PROCEEDING OF BOARD OF STUDIES 2022-2023, SCHOOL OF MATHEMATICS HELD ON 28th January 2023 at 11am.

MEMBERS PRESENT:

- 1. Prof. Jayaprakash Panda, External Member, Professor, Dept. of **Mathematics, VSSUT Burla**
- 2. Dr. B. L. Panigrahi, Chairperson, School of Math., G. M. University
- 3. Dr. Y. Jamudulia, Asst. Professor, School of Math., G. M. University
- 4. Dr. A. Patra, Asst. Professor, School of Math., G. M. University

BUISNESS CONDUCTED:

The Board of Studies meeting of School of Mathematics, GMU was held on 28-01-2023 in the Office of School of Mathematics in physical mode at 11am. The meeting continues up to 1.15pm with successful discussions.

- 1. It has been resolved that, the syllabus of PG and Ph.D. for the academic year 2022-2023 for the School of Mathematics, GMU remains unchanged.
- 2. The UG Syllabus has been discussed and found the following suitable change for the Academic year 2022-2023.

In Semester IV- SECII Paper- Introduction to MATLAB has been modified.

da) (B. L. Panigrahi) (Y. Jamudulia) (A. Patra) (01/2023

SKILL ENHANCEMENT COURSES-II (Option3)

INTRODUCTION TO MATLAB

Unit-I

Starting with MATLAB, MATLAB Windows, Arithmetic Operations, Elementary Math built-in functions, Defining scalar variables, Creating arrays: one dimensional, twodimensional, Variables in MATLAB, Transpose operator, Array addressing, Using a Colon, Adding and deleting elements, Built-in-functions for handling arrays, Strings

Unit-II

Mathematical operation with arrays: Addition and Subtraction with arrays, Array multiplication, Array division, Element-by-element operations, Using arrays in MATLAB built-in Math functions, Built-in functions for analyzing arrays, script files, creating and saving script files, input to a script files, Output commands.

Unit-III

Two-dimensional plots: The plot command, fplot command, plotting multiple graphs, formatting a plot, Plots with special graphics, Histograms, Polar plots, Three dimensional plots: Line plots, Mesh and surface plots, plots with special graphics.

Unit-IV

Function and function files: creating function files, structure of a function file, local and global variables, examples of simple function files, Programming in MATLAB: Relational and logical operators, conditional statements, loops, switch-case statement, nested loops, break and continue command.

Books Recommended:

1.A. Gilat, MATLAB: an introduction with Applications, Wiley, 2004

2. Rudra Pratap, Getting started with MATLAB.

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