGE OF ARTS AND SCIENCE, COIMBTORE-20

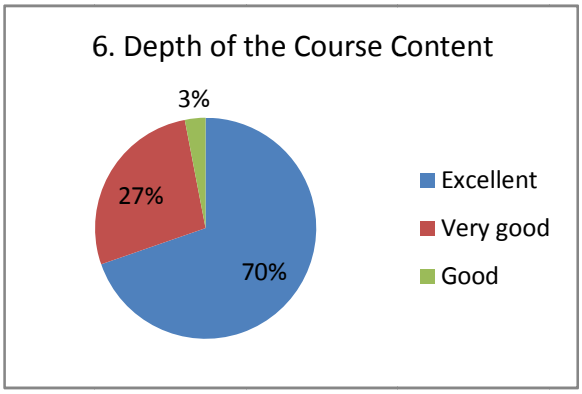
DEPARTMENTOFMATHEMATICS

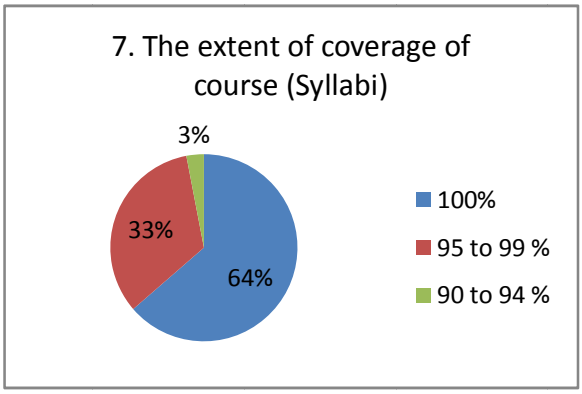
Stakeholders' consolidated feedback report on curriculum (2020-2021)

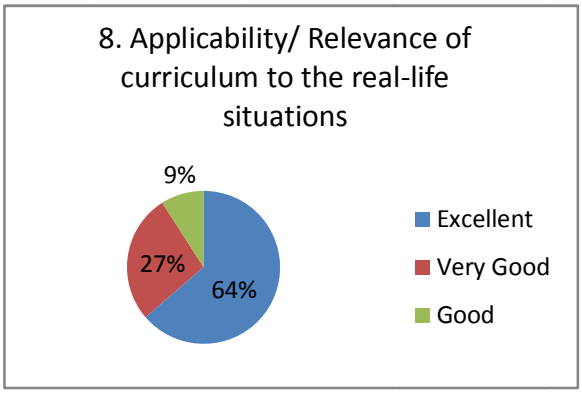
The overall development, assessment of quality, integration of innovations, the quest for excellence, sustainability, efficient performance, the cross-section of administration, and attainment of the vision of any organization are effectively retained through stakeholders' feedback. In parallel, a focused feedback system creates an effective core trajectory to integrate and enrich the respective courses in a programme. The consolidated feedback analysis 2020-2021 and report are submitted, for curriculum upgrading and integrating current trends in Mathematics.

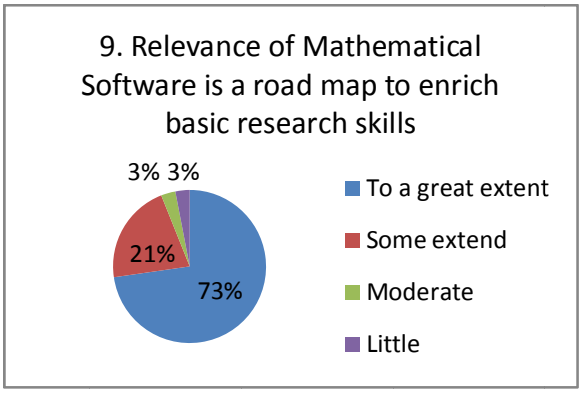
STUDENTS' FEEDBACK

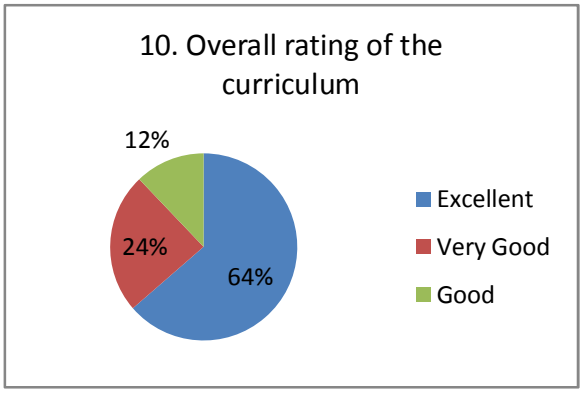
(33 responses)











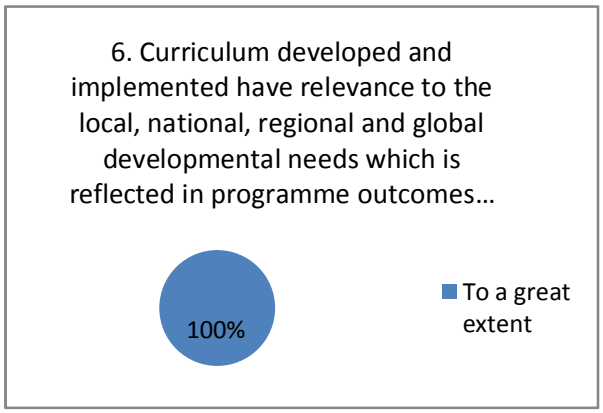
The student's feedback was collected on different parameters like content of the course, the coverage of syllabus, the applicability of syllabus in real-time, internships, overall rating on curriculum, and their suggestions, to improve the course content. At average of 95% students agreed that the content provided in the programme is depth enough in the curriculum. Students appreciated the effort made by the faculty members to covers the syllabi on average of 90%. The students agreed that the curriculum is in agreement with real-time situations. The inclination of mathematical software's paves the way for a research career. Finally, 90% of the students positively responded to the overall rating of the curriculum as good.

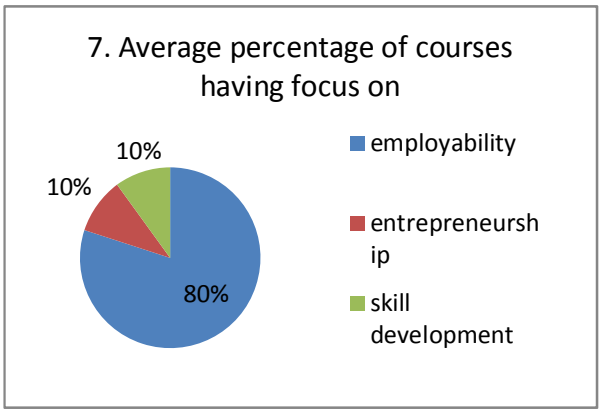
Suggestions:

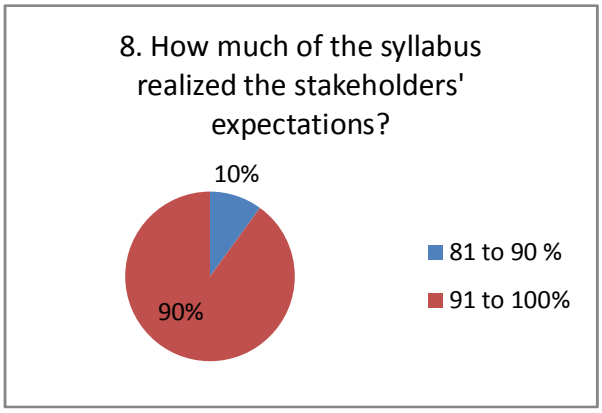
- Quiz programme may be conducted frequently in the department.
- It will be useful if SET/NET class is started.
- To introduce internship programme.

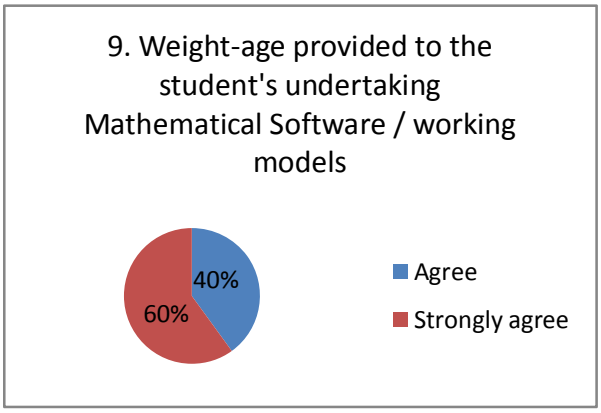
TEACHERS FEEDBACK

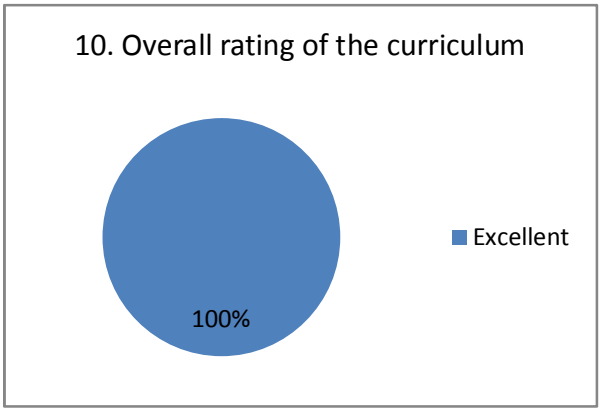
(10 responses)











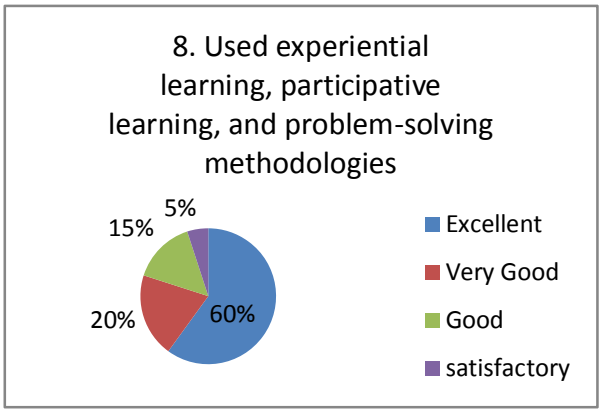
All the staff members of our department agreed that the POs, PSOs, and COs of the curriculum developed and implemented have relevance to the local, national, regional, and global developmental needs to a great extent. 80% of the members accepted that the courses having a focus on employability. The feedback revealed 90% of the members agreed that 91-100% of the syllabus realized the stakeholders' expectations. It is observed that 60% of them strongly agreed that the weightage provided to the students undertaking Mathematical software / working models is relevant. Unanimously the members approved that the Overall rating of the curriculum is excellent.

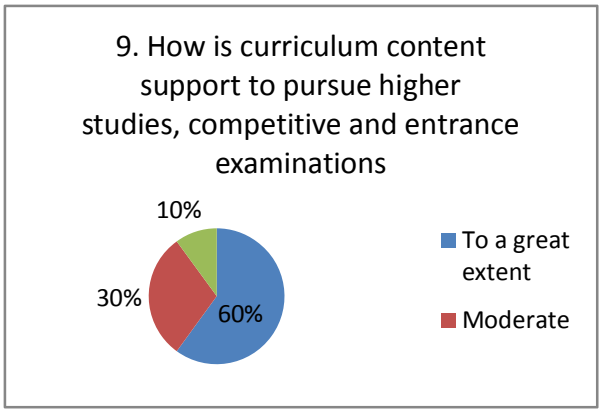
Suggestions:

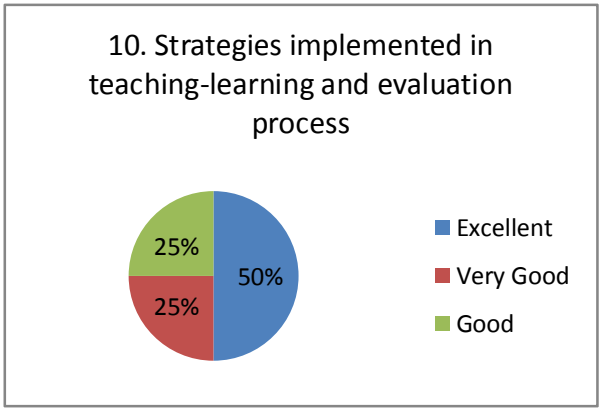
- Teaching practice may be adopted as internship for final year students to enhance employability in teaching field.
- Model and semester examination pattern may be change to 50 marks instead of 75 marks.
- NET/SET classes may be conducted to the students moving to higher education and employability.

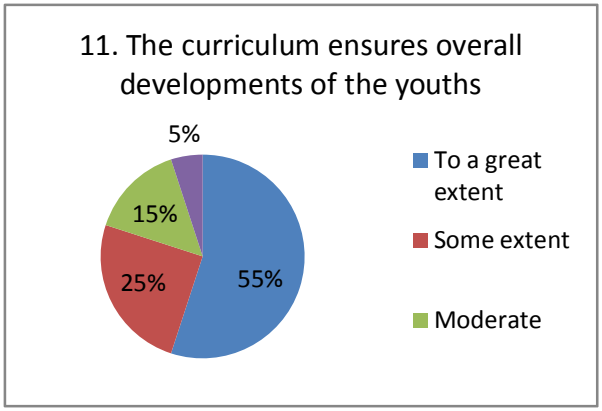
ALUMNI FEEDBACK

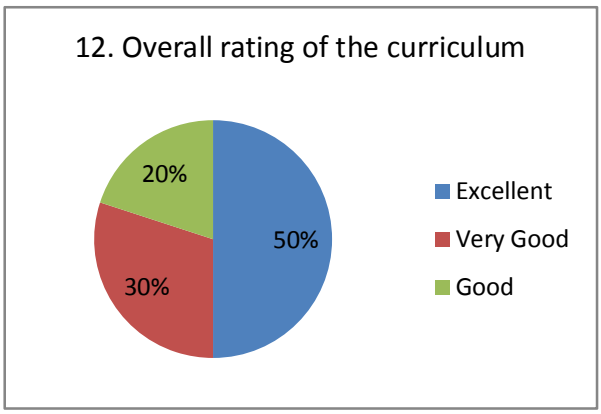
(20 responses)











60% of the respondent agreed that the offered experiential learning, Participative learning, and Problem-solving methodologies are good. The majority of the members support the sufficient grading to which curriculum content is sufficient to pursue higher studies, competitive and entrance examinations. 75% of respondents agreed that the Strategies implemented in the Teaching-Learning and Evaluation process are good. 55% of the respondents supports that curriculum ensures the overall development of the youths

to a great extent. The Majority of respondents extended their support to very good grading for the overall rating of the curriculum.

Suggestions:

- SET/NET classes may be conducted for those who are interested in teaching and research.
- Field projects may be introduced to gain experience.
- intra-department function (Math fest) may be conducted in the department to encourage students.

EMPLOYER'S FEEDBACK (Printed in Institution letterhead)

The esteemed institution, SRI RAMAKRISHNA MISSION VIDYALAYA COLLEGE OF ARTS AND SCIENCE is offering vital programmes under the science, arts, and IT stream along with the B.Voc programmes to knowledge acquisition. The department of Mathematics offers valuable courses for local, regional, national, and global needs. The following core course topics may be strengthened for the betterment of the mathematics students and to develop the higher-order innovations in Research.

- Real Analysis
- Topology
- Differential Equations
- Mathematical Statistics

Further, the Stakeholders' consolidated feedback report on curriculum (2020-2021) is submitted to the chairman of IQAC as the quality mandation and for competent authority approval.

K. Sathi 22/7/21

Chairman-BoS

Dr. K. SATHIYANATHAN
Associate Professor and Head
Dept. of Mathematics
SRMV College of Arts and Science
Coimbatore - 641 020

Principal, Chairman-IQAC

PRINCIPAL
SRI RAMAKRISHNA MISSION VIDYALAYA
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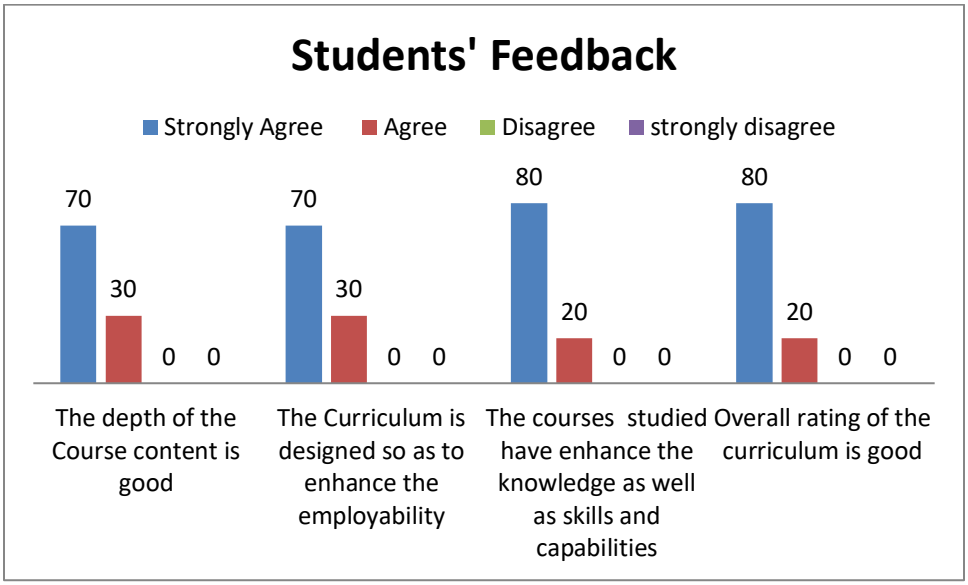
COIMBATORE-641020.

Sri Ramakrishna Mission Vidyalaya College of Arts and Science
Coimbatore – 641020
Department of Mathematics

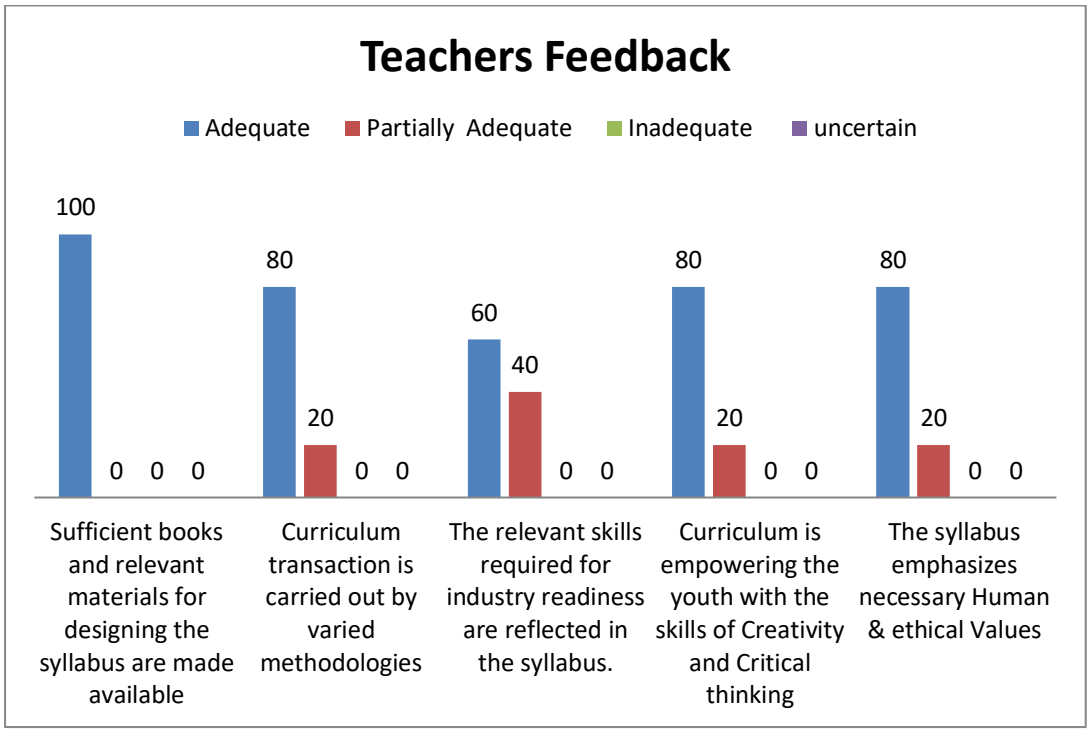
Stakeholders' feedback and suggestions received for the academic year 2018-19

Students' feedback



Suggestions: Nil

Teachers Feedback



Sufficient books and relevant materials

Sufficient books and relevant materials are available for curriculum design and development.

Methods applied to Curriculum transaction

Most of the faculty members accepted that the teaching methods used for curriculum transaction are adequate.

Preparedness for career placement

Sixty percentageof the faculty members felt that the relevant skills required for industry readiness are adequately reflected in the curriculum. Others suggested that the industry readiness/placement training programme may be arranged.

Development of Skills of creativity and critical thinking

Most of the faculty members felt that the skills of creativity and critical thinking in the curriculum are adequate.

Integration of Human and Ethical Values

Integration of Human and Ethical values are existing in thecurriculum.

Theory and Practical

Proportionate weightage has been given to both theory and practicalwherever applicable.

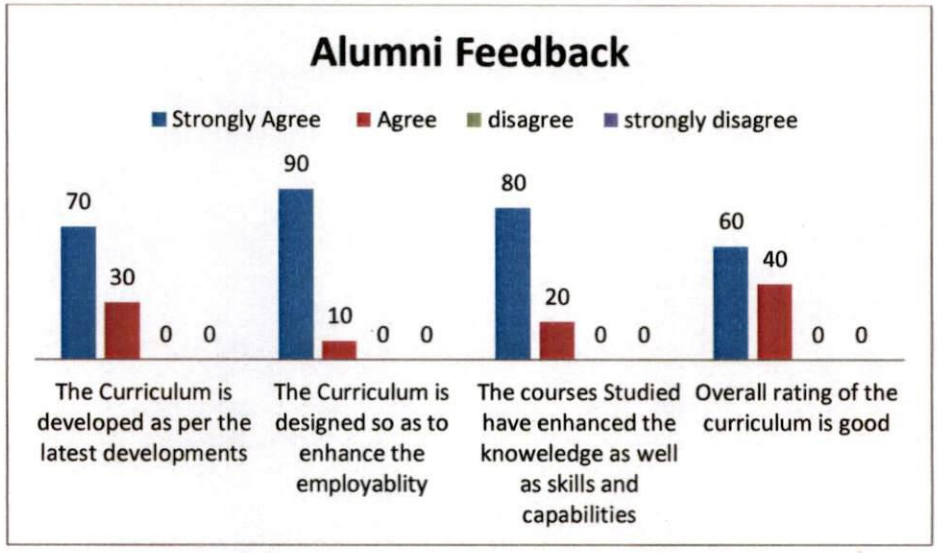
Need for instilling flexibility in curriculum

Existing flexibility in the curriculum is sufficient.

Suggestions:

- The content canonical form and triangular form in the course "Algebra" may be removed.
- In the course "Mathematical Statistics - I", unit II may be revised.
- The nomenclature of the course for M.Sc Physics (IDE) "Numerical Analysis" may be changed as "Numerical Methods"

Alumni Feedback



Suggestions:

Nil

Chairman, BoS

Dr. R. MURUGESU,
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Principal, Chairman- IQAC

SRI RAMAKRISHNA MISSION VIDYALAYA COLLEGE
OF ARTS AND SCIENCE
COIMBATORE - 641 020.

For candidates admitted from academic year 2019-2020 onwards

Under New CBCS

Programme : M.Sc Mathematics

Course Title : CORE 1: ALGEBRA Subject Code: 17PMA1C01

Year : First Year Semester : I

Hours/Week : 6 Credits : 5

Unit I:

Group Theory: Another counting principle - Sylows Theorem.

Chapter 2: Sections 2.11 and 2.12

Unit II:

Ring Theory: Euclidean Rings- Particular Euclidean Ring - Polynomial Rings - Polynomials over the Rational Field.

Chapter 3: Sections 3.7 to 3.10

Unit III:

Fields: Extension field – Roots of polynomials.

Chapter 5: Sections 5.1 and 5.3

Unit IV:

Fields: More about roots - Elements of Galois Theory.

Chapter 5: Sections 5.5 and 5.6

Unit V:

Linear Transformations: Canonical Forms: Triangular form, Trace and Transpose – Hermitian, Unitary and Normal Transformations.

Chapter 6: Sections 6.4, 6.8 and 6.10

Treatment as in:

Topics in Algebra by I.N. Herstein, John Wiley & Sons, Second Edition, 2006.

References:

1. **Algebra by M. Martin**, Prentice Hall of India, New Delhi, 1991.
2. **A First Course in Abstract Algebra by J. B. Fraleigh**, V Ed., Addison-Wesley Longman, Inc., Reading Massachusetts, 1999.

For candidates admitted from academic year 2018-2019 onwards
Under New CBCS

Programme : B.Sc., Mathematics.
Course Title : Allied 3: MATHEMATICAL STATISTICS I
Course Code : 18UMA3AL3
Year : Second Year **Semester : III**
Hours/Week : 6 **Credits : 5**

Course Objectives

1. To enable the students to acquire the knowledge of statistics.
2. To remember the properties of various statistical functions.
3. To understand the concepts of some statistical distributions.

Course Outcomes (CO)

CO1	Remembering the concepts of probability and random variables
CO2	Understanding the properties of some distributions.
CO3	Solving mean, median, mode, moments and moment generating functions of Binomial, Poission and Normal distributions.
CO4	Analyzing how correlation is used to identify the relationships between variables and how regression analysis is used to predict outcomes.

Unit –I

Random Variables - Mathematical Expectations.
Chapter 2: pages 2.1 to 2.32; Chapter 3: pages 3.1 to 3.18

Unit –II

Variance -Moments -Moment Generating Function.
Chapter 4: pages 4.1 to 4.25; Chapter 5: pages 5.1 to 5.17

Unit –III

Correlation **(Omit Bivariate sample)** – Regression
Chapter 8: pages 8.1 to 8.51; Chapter 9: pages 9.1 to 9.24

Unit –IV

Binomial Distribution – Poisson Distribution - Geometric Distribution.
Chapter 12: pages 12.1 to 12.25; Chapter 13: pages 13.1 to 13.21; Chapter 15

Unit –V

Normal Distribution - Uniform Distribution - Exponential Distribution - Gamma Distribution – Beta distribution.
Chapters 16,17,18,19 and 20.

Text Book:

Mathematical Statistics by P.R. Vittal -Margham Publications, Chennai, 2004.
(Omit all Exercise Problems)

Reference Book:

Fundamental of Mathematical Statistics by S.C. Gupta and V.K. Kapoor, Sultan Chand & Sons, 2008.
R.S.N. Pillai and V.Bagavathi,, "Statistics", Sultan Chand, New Delhi, 2008.
Gupta S.P, Statistical Methods, Sultan Chand, New Delhi, 33rd Edition, 2005.

For candidates admitted from academic year 2019-2020 onwards
Under New CBCS

Programme :**M.Sc PHYSICS**
Course Title : IDE ELECTIVE: NUMERICAL METHODS
Course Code :19PPH3EL3
Year : Second Year **Semester : III**
Hours/Week : 5 **Credits :**

Unit I:

The solution of numerical algebraic and transcendental equation: Introduction – The Bisection method – Method of Successive Approximation or the Iteration method – The Method of False Position (RegulaFalsi method) – Newton's Iteration method or Newton-Raphson method.**Simultaneous Linear Algebraic equations**: Introduction – Gauss Elimination method – Computation of the inverse of a matrix using Gauss's Elimination method –Iterative methods – examples.

Chapter III Sections 1-6.and**Chapter IV Sections 1,2 and 6.**

Unit II:

Finite Differences : First differences – Higher Differences – Backward Differences – Central difference notation – Properties of the operator Δ - Differences of a polynomial – Factorial polynomials – Relation between the operators E and Δ - Relation between the operators (D) and Δ - other difference operators – Relationship between the operators – Examples.**Interpolation:** Central difference tables – Central Difference - Interpolation Formulae – Gauss's Forward Interpolation Formula &Backward Interpolation formulae-examples.

Chapter V Sections 1- 18and **Chapter VII Sections 1- 4.**

Unit III:

Numerical Differentiation and Integration: Newton's Forward& Backward Difference Formula to compute the Derivatives – Derivatives using Striling's formula- Trapezoidal rule – Truncation error in the Trapezoidal Formula – Romberg's method – Simpson's rule – Practical Applications of the Simpson's rule – Examples.

Chapter IX Sections 1- 4 and **8-12.**

Unit IV:

Numerical Solution of Ordinary Differential Equations:

Solutions by Taylor's series – Euler's method – Improved Euler's method – Modified Euler's method – RungeKutta method – Second order RungeKutta method – Higher order RungeKutta method – Examples.

Chapter XI Sections 6-8 & 10-18.

Unit V:

Numerical Solution of Partial Differential Equations:

Solution of Boundary value and Initial value problems of partial differential equations - Solution of Elliptic, Parabolic and Hyperbolic Partial Differential Equations.

Chapter XII Sections 1- 9.

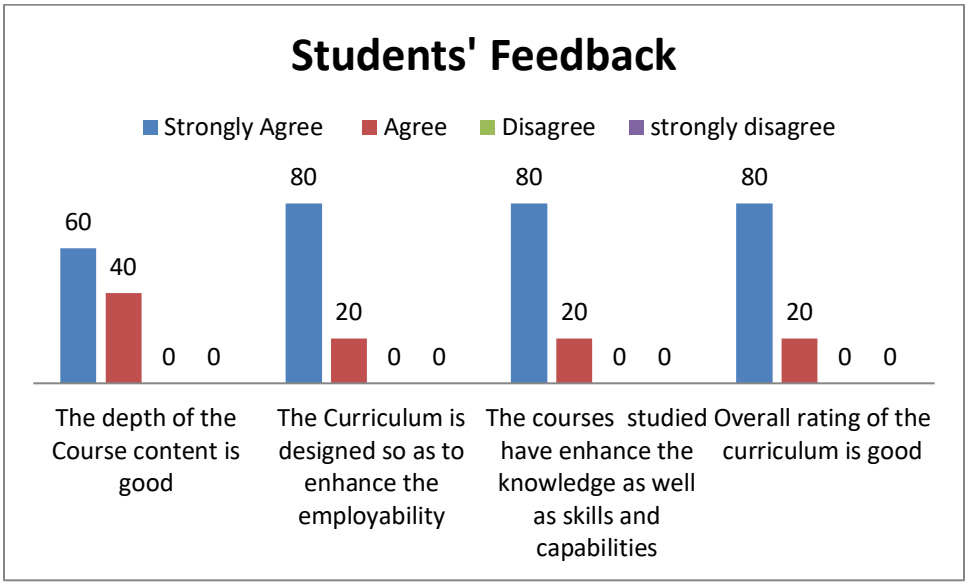
Treatment as in:

Numerical Methods in Science and Engineering by M.K. Venkataraman, The National Publishing Company, 5th Edition, 1999.

Sri Ramakrishna Mission Vidyalaya College of Arts and Science
Coimbatore – 641020
Department of Mathematics

Stakeholders' feedback and suggestions received for the academic year 2017-18

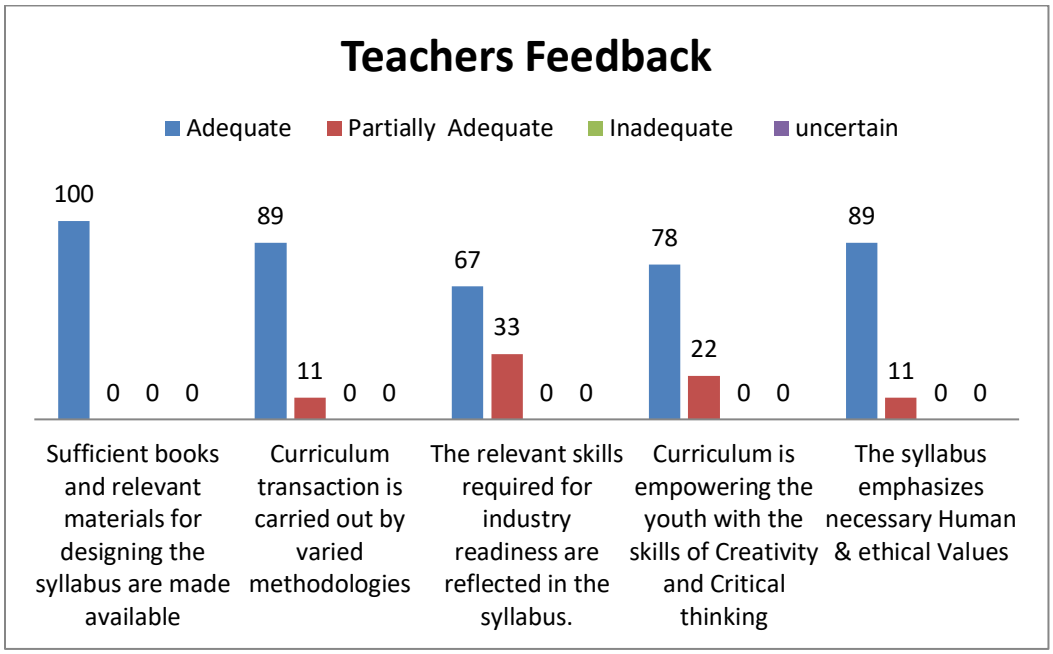
Students' feedback



Suggestions:

- PGDCA may be introduced as an additional/part-time programme for PG students.

Teachers Feedback



Sufficient books and relevant materials

Sufficient books and relevant materials are available for curriculum design and development.

Methods applied to Curriculum transaction

Most of the faculty members perceived that the teaching methods used for curriculum transaction are adequate.

Preparedness for career placement

Sixty-seven percentage of the faculty members felt that the relevant skills required for industry readiness are adequate in the curriculum.Others suggested that the industry readiness/placement training programme may be arranged.

Development of Skills of creativity and critical thinking

Most of the faculty members referredthat the skills of creativity and critical thinking areembedded in the curriculum.

Integration of Human and Ethical Values

Integration of human and Ethical values is existingin the curriculum.

Theory and Practical

Proportionate weightage has been given to both theory and practicalwherever applicable.

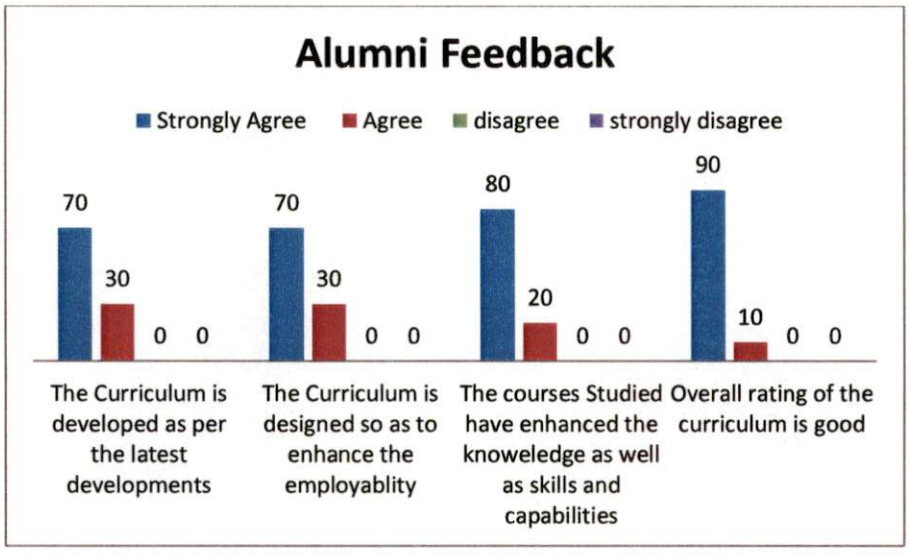
Need for instilling flexibility in curriculum

Existing flexibility in the curriculum is sufficient.

Suggestions:

Outcome based education may be introduced.

Alumni Feedback



Suggestions: Nil

Chairman, BoS

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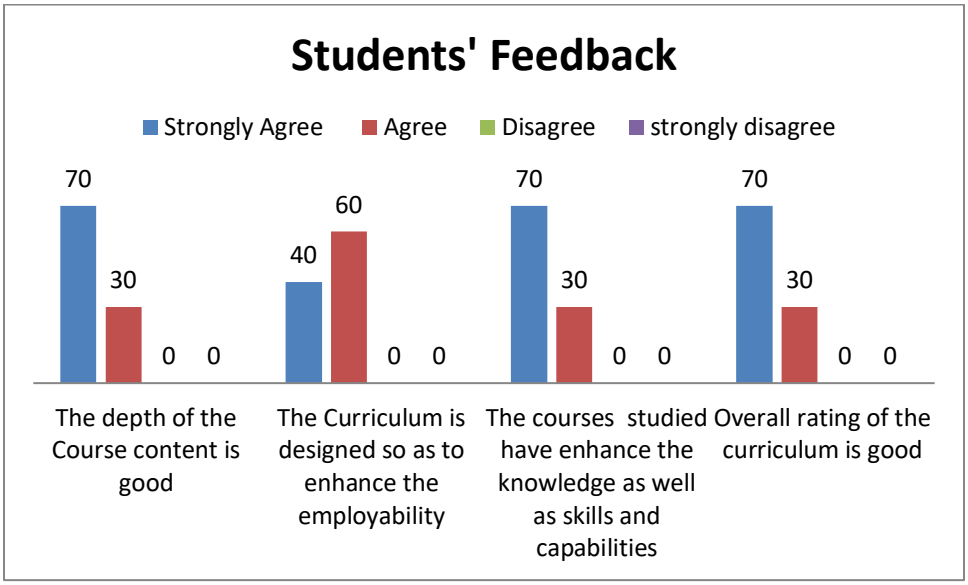
Stakeholders' feedback and suggestions received for the academic year 2016-17

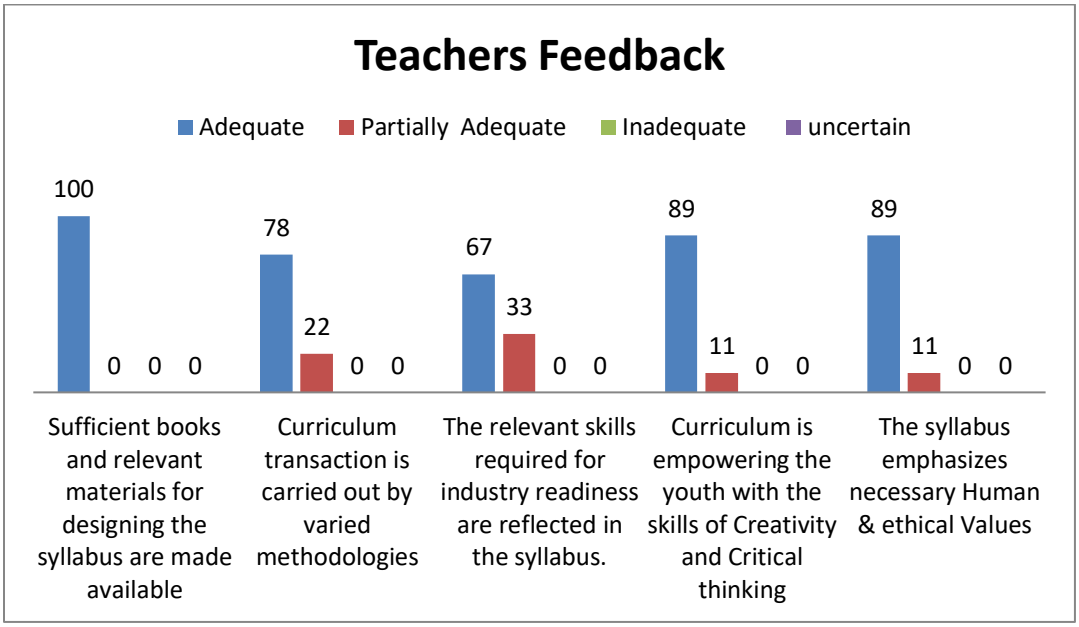
Students' feedback



Suggestions

- In the syllabi of each course, the unit wise referred material section numbers of the text books may be provided.
- Aptitude classes may be conducted.

Teachers Feedback



Sufficient books and relevant materials

Sufficient books and relevant materials are available for curriculum design and development.

Methods applied to Curriculum transaction

Most of the faculty members felt that the teaching methods used for curriculum transaction are adequate.

Preparedness for career placement

Sixty-seven percentage of the faculty members felt that the relevant skills required for industry readiness are adequately reflected in the curriculum. Others suggested that the industry readiness is partially reflected in the curriculum.

Development of Skills of creativity and critical thinking

Most of the faculty members felt that the skills of creativity and critical thinking in the curriculum are adequate.

Integration of Human and Ethical Values

Most of faculty members felt that integration of Human and Ethicalvalues in the existing curriculum is sufficient.

Theory and Practical

Proportionate weightage has been given to both theory and practicalwherever applicable.

Need for instilling flexibility in curriculum

Existing flexibility in the curriculum is sufficient.

Suggestions:

PG Level

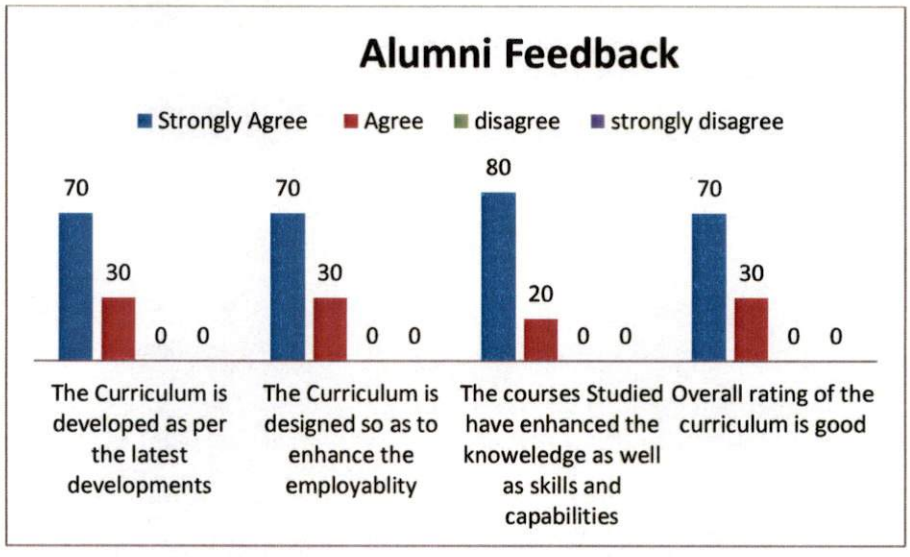
- The following courses may be enriched:
  - Algebra
  - MATLAB
  - Mechanics

- Text book for the course "Ordinary Differential Equations" may be changed.
- The content Uniform Distribution may be included in the course "Mathematical Statistics".
- More problems may be included in the course "Mathematical Methods".

UG Level

- The nomenclature of the course "Numerical Analysis" may be changed as "Numerical Methods".

Alumni Feedback



Suggestions:

Competitive examination-based aptitude classes may be conducted.

Chairman, BoS

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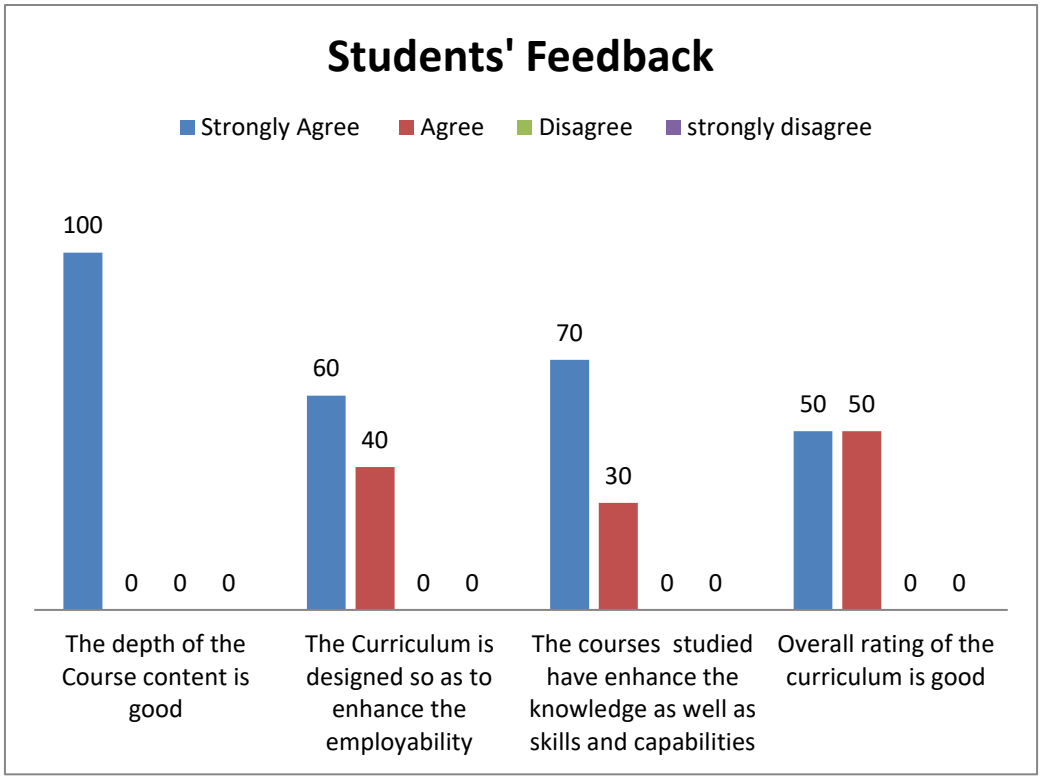
Sri Ramakrishna Mission Vidyalaya College of Arts and Science
Coimbatore – 641020
Department of Mathematics

Stakeholders' feedback and suggestions received for the academic year 2015-16

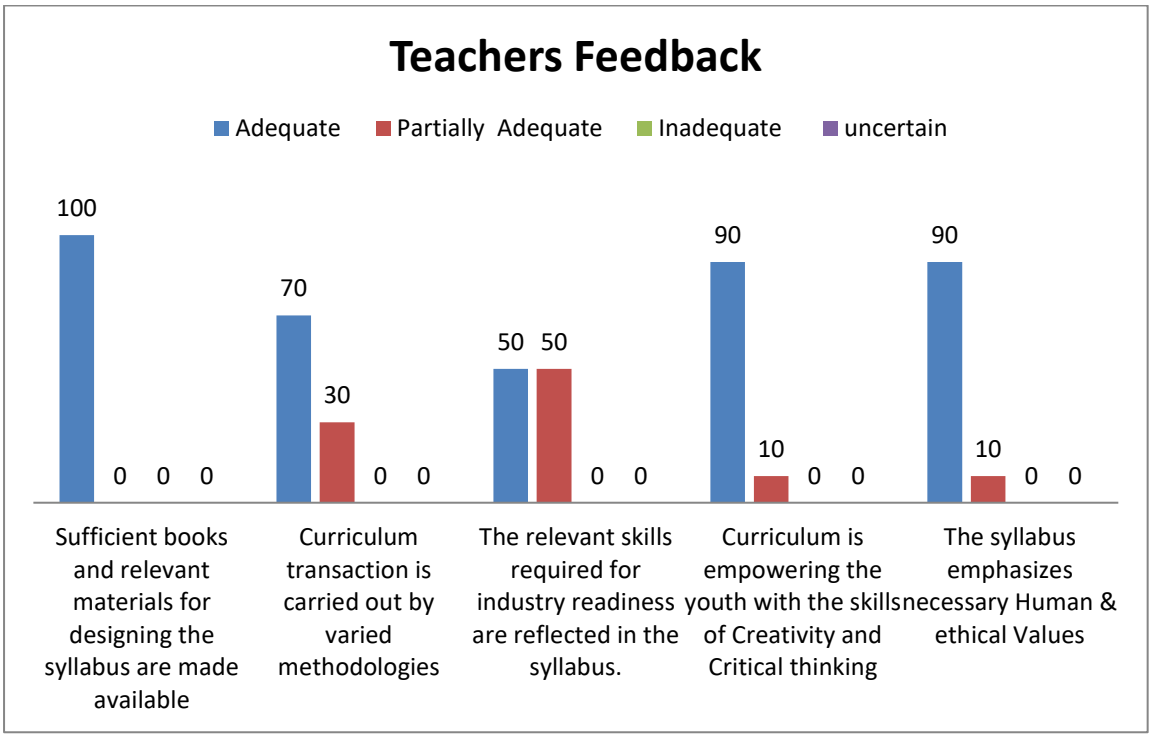
Students' feedback



Suggestions

- More number of programmes may be added in the C++ lab.
- Coaching for competitive examinations is required.
- Practical course on Statistics may be introduced.

Teachers Feedback



Sufficient books and relevant materials

Sufficient books and relevant materials are available for curriculum design and development.

Methods applied to Curriculum transaction

Most of the faculty members felt that the teaching methods used for curriculum transaction are adequate.

Preparedness for career placement

Fifty percent of the faculty members said that the relevant skills required for industry readiness are partially reflected in the curriculum. Others suggested to incorporate the content to enhance the preparedness for career placement.

Development of Skills of creativity and critical thinking

Mostof the faculty members mentioned that the skills of creativity and critical thinking are existing in the curriculum.

Integration of Human and Ethical Values

Integration of human and ethical values in the existing curriculum is sufficient.

Theory and Practical

Proportionate weightage has been given to both theory and practical wherever applicable.

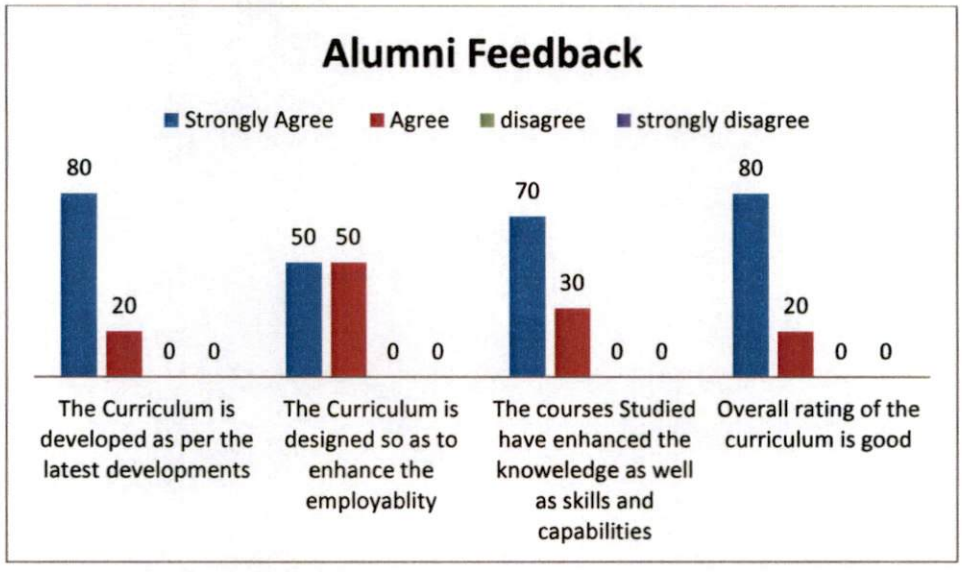
Need for instilling flexibility in curriculum

Flexibility in the existing curriculum is sufficient.

Suggestions:

- The course "Combinatorics" may be introduced.
- Practical Statistical Package for Social Science (SPSS) may be introduced.
- Latest editions of text books may be added.

Alumni Feedback



Suggestions

- The course "Astronomy" may be replaced with needy course.
- SET / NET coaching may be conducted.

Chairman, BoS

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