Directorate of Open and Distance Learning
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NOTIFICATION

for

BCA 4th Semester Learners regarding submission of Home Assignments

This is for information to all Study Centers and Learners under DODL, DU that the student of BCA 4th Semester shall have to submit one Home Assignment in each course (paper). Each assignment carries 30 marks. The questions for the Home Assignments are enclosed herewith. At the time of submitting the assignments, please note the following:

* Write your assignment in A4 size paper neatly, with your own hand- writing on one side of the paper. You may also submit a computer printed copy of your assignments with your signature at the end.

* Stick to the word limit mentioned in the questions.

* Keep a margin of about 5 cm on the left side of the paper.

* You have to submit the assignments directly in the Study Centre wherein you have enrolled yourself.

* The assignments for a course (paper) should be tagged / stapled together to make a booklet, i.e. a separate booklet for each course (paper).

* Keep a duplicate or photo copy of the assignment with you (compulsory).

* The last date of submitting the Assignment is 14th October, 2022 (excluding Sundays)

* The cover page of your booklet should contain the following Label :

Home Assignment

Name of Study Centre_____

Roll No._____

Name _____

Programme : BCA

Class : 4th Semester

Course (Paper) : _____

Session :

D.U. Registration No. : (If received) _____of ___

Date of Submission : _____

Sincerely Yours

Sd/-

(Prof. D.K. Chakraborty)

Director, i/c

DODL, D.U

4th SEMESTER
ASSIGNMENT
Numerical Analysis and Scientific Computing
BCA 401

Total marks : 30

Answer any three.

10X3=30

1. Explain forward difference and backward difference in detail.

2. Regula-falsi Method

3. Prove that bisection method always converges.

4. Newton Raphson Method

5. Range – Kutta Method

ASSIGNMENT
Database management System
BCA-402

Answer any three.

10X3=30

1. Explain three-schema architecture for database system

2. Define functional dependency. Explain the various normal forms.

3. Explain in detail about E-R model with the help of an example.

4. What is hashing? Explain external hashing.

5. Explain Lost Update problem and the Temporary Update Problem

ASSIGNMENT
Operating System
BCA- 403

Answer any three.

10X3=30

1. What is an operating system? Explain the different types of operating system.

2. Explain in brief the concept of demand paging.

3. What is a semaphore? Explain busy waiting semaphores.

4. Describe the necessary conditions for Deadlock prevention?

5. Explain the following:

(i) FIFO Page replacement algorithm.
(ii) Virtual memory

ASSIGNMENT
Programming Paradigms
BCA- 404

Answer any three.

10X3=30

1. Discuss about the evolution of software Architecture

2. Explain the Organization of a conventional computer.

3. Compare structure and object oriented programming paradigm with examples.

4. Describe the elementary data type that are built into the hardware of your local computer.

5. Write short notes on

    a. Constructor and destructor
    b. Parametric Polymorphism