

**Directorate of Distance Education
Swami Vivekanand Subharti University
II Year**

MASTER OF COMPUTER APPLICATION

(MCA)

MCA/ASSIGN/II/YEAR/ C-2019

Assignments

(For DECEMBER CALENDAR Batch-2019)

MCA-09, MCA -10, MCA -11, MCA -12

MCA -13, MCA -14, MCA -15, MCA-16



**DIRECTORATE OF DISTANCE EDUCATION
SWAMI VIVEKANAND SUBHARTI UNIVERSITY**

Subhartipuram, NH-58, Delhi-Haridwar-Meerut

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Detail of Program

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Course Code : MCA - 9
Course Title : Computer Network
Assignment No. : MCA - 9/ C-138/C-2015
SLM Code : C-138
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. Define the various types of networks in detail.
2. Discuss ADSL?
3. What is mobility in Network?
4. Describe Network IPX/SPX..
5. Discuss Firewalls & its types?

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Course Code : MCA - 10
Course Title : Design Analysis of Algorithm
Assignment No. : MCA - 10/ C-129/ C-2019
SLM Code : C-129
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. What do you mean by algorithm?
2. Write short notes on Knapsack problem
3. Write short notes on Las Vegas Algorithm
4. Write short on NP-HARD
5. What is splay tree?



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Course Code : MCA -11
Course Title : Object Oriented Programming & C++
Assignment No. : MCA - 11/ C-105/ C-2019
SLM Code : C-105
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. What is the difference between function overloading and operator overloading?
2. What is constructor in C++?
3. Define the features of OOPS?
4. What is type conversion?
5. Is it possible to create a loop that never ends?

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Course Code : MCA - 12
Course Title : Computer Based Optimization Techniques
Assignment No. : MCA - 12/ C-133/ C-2019
SLM Code : C-133
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. Enumerate the various types of inventory models?
2. Formulate and solve the purchase inventory problem with one price break?
3. What is a queue?
4. With respect to the queue system, explain the following:
 - i) Input Process ii) Queue discipline iii) Capacity of the system
5. Describe Single queue, single server queuing system.

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Course Code : MCA - 13
Course Title : Visual Basic & Discrete Mathematics
Assignment No. : MCA - 13/ C-112, C-107/ C-2019
SLM Code : C-112, C-107
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Visual Basic

1. How does visual basic support OOP paradigm ?
2. Write a program in Visual Basic to create a simple paint brush or to create a Text editor.
3. Explain the mechanism of implementing error handling features in an Application.
4. Explain the nested for NEXT LOOP in VISUAL BASIC
5. Containing the records of students and to arrange these records in the alphabetical order

Total Marks:10

Discrete Mathematics

1. Differentiate between paths and circuits with example.
2. Consider $Z_7 = [0, 1, 2, 3, \dots, 6, +_7, \times_7]$. show that Z_7 is a field
3. Tree is a "bipartite graph", justify the statement with an example
4. Prove that group of prime order is cyclic.
5. If R is an equivalence relation on set A, prove that R^{-1} is also an equivalence relation.

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Course Code : MCA - 14
Course Title : Internet & E-Commerce , MIS
Assignment No. : MCA - 14/ C-117, C-118 / C-2019
SLM Code : C-117, C-118
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Internet & E-Commerce

1. Describe the similarities and differences between XML and HTML.
2. What is the Encryption Algorithm?
3. What do you mean by Encryption?
4. What do you mean by Internet?
5. what do you mean by Integrity Threats and Necessity Threats along with threats to wireless network.

MIS

1. What do you mean by Information System?
2. Write a short note on Structure of Management Information System.
3. What do you mean by Organizational Planning?
4. What is Procurement Management System?
5. Describe the SCM (Supply Chain Management)

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Course Code : MCA - 15
Course Title : Modeling and Simulation
Assignment No. : MCA - 15/ C-136/ C-2019
SLM Code : C-136
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. Describe the Natural System and Artificial System.
2. Write a short note on PERT network
3. Define the Pure-Pursuit Simulation problem.
4. Explain Simulation of a water reservoir system.
5. What is Discrete System Simulation.

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Course Code : MCA - 16
Course Title : Internet & Java Programming
Assignment No. : MCA - 16/ C-137/ C-2019
SLM Code : C-137
Maximum Marks : 15
Words : 100 words

Attempt all questions.

All questions carry equal marks.

1. How Java is differ from C++ ?
2. What is the type casting?
3. What is an Array?
4. Write short note on the mixing data types?
5. How you can create an Interface?