Course outcomes 2022 scheme

1) **Course Name: Mathematics for Computer Science BCS301**

C201.1	Explain the basic concepts of probability, random variables, probability distribution.
C201.2	Apply suitable probability distribution models for the given scenario.
C201.3	Apply the notion of a discrete-time Markov chain and n-step transition probabilities to solve the given problem.
C201.4	Use statistical methodology and tools in the engineering problem-solving process.
C201.5	Compute the confidence intervals for the mean of the population.
C201.6	Apply the ANOVA test related to engineering problems.

2) **Course Name: Digital Design and Computer Organization BCS302**

C202.1	Apply the K–Map techniques to simplify various Boolean expressions.
C202.2	Design different types of combinational and sequential circuits along with Verilog programs.
C202.3	Describe the fundamentals of machine instructions, addressing modes and Processor performance.
C202.4	Explain the approaches involved in achieving communication between processor and I/O devices.
C202.5	Analyze internal Organization of Memory and Impact of cache/Pipelining on Processor Performance.

3) **Course Name: Operating Systems BCS303**

C203.1	Explain the structure and functionality of operating system.
C203.2	Apply appropriate CPU scheduling algorithms for the given problem.
C203.3	Analyse the various techniques for process synchronization and deadlock handling.
C203.4	Apply the various techniques for memory management.
C203.5	Explain file and secondary storage management strategies.
C204.6	Describe the need for information protection mechanisms.

4) **Course Name: Data Structures And Applications BCS304**

C204.1	Explain different data structures and their applications.
C204.2	Apply Arrays, Stacks and Queue data structures to solve the given problems.
C204.3	Use the concept of linked list in problem solving.
C204.4	Develop solutions using trees and graphs to model the real-world problem.
C204.5	Explain the advanced Data Structures concepts such as Hashing Techniques and Optimal Binary Search Trees

5) **Course Name: Data Structures Laboratory BCSL305**

C205.1	Analyze various linear and non-linear data structures
C205.2	Demonstrate the working nature of different types of data structures and their applications
C205.3	Use appropriate searching and sorting algorithms for the give scenario.

C205.4	Apply the appropriate data structure for solving real world problems
C205.5	

6) Course Name: Object Oriented Programming with JAVA BCS306A

C206.1	Demonstrate proficiency in writing simple programs involving branching and looping structures.
C206.2	Design a class involving data members and methods for the given scenario.
C206.3	Apply the concepts of inheritance and interfaces in solving real world problems.
C206.4	Use the concept of packages and exception handling in solving complex problem
C206.5	Apply concepts of multithreading, autoboxing and enumerations in program development

7) Course Name: Object Oriented Programming with C++ BCS306B

C207.1	Illustrate the basic concepts of object-oriented programming.
C207.2	Design appropriate classes for the given real world scenario.
C207.3	Apply the knowledge of compile-time / run-time polymorphism to solve the given problem.
C207.4	Use the knowledge of inheritance for developing optimized solutions.
C207.5	Apply the concepts of templates and exception handling for the given problem.
CS207.6	Use the concepts of input output streams for file operations