(Full Marks 30 for each course)

(ALL THE QUESTIONS GIVEN BELOW ARE COMPULSORY)

Course : BCA 401 (Numerical Analysis and Scientific Computing)
ASSIGNMENT-I   *Total Marks : 7.5×2=15*

1. Compare Lagrange's formula with Newton's Divided Difference formula with suitable examples.
2. Explain Picard's rule with a an example

Course : BCA 401 (Numerical Analysis and Scientific Computing)
ASSIGNMENT-II   *Total Marks : 7.5×2=15*

1. Find the cube root of 10 using Newton-Raphson Method.
2. Explain Trapezoidal rule with an example.

Course : BCA-402 (Database management System)
ASSIGNMENT-I   *Total Marks : 7.5×2=15*

1. Explain the concept of E-R model with the help of an example.
2. Define functional dependency. Explain the second and third normal form.

Course : BCA-402 (Database management System)
ASSIGNMENT-II   *Total Marks : 7.5×2=15*

1. What is hashing? Explain external hashing.
2. Explain Lost Update problem and the Temporary Update Problem

Course : BCA- 403 (Operating System)
ASSIGNMENT-I   *Total Marks : 7.5×2=15*

1. What is an operating system? Explain the different types of operating system.
2. Explain in brief the concept of demand paging.

Course : BCA- 403 (Operating System)
ASSIGNMENT-II   *Total Marks : 7.5×2=15*

1. What is a semaphore? Explain busy waiting semaphores.
2. Describe the necessary conditions for Deadlock prevention?

Course : BCA- 404 (Object Oriented Programming using JAVA)
ASSIGNMENT-1   *Total Marks : 5 × 3 = 15*

1. Discuss the features of the Java Programming language?
2. Explain the structure of Java Program with example.
3. What are types Of Exceptions In Java? Explain with examples.

Course : BCA- 404 (Object Oriented Programming using JAVA)
ASSIGNMENT-II   *Total Marks : 15*

1. What is meant by Method Overriding? Explain with an example.   5
2. Write short notes on   10
   a. Constructor and destructor
   b. Multithreading

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