# Emerging Science and Technology Department Course outcome statements and mapping CO-PO AY 2023-24 Part II

Class : - SY CSD

Course Code :- BSC251A	Course Title:- Complex Variable & Vector Calculus						
<b>Course Outcomes :-</b>	CO1	Find the Fourier transform of given function					
	CO2	Express the function in Fourier series in different intervals					
	CO3	Discuss the function of complex variables					
	CO4	Make use of partial derivatives for differentiation of vector					
	0.05						
	005	Evaluate vector integral by Stoke's theorem& Gauss theorem					
	CO6	Solve the difference equations by z-transform					
		or					
		Solve partial differential equations by separation of variables					

							0					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1	-	-	-	-	-	-	-	-	-	-
CO2	2	1	-	-	-	-	-	-	-	-	-	-
CO3	2	1	-	-	-	-	-	-	-	-	-	-
CO4	2	1	-	-	-	-	-	-	-	-	-	-
CO5	2	1	-	-	-	-	-	-	-	-	-	-
CO6	2	1	-	-	-	-	-	-	-	-	-	-
Average	2	1	-	-	-	-	-	-	-	-	-	-
Mapping Strength	1.0	1.0	-	-	-	-	-	-	-	-	-	-

### Course Code :- CSD251 Course Title:- Database Management System

<b>Course Outcomes :-</b>	CO1	Explain basic concept of database management system and its
		architecture. (I. Knowledge)

- CO2 Analyze and design Database Management Systeusing ER model (I. Knowledge).
- CO3 Normalize the database design using normal forms (III. Apply).
- CO4 Implement different types of SQL queries on data (III. Apply).
- CO5 Illustrate ACID properties for transaction management and concurrency control (I. Knowledge).
- CO6 Compare NoSQL databases with SQL databases (I. Knowledge).

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	-	-		-	-	-	-	-	-	-	-
CO2	2	2	-	-	-	-	-	-	-	-	-	-
CO3	2	-	-	-	-	-	-	-	-	-	-	-
CO4	2	1	-	-	-	-	-	-	-	-	-	-
CO5	1	-	-	-	-	-	-	-	-	-	-	-
CO6	1	2	-	-	-	-	-	-	-	-	-	-
Average	1.6	1.6	-	-	-	-	-	-	-	-	-	-
Mapping Strength	1.6	1.6	-	-	-	-	-	-	-	-	-	-

# Course Code :- CSD252 Course Title:- Operating System

<b>Course Outcomes :-</b>	CO1	Students will be able to understand the basics, structures, and
		functions of the Operating System.(II Understand)
	CO2	Students will be able to apply the process management concepts and
		scheduling algorithms.(III Apply)
	CO3	Students will be able to identify Deadlock(II Understand)
	CO4	Apply the knowledge of Memory management and segmentation.(III Apply)
	CO5	Students will be able to understand the File management system of Operating systems with Storage management(II Understand)
	CO6	Students will understand the workings of the operating system(II Understand)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	-	1	-	-	-	-	-	-	-	-	-	-
CO2	-	1	-	-	-	-	-	-	-	-	-	-
CO3	-	1	-	-	-	-	-	-	-	-	-	-
CO4	-	-	2	-	-	-	-	-	-	-	-	-
CO5	-	-	2	-	-	-	-	-	-	-	-	-
CO6	-	-	-	1	-	-	-	-	-	-	-	-
Average	-	1.0	2.0	1.0	-	-	-	-	-	-	-	-
Mapping Strength	-	1	2	1	-	-	-	-	-	-	-	-

<b>Course Code :-</b> CSD253	Course	rse Title:- Discrete Mathematics and Graph Theory					
Course Outcomes :-	CO1 CO2	Use the concept of propositional logic to solve the engineering problems. (BL: Remember, Understand, Apply) Solve the problems on set operations, counting theory and functions (BL: Remember, Understand, Apply)					
	CO3	Identify equivalence and partial order relations. (BL: Understand, Apply)					
	CO4 CO5	Apply concepts of graph and trees for solving complex problems. (BL: Apply) Make use of algebraic properties of groups, rings and fields to solve number theoretic problems (BL: Apply)					

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-	-	-	-	-	-	-	-	-	-	-
CO2	3	2	2	-	-	-	-	-	-	-	-	-
CO3	3	2	-	-	-	-	-	-	-	-	-	-
CO4	2	2	3	-	-	-	-	-	-	-	-	-
CO5	3	2	-	-	-	-	-	-	-	-	-	-
Average	2.8	2	2.5	-	-	-	-	-	-	-	-	-
Mapping Strength	2.8	2	2.5	-	-	-	-	-	-	-	-	-

HESTD