



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 11 & Computer Graphics
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain in detail about polygon clipping.
2. Explain about Graphical input function.
3. Explain about cohen-sutherland line clipping algorithm.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain the working principle of shadow mask CRT.
2. Explain view transformation and windowing transformation in detail.
3. Explain the depth-sorting method in detail.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 12 & Design and Analysis of Algorithms
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain the methods used to analyse an algorithm.
2. What is meant by ordered list? Explain the algorithm used to create it.
3. Illustrate the applications of a tree with an example.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain the basic steps in the complete development of an algorithm with suitable example.
2. Explain the concepts of sub goals, hill climbing and working backward using a single example.
3. Write detail notes on simulation.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No : 271
Programme Name : Master of Computer Applications
Course Code & Name : MCA – 13 & Accounting and Finance on Computers
Batch : AY 2019-20 (1st Year)
No.of Assignment : One Assignment for Each 2 Credits
Maximum CIA marks : 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. What are accounting concepts? Name them and explain in details.
2. X Y Ltd., a multi-product company furnishes you the following data relating to year. Assuming that the cost structure and selling prices remains the same. Find out.
 - (a) P/V ratio
 - (b) Break even sales.
 - (c) Profit when sales are Rs. 1,00,000
 - (d) Sales required to earn a profit of Rs. 20,000.

Period	Sales	Profits
I	1,20,000	9,000
II	1,40,000	13,000

3. Prepare a flexible budget for overhead on the basis of the following data. Ascertain the overhead rates at 50%, 60% and 70% capacity.

At 60% capacity

Rs.

Variable overheads :

Indirect material 6,000

	At 60% capacity
	Rs.
Indirect labour	18,000
Semi-variable overheads :	
Electricity (40% fixed 60% variable)	30,000

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Define different types of accounting. What are the advantages of it?
2. Define budgetary control and state its advantages.
3. You are given the following data for the year 2004 of the company.

Variable cost	Rs. 6,00,000
Fixed cost	Rs. 3,00,000
Net profit	Rs. 1,00,000
Sales	Rs. 10,00,000

Find

- (a) P/V Ratio
- (b) Break-even point
- (c) Profit when sales amounted to Rs. 12,00,000
- (d) Sales required to earn a profit of Rs. 2,00,000.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 14 & Communication Skills
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. What are the various diagnostic models aiding in understanding oral communications?
2. Name and explain the different interviews used in an organization?
3. What is paraphrasing? Also list the techniques and dos and donts of paraphrasing.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. What are the attributes of a good conversationalist?
2. Briefly elaborate the negotiation techniques.
3. Give some examples of nonverbal behavior and its body language interpretation.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 15 & Computer Networks
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain OSI Reference model of Network architecture with Block diagram.
2. Discuss about Satellite Networks
3. Discuss about Broadcast Routing and Hierarchical Routing.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Describe the function of different layers in the OSI reference model.
2. Explain the MAC layer for medium access.
3. Explain multicast routing and link state routing algorithms.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No : 271
Programme Name : Master of Computer Applications
Course Code & Name : MCA – 16 & Operation Research
Batch : AY 2019-20 (1st Year)
No.of Assignment : One Assignment for Each 2 Credits
Maximum CIA marks : 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

Obtain an optimum basic feasible solution to the following Transportation Problem :
Warehouse

		W ₁	W ₂	W ₃	W ₄	
	F ₁	19	30	50	10	7
Factory	F ₂	70	30	40	60	9 Capacity
	F ₃	40	8	70	20	18
		5	8	7	14	

Requirements

2. Find the Optimum integer solution to the LPP using Gomory's constraint :

$$\text{Maximize } z = 2x_1 + 2x_2$$

Subject to the constraints :

$$5x_1 + 3x_2 \leq 8$$

$$x_1 + 2x_2 \leq 4$$

$$x_1, x_2 \geq 0 \text{ and are integers.}$$

3. Use the Khun-Tucker conditions to solve the following NLPP :

$$\text{Maximize } z = 2x_1^2 + 2x_1 x_2 - 7x_2^2$$

subject to the constraints :

$$2x_1 + 5x_2 \leq 98$$

$$x_1, x_2 \geq 0.$$

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

Use simplex method to solve :

$$\text{Max } Z = x_1 - x_2 + 3x_3$$

Subject to the constraints :

$$x_1 + x_2 + x_3 \leq 10$$

$$2x_1 - x_3 \leq 2$$

$$2x_1 - 2x_2 + 3x_3 \leq 0$$

$$x_1, x_2, x_3 \geq 0.$$

2. A company is faced with the problem of assigning six different machines to five different jobs. The costs are estimated as follows :

		Job				
		1	2	3	4	5
Machine	1	2.5	5	1	6	1
	2	2	5	1.5	7	3
	3	3	6.5	2	8	3
	4	3.5	7	2	9	4.5
	5	4	7	3	9	6
	6	6	9	5	10	6

Solve the problem assuming that the objective is to minimize total cost.

3. Find the optimum integer solution to the L.P.P. :

$$\text{Max } Z = 2x_1 + 2x_2$$

Subject to the constraints :

$$5x_1 + 3x_2 \leq 8$$

$$x_1 + 2x_2 \leq 4$$

$$x_1, x_2 \geq 0 \text{ and are integers.}$$



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 17 & Operating Systems
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain the characteristics of modern operating system.
2. Define interprocess communication and also explain the producer – consumer problem.
3. What is meant by user authentication? Classify the types of authentication mechanism.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain shortest remaining time first-CPU scheduling in detail.
2. Write in detail about fixed and equal multiple partition memory management scheme.
3. Explain file accessing methods in detail.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 18 & Objected Oriented Analysis and Design
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Discuss in detail about objects and classes with necessary examples.
2. Discuss the overview of system design. Explain about sub systems.
3. Discuss in detail about non-object oriented languages.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain in detail about advanced dynamic modeling concepts with its relevant example.
2. Explain about the steps required for software control implementation.
3. Describe in detail about design optimization for object designing phase.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 19 & Internet Programming
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain the different applications of internet.
2. Explain form validation in Java script with an example.
3. Explain about exception handling with illustration.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain in detail about table tags.
2. Explain Java bit wise operators with example.
3. Explain the importance and methods to implement interface in Java.



TAMIL NADU OPEN UNIVERSITY

Chennai - 15

School of Computer Science

HOME / SPOT ASSIGNMENT

Programme Code No	: 271
Programme Name	: Master of Computer Applications
Course Code & Name	: MCA – 20 & Visual Programming
Batch	: AY 2019-20 (1 st Year)
No.of Assignment	: One Assignment for Each 2 Credits
Maximum CIA marks	: 25 (Average of Total No. of Assignments)

ASSIGNMENT – 1

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Discuss about the VB string manipulation functions in detail.
2. Explain about the VC++ event handling in detail.
3. Explain the key concepts of DLL in Visual C++.

ASSIGNMENT - 2

Max : 25 marks

Answer any one of the question not exceeding 1000 words

1. Explain Object-Oriented Programming and its characteristics.
2. Explain file concepts in VC++.
3. Discuss about ODBC connectivity for database.