



# Assignment No: 2

Programme: \_\_\_\_\_

Semester: \_\_\_\_\_

**Submitted by:-**

<b>Student Name :</b>	
<b>Enrollment No :</b>	
<b>Roll No. :</b>	
<b>Course Name:</b>	
<b>Date of Submission:</b>	

**Submitted to:-**

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**Department of Computer Science and Applications (CSA)  
Monad University  
N.H. 24, Delhi Hapur Road, Pilakhwa,  
Dist. Hapur (U.P.), India-245101**



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**Programme: MCA + MSc(C.S) II Sem**

**Course Name: Digital Logic Design**

**Course Code: MCA-121**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **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 we know about the concept of combinational circuit. So can you explain Shift registers and ripple counter.

(b) As we know about Combinational Logic. So can you explain decimal adder and binary multiplier?

### **Q.2**

(a): Differentiate between RAM and ROM.

(b) Discuss in brief about asynchronous sequential logic.



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**Programme: MCA + MSc(C.S) II Sem**  
**Course Name: DATA STRUCTURES USING 'C'**  
**Course Code: MCA-122**  
**Assignment No: 2**  
**Due date of submission: 20.04.2018**

### **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

Q.1

- a) As you know the concept of pointers. So explain the creation of singly linked list with the help of an example.
- b) As we discussed different operation perform on stack. So WAP to insert and delete a element in a stack using array.

Q.2

- a) Find out the complexity of Merge sort algorithm from recurrence relation? Solve by method of substitution
- b) What is binary tree? Explain the different operation perform on binary tree?



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**Programme: MCA + MSc(C.S) II Sem**

**Course Name: OBJECT ORIENTED SYSTEM AND C++**

**Course Code: MCA-123**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **Q.1**

- a) As you are aware of C++. So, now you can explain Object Oriented features of C++. Do it.
- b) As you are aware of C and C++. You will learn more, if you differentiate C and C++. Go ahead.

### **Q.2**

- a) As you know about the constructors. You may learn more, if you discuss constructors with its types. Go ahead.
- b) As you are aware of Console I/O. So, now you can explain formatted and unformatted I/O with example. Do it.



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**Programme: MCA + MSc(C.S) II Sem**  
**Course Name: OPERATING SYSTEM**  
**Course Code: MCA-124**  
**Assignment No: 2**  
**Due date of submission: 20.04.2018**

Q-1:

- (a) As we know about deadlock. If yes, explain the necessary conditions to occur deadlock.
- (b) Explain the concept of FCFS and SJF. It will help you to learn more on scheduling algorithms.

Q-2:

- (a) As we know that a distributed system is a collection of loosely coupled processors interconnected by a communication network. So, explain the advantages of distributed systems.
- (b) Explain the concept of thread. Explain thread life cycle with proper diagram.



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**Programme: MCA + MSc(C.S) II Sem**

**Course Name: E-COMMERCE**

**Course Code: MCA-125**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **Q.1**

(a) As you know about threat. It's very harmful for our systems. So, can you explain the types of threat?

(b) As we all aware about firewall. It's used for security purpose. So, can you explain the importance of firewall in detail?

### **Q.2**

(a) As you know that e-payment is a basic need for us in today's scenario. So, can you explain the types of e-payment in detail?

(b) Explain the following terms. By this you will be aware of types of transaction.

(I) Inter-Organization transaction.

(II) Intra-Organization transaction.