

Telangana Tribal Welfare Residential Degree College (Girls)-Mulugu

Mulugu District - Telangana State

Affiliated to Kakatiya University -Warangal

Subject: Mathematics

Programme Out Comes of UG B.Sc

Graduates of a Bachelor Degree will have a broad and coherent body of knowledge in their disciplines, with a deep understanding of the underlying principles and concepts in one or more discipline has a basis for independent Lifelong learning.

At the end of an undergraduate Programme Student will be able to

Semester 1

Differential and integral calculus:

CO-1: Understand the concept of differentiation and partial differentiation

CO-2: Understand the limit of a function

CO-3 : Gain knowledge the total derivatives

CO-4 : Student's will have the ability to work independent

Semester 2

Differential Equations :

CO-1: Understand the differential equation of first order and first degree

CO-2 : Understand the Linear differential equations

CO-3 : Understand the Total differential equations

CO-4 : Student's gain the knowledge of applications of first order differential equations

CO-5 : The Cauchy-Eulers Equation

Semester 3

Real Analysis :

CO-1 : understand the limit of sequences

CO-2 : Students known basic properties of the derivatives

CO-3 : Student's understand the mean value theorem

CO-4 : Students known the properties of Riemann integral

CO-5 : Student's understand the fundamental theorem of calculus

Semester 4

Algebra :

CO-1: Student's Understand the Group definition

CO-2: Student's known the properties of groups

CO-3: Student's understand the sub groups, terminology and notation

CO-4: Student's understand the cyclic groups and their properties

CO-5: Student's known the permutations and properties of permutations

CO-6 : Student's understand the normal sub groups and factor groups

CO-7 : Student's understand the rings and their properties

CO-8 : Student's understand the integral domains

CO-9 : Student's understand the rings Homomorphism

Semester 5

Linear Algebra :

CO-1 : Students can understand vector space and sub spaces

CO-2 : Student's known the linear transformations and linearly independent sets

CO-3 : Student's understand the what is the basis and coordinates systems

CO-4 : Student's can understand dimension of vector space

CO-5 : Student's find the Eigen values and Eigen vectors

CO-6 : Student's known the characteristic equations

CO-7: Student's understand the diagonalisation

CO-8 : Student's gain the knowledge applications to differential equations

CO-9 : Student's understand the orthogonality and least squares.

Semester 6

Solid Geometry :

CO-1 : Student's can understand three dimensional spaces

CO-2 : Student's will be able to understand the different types of three dimensional spaces.

CO-3: Student's will have the capability to solve various problems using the domain knowledge of mathematics

CO-4 : Student's will have the ability to think acquire knowledge and skill through logical reasoning

CO-5: The entire UG mathematics program will help the students enhance their employability skills.