

DEPARTMENT OF MATHEMATICS

COURSE OBJECTIVES AND OUTCOMES

CBCS SYSTEM

| Course Title | Title | Credits | Course objectives | Course outcomes |
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| SEMESTER I | | | | |
| CC1/G E1(Sem -1) Paper Code (Theoretical): MTM-G-CC-1-1-TH / MTM-G-GE-1-1-TH Paper Code (Tutorial): MTM-G-CC-1-1-TU / MTM- | Unit-1 : Algebra-I. Unit-2 : Differential Calculus-I. Unit-3 : Differential Equation-I. Unit-4 : Coordinate Geometry | Credits : 5+1*6 *1 Credit for Tutorial | <ul style="list-style-type: none"> • Understand the concepts of Algebra in different fields of science. • Acquire basic knowledge of the theories of differential calculus. • Understand the applications of differential calculus in various fields. • Understand the applications of differential equations | <ul style="list-style-type: none"> • Students understood the concepts of Algebra. • Students understood the applications of differential calculus in various fields. • Students understood the applications of differential equations. • Students get well acquainted with geometry. |

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| G-GE-1-1-TU | | | <p>especially in Economics.</p> <ul style="list-style-type: none"> To make acquainted with the structures in geometry. To comprehend the various results of geometry with algebra in the study of science. | |
| SEMESTER II | | | | |
| <p>Paper Code (Theoretical): MTM-G-CC-2-2-TH / MTM-G-GE-2-2-TH Paper Code (Tutorial): MTM-G-CC-2-2-TU /</p> | <p>Unit-1 : Differential Calculus-II</p> <p>Unit-2 : Differential Equation-II</p> <p>Unit-3 : Vector Algebra</p> <p>Unit-4 : Discrete Maths</p> | 5 + 1 | <ul style="list-style-type: none"> Acquire advanced knowledge of the theories of differential calculus. Understand the applications of advanced differential calculus in various fields. Understand the advanced applications of differential | <ul style="list-style-type: none"> Students acquired knowledge of the theories of differential calculus. Students get well acquainted with the applications of advanced differential calculus . Students understood the advanced applications of differential equations. Students learnt the |

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| MTM-G-GE-2-2-TU | | | <p>equations especially in Economics.</p> <ul style="list-style-type: none"> To make acquainted with the structures of vectors in geometry. To comprehend the various results of geometry with algebra in the study of science. To integrate discrete structures with number theory. | <p>structures of vectors in geometry.</p> <ul style="list-style-type: none"> Students were able to integrate discrete structures with number theory. |
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| SEMESTER III | | | | |
| <p>CC3/G E3 (Sem-3)</p> <p>Paper Code (Theoret</p> | <p>Unit-1 : Integral Calculus</p> <p>Unit-2 : Numerical Methods</p> | 5+1 | <ul style="list-style-type: none"> Acquire knowledge of integral calculus and apply it on various fields of science. To relate integral calculus with | <ul style="list-style-type: none"> Students acquired knowledge of integral calculus and applied it on various fields of science. Students were able to relate integral |

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| <p>ical) : MTM- G-CC-3- 3-TH / MTM- G-GE-3- 3-TH Paper Code (Tutorial):MTM- G-CC-3- 3-TU / MTM- G-GE-3- 3-TU</p> | <p>Unit-3 : Linear Programming</p> | | <p>economics.</p> <ul style="list-style-type: none"> • To understand the significance of approximation in day to day calculations. • To integrate integral calculus with numerical analysis. • Comprehend the emergence of Business applications. • Understand LPP in business management approach | <p>calculus with economics.</p> <ul style="list-style-type: none"> • Students were able to analyze the significance of approximation in day to day calculations. • Students learnt to integrate integral calculus with numerical analysis. • Students learnt to comprehend the emergence of Business applications. • Students understood LPP in business management approach |
| <p>SEMESTER IV</p> | | | | |

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| <p>CC4/G E4 (Sem-4) Paper Code (Theoretical): MTM- G-CC-4- 4-TH / MTM- G-GE-4- 4-TH Paper Code (Tutorial):MTM- G-CC-4- 4-TU / MTM- G-GE-4- 4-TU</p> | <p>Unit-1 : Algebra-II</p> <p>Unit-2 : Computer Science & Programming</p> <p>Unit-3 : Probability & Statistics</p> | <p>5+1</p> | <ul style="list-style-type: none"> • Understand the concepts of advanced Algebra in different fields of science. • To integrate algebra with different branches of science in advanced stage. • Comprehend the development of computer science and programming. • Analyse different algorithms and programmes • Integrate algorithms with different aspects of Mathematics. • Applications of Probability and statistics in Economics, Psychology, Education and Geography | <ul style="list-style-type: none"> • Students understood the concepts of advanced Algebra in different fields of science. • Students were able to integrate algebra with different branches of science in advanced stage. • Students were able to comprehend the development of computer science and programming. • Students analysed different algorithms and programmes • Students learnt to integrate algorithms with different aspects of Mathematics. • Students learnt applications of Probability and statistics in Economics, Psychology, Education and Geography. |
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