



Assignment No: 1

Programme: _____

Semester: _____

Submitted by:-

Student Name :	
Enrollment No :	
Roll No. :	
Date of Submission:	

Submitted to:-

**Department of Computer Science and Applications (CSA)
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Programme: B.Sc CS IV Sem

Course Name: ANALYSIS OF ALGORITHM AND DATA STRUCTURES

Course Code: BCS-221

Assignment No: 1

Due date of submission: 12.03.2018

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

- a) As you know that analysis of any algorithm can be done on basis of their complexities. So you can explain the different type's complexity.
- b) We have already discussed about the concept of asymptotic notation. So you can explain the different type of asymptotic notation. Do it.

Q.2

- a) As we know that there are many techniques to analysis an algorithm so you can explain the divide and conquer technique. It will help you to learn more.
 - b) As you know Insertion sort is a simple sorting algorithm that builds the final sorted array (or list) one item at a time. So you can write the algorithm of it. Also solve the given question
- i) {3, 7, 4, 9, 5, 2, 6, 1}



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Programme: B.Sc CS IV Sem

Course Name: COMPUTER ARCHITECTURE & ASSEMBLY LANGUAGE

Course Code: BCA-221

Assignment No: 1

Due date of submission: 12.03.2018

Instructions

1. Write the responses to the assignment in your own handwriting.
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3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

- a) What do you mean by Registers? Explain all types of register in detail.
- b) Define the following.
 - (i) Instruction cycle
 - (ii) Micro-operations

Q.2

- a) What do you mean by computer instructions? Explain all types of instructions used in computers.
- b) Differentiate between Direct and indirect address.



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Programme: B.Sc CS IV Sem

Course Name: CRYPTOGRAPHY & NETWORK SECURITY

Course Code: BCA-225-1

Assignment No: 1

Due date of submission: 12.03.2018

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

(a): As you know, in *classical cryptography*, the various parameters used by a decryption *algorithm* are derived from the same secret key that was used in the *encryption algorithm*. Explain the concept of classical encryption techniques?

(b) Differentiate between active attacks and passive attacks in brief.

Q.2

(a): As we know that there are three layers of OSI network security. So can you explain the security mechanism in detail?

(b) As we know that security services are the main component to secure our data. So can you explain types of security services it will help you learn more about the topic?



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Programme: B.Sc CS IV Sem

Course Name: COMPUTER GRAPHICS & MULTIMEDIA AND APPLICATIONS

Course Code: BCA-222

Assignment No: 1

Due date of submission: 12.03.2018

Instructions

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Q.1

a) As you know the Computer Graphics (CG). So, you can define it and give its real life applications in detail. Do it.

b) As you are aware of Display System. So, you can differentiate Raster and Random scan display system. Do it.

Q.2

a) As you are aware of DDA line drawing algorithm. So, you can explain it to draw a line from (0, 0) to (4, 5). Do it.

b) As you are aware of video controller and frame buffer. You will learn more, if you attempt to explain them with the help of their architecture. Go ahead.



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Programme: B.Sc CS IV Sem
Course Name: JAVA PROGRAMMING
Course Code: BCA-223
Assignment No: 1
Due date of submission: 12.03.2018

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

- a) Explain all the features of Java.
- b) Explain all the data types of Java in detail.

Q.2

- a) Explain all the branches statement in Java with syntax and suitable example of each.
- b) Explain all the operators of Java in detail.