

HOME ASSIGNMENT (2022 batch)
Bachelor of Computer Application (BCA) NEW SYLLABUS
(FOURTH SEMESTER)
CENTRE FOR DISTANCE AND ONLINE EDUCATION
DIBRUGARH UNIVERSITY
(Full Marks 30 for each course.)

(ALL THE QUESTIONS GIVEN BELOW ARE COMPULSORY)

COURSE : BCA 401 (Numerical Analysis and Scientific Computing)

Assignment – 1

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

Assignment – 2

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 – 1

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.

Assignment – 2

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 – 1

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.

Assignment – 2

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

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.

Assignment – 2

Marks –5+10=15

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