KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG – 2nd Semester, 2026
Computer Application
CADSC-151
Data Structure
Unit Test 1(Assignment)

Total marks: 20

Answer any 4 question each carries 5 marks each:

1. Define array. Write an algorithm to insert an element in a Linear Array.
2. Convert the following large infix expression into postfix form. Show all stack contents step by step.

A + B * (C ^ D - E) ^ (F + G * H) - I

3. What is a stack? Write an algorithm to implement stack using an array and linked list.
4. Explain the working of a queue with the help of a diagram? Write an algorithm to insert an element in a queue.
5. Differentiate between recursion and iteration. Write a recursive algorithm to find sum of first n natural numbers.
6. Write an algorithm to insert an element at the beginning of a singly linked list.

KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG – 2nd Semester, 2026
Computer Application
CADSC-152
Lab on Data Structure
Unit Test 1(Assignment)

Total marks: 20

Answer any 4 question each carries 5 marks each:

1. Write a C program to find factorial of a number using recursion and iteration
2. Write a C program to perform stack operations using array implementation.
3. Write a C program to perform stack operations using linked list implementation.
4. Write a C program to convert the sparse matrix into non-zero form and vice-versa.
5. Write a C program to calculate GCD of 2 numbers with recursion and without recursion.
6. Write a C program to search an element from a list. Give users the option to perform linear or binary search.

KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG – 2nd Semester, 2026
Computer Application
CASEC-151
Python Programming

Unit Test 1(Assignment)
Answer the following questions: Total marks: 14

1. Explain variables in python. What are the rules for declaring variable in python? 3
2. What is keyword in python? Which keyword is used to define a function in python? 3
3. What is operator? What are the various types of operators in python? 2+3
4. Write a program in python to print the factorial of a number. 3

Department of Computer Science and Application
Unit Test—Assignment
FYUG 2nd Sem. Computer Application
Programming Fundamentals with C: CAIDC-151
Total Marks—20

Answer the following questions:

1. Differentiate between Natural Language and Programming Language. 5
2. Explain different types of errors in computer program 5
3. Write short notes on: 2X5=10
    a) Machine language
    b) Compiler
    c) Interpreter
    d) Assembly language
    e) Source code

Department of Computer Science and Application
Unit Test—Assignment
FYUG 6th Sem. Computer Application
Computer Network and Internet Technology: CADSC-351
Total Marks—20

Answer the following questions

1. What is Computer Network? Explain network topologies with diagram. 2+8=10
2. Discuss network classification briefly 5
3. Explain network protocol mentioning some important protocol 5

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Department of Computer Science and Application
Unit Test—Assignment
FYUG 6th Sem. Computer Application
E-Commerce and Cyber Security: CADSC-352
Total Marks—20

Answer the following questions:

1. What do you mean by E-Commerce? Discuss the main components of E-Commerce. 3+7=10
2. Illustrate some threats of E-Commerce 5
3. Explain briefly the elements of E-Commerce Security. 5

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Karimganj College
Department of Computer Science and Application
FYUG 6th Semester
Computer Application (BCA)
CADSC353: Programming with PHP
Unit Test
Marks: 20
Assignment

Answer all questions.

1. What do you mean by server side scripting language? Explain different features of server side scripting language. 2+3=5
2. Explain different tools and platforms used to develop web based application using PHP. 5
3. Define the following: 2 ½ + 2 ½ = 5
    a. Web server
    b. Localhost
4. Explain the PHP tag with example. 5

KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG 4th Semester
Computer Application
CACDSC251: Programming with Java
Unit Test
Marks: 20
Assignment

Q: Write a Java program: **5 x 4 = 20**

1. To find the sum of any number of integers entered as command line arguments.
2. To implement the concept of constructor.
3. To learn use of single dimensional array by defining the array dynamically.
4. To implement single inheritance.
5. To implement concept of method overriding.

KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG – 4th Semester 2026
Computer Application
CADSC-252
Database Management System (DBMS)
Unit Test 1(Assignment)

Answer any 4 question each carries 5 marks each: Total Marks: 20

1. Why is DBMS preferred over file-processing systems? Explain with suitable examples.
2. Explain the three-schema architecture of DBMS with a neat diagram.
3. Describe the hierarchical and network data models with examples.
4. What is data abstraction? Explain with suitable diagram different levels of data abstraction.
5. Draw and explain an ER-diagram for a Library Management System / College Database / Banking System.
6. Explain all types of keys in DBMS with suitable examples.

KARIMGANJ COLLEGE
Department of Computer Science and Application
FYUG 4th Semester
Computer Application
CACDSC253: Lab on Java Programming and DBMS
Unit Test
Marks: 20
Assignment

Q: Write Java programs to:

1. To check if a number is prime or not, by taking number as input from the keyboard
2. To create a distance class with methods where distance is computed in terms of feet and inches.
3. Create a package called "Calculate" which includes classes and methods to perform arithmetic calculation and import this package in a program.
4. To implement the concept of multithreading.
5. To implement the use of Static methods in a class.