



**Course Outcome**  
**F. Y. B. Sc. (Mathematics)**  
**Semester –I and II**

Name of the Course code	Course Outcomes
USMT101	<ol style="list-style-type: none"> <li>1. Students will able to gain Knowledge of fundamental concepts of real numbers.</li> <li>2. Students will verify the value of the limit of a function at a point using the definition of the limit.</li> <li>3. Students will Learn to check function is continuous understand the consequences of the intermediate value theorem for continuous functions</li> </ol>
USMT102	<ol style="list-style-type: none"> <li>1. Students can able to learn to solve system of linear equation.</li> <li>2. Students will able to find roots of polynomial over rational.</li> </ol>
USMTP01	<ol style="list-style-type: none"> <li>1. Students can solve problem solve on algebra and calculus.</li> <li>2. Students can able to utilize Knowledge of Mathematics to its applications.</li> </ol>
USMT201	<ol style="list-style-type: none"> <li>1. Students will be to understand differentiation and fundamental Theorem in differentiation and various rules.</li> <li>2. Students Geometrical representation and problem solving on MVT and Rolls theorem.</li> </ol>
USMT202	<ol style="list-style-type: none"> <li>1. Students will able to solve system of linear equation.</li> <li>2. Students will understand Vector spaces</li> <li>3. Students will able to solve problems on basis and linear transformation.</li> </ol>
USMTP02	<ol style="list-style-type: none"> <li>1. Problem solve on Calculus II and Algebra II</li> </ol>

**Course Outcome**  
**S. Y. B. Sc. (Mathematics)**  
**Semester- III and IV**

Name of the Course code	Course Outcomes
USMT301	<ol style="list-style-type: none"> <li>1. Students will able to understand fundamental concepts function.</li> <li>2. Students are able to solve problems on differentiation</li> <li>3. Students are able to study Application of differentiation</li> </ol>
USMT302	<ol style="list-style-type: none"> <li>1. Students able to study of linear transformation and matrices.</li> <li>2. Students able to solving problem on determinant and its application.</li> <li>3. Study of inner product and solving problems on inner product.</li> </ol>
USMT303	<ol style="list-style-type: none"> <li>1. Students able to study of permutation and recurrence relation.</li> <li>2. Students are able to solve problems on preliminary counting's.</li> <li>3. Study of advance counting</li> <li>4. Able to solve problems on counting principle.</li> </ol>
USMTP03	<ol style="list-style-type: none"> <li>1. Solving problem on based on USMT 301 , USMT 302 and USMT 303</li> </ol>
USMT401	<ol style="list-style-type: none"> <li>1. Students can able to study of Riemann Integration.</li> <li>2. Solving problem on Riemann Integration.</li> <li>3. Study of types of integrals, indefinite integrals and definite integrals.</li> <li>4. Introduction of Beta and Gamma function.</li> </ol>
USMT402	<ol style="list-style-type: none"> <li>1. Students will able to study of groups and subgroups.</li> <li>2. Students will study of cyclic groups and subgroups.</li> <li>3. Introduction Lagrange's theorem</li> <li>4. Students will study of group homomorphisms.</li> </ol>
USMT403	<ol style="list-style-type: none"> <li>1. Students can able to solve First order First degree differential equation by various methods.</li> <li>2. Students can able to solve second order linear differential equation i.e. homogeneous and non-homogeneous</li> <li>3. Students can solve the problems on linear system of ordinary differential equation.</li> <li>4. Students can solve problems on partial differential equations.</li> </ol>
USMTP04	<ol style="list-style-type: none"> <li>1. Students Solving problem on USMT 401, USMT 402 and USMT 403</li> </ol>

**Course Outcome**  
**T. Y. B. Sc. (Mathematics)**  
**Semester -V**

Name of the Course code	Course Outcomes
USMT501	<ol style="list-style-type: none"> <li>1. Students can able to solve problems on multiple integrals.</li> <li>2. Students can solve problems on line integrals.</li> <li>3. Students can able to solve problems on surface integrals.</li> </ol>
USMT502	<ol style="list-style-type: none"> <li>1. Introduction to vector space and subspace.</li> <li>2. Use computational techniques and algebraic skills essential for the study of systems of Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors, Orthogonally and Diagonalization.</li> </ol>
USMT503	<ol style="list-style-type: none"> <li>1. Able to understand the Euclidean distance function on <math>\mathbb{R}^n</math></li> <li>2. Students will understand the geometric meaning of each of the metric space</li> <li>3. Students can understand between open and closed balls in a metric space</li> <li>4. Students can understand convergence for sequences in a metric space.</li> </ol>
USMT5C4	<ol style="list-style-type: none"> <li>1. Students can able to understand basics of graphs</li> <li>2. Students can able to solve problems on trees.</li> <li>3. Students can solve problems on Eulerian and Hamiltonian graphs</li> </ol>
USMTP05	<ol style="list-style-type: none"> <li>1. Practical's based on USMT501 and USMT 502</li> </ol>
USMTP06	<ol style="list-style-type: none"> <li>1. Practical's based on USMT 503 and USMT USMT5C4</li> </ol>

**Course Outcome**  
**T. Y. B. Sc. (Mathematics)**  
**Semester-VI**

Course code	Course Outcomes
USMT601	<ol style="list-style-type: none"><li>1. Students are able to understand complex numbers and its operation.</li><li>2. Students are able to solve problems on Cauchy integral formula.</li><li>3. Students can solve problems on power series and Laurent power series.</li></ol>
USMT602	<ol style="list-style-type: none"><li>1. Understand the importance of algebraic properties with regard to working within various number systems</li><li>2. Students are able to understand groups and rings.</li><li>3. Students can solve problems on group and ring homomorphisms.</li></ol>
USMT603	<ol style="list-style-type: none"><li>1. Students are able to understand metric spaces.</li><li>2. Students are able to solve problems on connected sets.</li><li>3. Students are able to solve problems on sequences and series of the functions.</li></ol>
USMT6C4	<ol style="list-style-type: none"><li>1. Students are able to understand colorings of the graphs.</li><li>2. Students are able to solve problems on types of graphs.</li><li>3. Students will understand Combinatorics.</li></ol>
USMTP07	<ol style="list-style-type: none"><li>1. Practical's based on USMT 601 and USMT 602</li></ol>
USMTP08	<ol style="list-style-type: none"><li>1. Practical's based on USMT 603 and USMT6C4.</li></ol>