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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-1, MATHEMATICAL STRUCTURES FOR COMPUTER SCIENCE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

 1. a. Show that (P$\rightarrow Q$) ^ ( Q$ \rightarrow P)$ is logically equivalent to P $⇔Q$

b. Show that.

 2. Show that (A- B) – C = (A – C) – (B – C)

 3. How to solve linear recurrence relations? Write its steps with suitable example.

 4. Draw a finite-automaton state transition table that accepts bit-strings representing numbers divisible by 5.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Show that

a. ~ (P^Q) $\rightarrow $ (~P ∨ (~P ∨Q )) $⇔$ (~P ∨ Q)

b. (P ∨ Q) ^(~P^(~P ^ Q))$ ⇔$ (~P ^ Q)

1. A class consists of 15 boys of whom 5 are prefects. How many committees of 8

 can be formed if each consists of

(a) exactly 2 prefects

(b) at least 2 prefects?

1. Briefly explain with suitable example the following :

(a) Hamiltonian Circuit

(b) Decision Trees

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-2, DATA STRUCTURES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write an algorithm for PUSH and POP operation in a stack.
2. Explain the binary heap in detail.
3. With an example, explain R-Trees.
4. Explain in detail about Multi-way Search Trees.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain operations of doubly linked List in detail with routine of add, delete node from DLL.
2. Write short notes on following :

(a) Fibonacci Heaps

(b) Lazy-Binomial Heaps

1. What are the basic operations that can be performed on a k-d Trees? Explain with suitable example.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-3, COMPUTER GRAPHICS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Explain about the DDA algorithm for line drawing.
2. Write short notes on Line attributes.
3. Write short notes on parallel projection.
4. What is depth curing? Explain it.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain about the Line drawing algorithm.
2. Explain in detail about the physical input device.
3. Describe the Depth buffer method.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-4 OBJECT ORIENTED ANALYSIS AND DESIGN

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Explain UML in detail.
2. What is the purpose of use case diagrams? Explain.
3. Write short notes on test cases.
4. What are the principles of modeling ? Explain.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Discuss in detail about software development life cycles.
2. Describe about object modeling in detail.
3. What is purpose of deployment diagrams? Explain basic element of diagrams through an example.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-5, ADVANCED DATABASES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write notes on Inter and Intra Query parallelism.
2. Describe about type and class hierarchies.
3. Write notes on taxonomy of active databases.
4. Describe about data storage system on the cloud.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Write brief notes on centralized and client server architecture.
2. Write brief notes on overview of deductive databases.
3. Discuss briefly about mobile transaction models.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-6 COMPUTER ARCHITECTURE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write notes on Handler’s classification.
2. Compare task and data parallel processing.
3. Explain about data buffering and busing structure.
4. Discuss about sorting and searching in parallel algorithms.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain in detail about architectural classification schemes.
2. Describe in detail about solving problems in parallel processing.
3. Explain the process of job sequencing and collision prevention.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-7 MOBILE COMPUTING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Discuss about modern mobile device features.
2. Discuss the advantages of WLAN.
3. What do you mean by tunneling and reverse tunneling?
4. Describe Clustered Architecture for WSN.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Describe the design consideration for mobile computing.
2. Explain about the TDMA.
3. Explain how mobile IP packet delivered with example.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC- 8DATA WAREHOUSING AND DATA MINING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Describe the OLAP operations in the multidimensional data model.
2. Briefly describe how association rules can be generated from frequent itemsets.
3. Describe the criteria used for comparing classification and prediction methods.
4. Describe various types of data in cluster analysis.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Describe the various components of three tier architecture of data warehouse with a neat diagram.
2. Describe various ways for mining different types of association rules.
3. What is meant by ensemble method? Explain various ensemble methods used for increasing the accuracy.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-9, ANALYSIS OF ALGORITHMS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Discuss about Recursive Algorithm with an example.
2. Write short notes on I/O Knapsack.
3. Write short notes single source shortest path.
4. Discuss about the Traveling sales person decision problem.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain space complexity with an example.
2. Explain Knapsack problem.
3. Explain sum of subsets problem with an example.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 1** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-10, ADVANCED SOFTWARE ENGINEERING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. What is Software dependability? Explain.
2. What is critical system development?
3. What is Software metrics? Explain.
4. How to maintain software? Explain in detail.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain: Software requirements and processes.
2. Explain: Software reusability and iterative software development.
3. Explain: Risk Management.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-1, MATHEMATICAL STRUCTURES FOR COMPUTER SCIENCE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. a.Use the Logical equivalence above to show that~(P∨~(P^Q)) is a contradiction.

b. Show that .

1. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?
2. What is binary relations? Write its properties.

 4. Define the states of the finite state machine and draw the state diagram.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Show that  is a valid conclusion from the premises P∨Q,

 Q→R, P→M and ~M .

 2. Use mathematical induction to prove that 12 + 22 + 32 + … + +n2 = n(n

 +1)(2n+1)/6

 3. Briefly explain with suitable example the following:

 (a) Hamiltonian Circuit

 (b) Decision Trees

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-2, DATA STRUCTURES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write the procedures to perform the DFS search of a graph.
2. What are the various transformation performed in AVL tree? Explain.
3. Discuss in detail the applications of data structures.
4. Explain in detail about Red-Black trees.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. With an example, explain how will you measure the efficiency of an algorithm.
2. What are the basic operations that can be performed on k-d Trees? Explain with suitable example.
3. State and explain the operation on circular linked list.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-3, COMPUTER GRAPHICS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write short notes on Graphics software.
2. List and explain area fill algorithms.
3. Discuss on Visible Line algorithm.
4. Discuss any two visible surface detection methods.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain in detail about interactive picture construction techniques.
2. Discuss about three dimensional transformations.
3. Explain two dimensional display methods.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-4 OBJECT ORIENTED ANALYSIS AND DESIGN

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Discuss about objects and classes.
2. State the uses of user interface design.
3. Explain about packages with an example.
4. How to mapping object model to database schema? Explain.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain in detail about UML conceptual model.
2. Briefly discuss about advanced structural modeling.
3. Explain in detail about state chart diagrams with examples.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-5, ADVANCED DATABASES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Explain about distributed database design.
2. Discuss about encapsulation of operations.
3. Explain about data warehousing ad data mining.
4. Explain in detail about cloud storage architectures.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain in detail about object database standards, languages and design.
2. Describe in detail about spatial data structures and DB implementations.
3. Illustrate the procedure of storing XML in databases.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-6 COMPUTER ARCHITECTURE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Discuss about trends about parallel processing.
2. Describe about instructional level parallel processing.
3. Write notes on cube interconnection network.
4. Write brief notes on analysis of parallel algorithms prefix computation.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Discuss in detail about the overview of parallel processing.
2. Write brief notes on general pipeline and reservation tables.
3. Describe in detail about multiprocessor architecture.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-7 MOBILE COMPUTING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write about device connectivity.
2. Define Modulation. Discuss different analog modulation schemes.
3. Write about QOS in ADHOC wireless Networks.
4. Compare WSN with Ad Hoc Wireless Networks.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain any one mobile enabled application.
2. Describe Blue tooth architecture.
3. Discuss the issues in designing a routing protocol for AD HOC wireless network.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC- 8DATA WAREHOUSING AND DATA MINING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Describe various strategies for data reduction.
2. Write and explain various approaches for mining multilevel association rules.
3. Explain how linear regression is useful in prediction.
4. Describe various approaches for effective clustering of high dimensional data.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain

(a) Dimensionality reduction

(b) Data transformation.

1. Elaborate how classification can be performed by decision tree induction.
2. Explain the working principle of SVM along with its applications in classification and regression.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-9, ANALYSIS OF ALGORITHMS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write a algorithm for interactive binary search.
2. Discuss about the fifteen puzzle.
3. Write a algorithm fro straight forward evaluation.
4. Discuss about general interactive backtracking methods.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Discuss about merge sort with an example.
2. Discuss about optimal binary search Trees.
3. Briefly explain modular arithmetic.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 2** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-10, ADVANCED SOFTWARE ENGINEERING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Give a note on User interface design.
2. Write about Clean room software engineering.
3. Give a note on Formal Specification.
4. Write about the Economics and Quality of software.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain in detail about Distributed System Architecture.
2. Explain in detail about Agile Software Engineering.
3. Write in detail about Application Architecture.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-1, MATHEMATICAL STRUCTURES FOR COMPUTER SCIENCE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. a. Construct the truth table for .

b. Show that .

1. If we select any group of 1000 students on campus, show that atleast tree of

them must have same birthday.

1. For a binomial distribution with  and , compute the mean and the variance.

 4. If the sequence, then find the corresponding recurrence relation.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. a. Show that  is a valid conclusion from the premises.

 b. Prove that .

 2) a. Using mathematical induction prove that  is divisible by

 .

 b. If  are defined by ,  and ,

 find  and , and check if they are equal.

 3) a. Show that maximum number of edges in a simple graph with  vertices

 is.

 b. Prove that a connected graph is Euler graph if and only if each of its

 vertice is of even degree.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-2, DATA STRUCTURES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. What is Data structure? Write its properties.
2. Write down the algorithm for insertion and deletion operation of queue.
3. Explain Leftist heaps in detail.
4. Mention the differences between Segment Trees and AVL trees.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Write the algorithms for inserting and deleting nodes in a linked list.
2. What are the types of Graph? Explain representation of graph in detail.
3. Explain Fibonacci Heaps and Skew Heaps in detail.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-3, COMPUTER GRAPHICS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Explain any four input devices.
2. Describe windows and view ports.
3. Explain 3D viewing pipeline.
4. Discuss about perspective projection.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Write short notes on logical classification of input devices.
2. Explain Sutherland- Hondman polygon clipping algorithm in detail.
3. Describe the three dimensional basic transformation with matrix format.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-4 OBJECT ORIENTED ANALYSIS AND DESIGN

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. What is a object oriented model? Explain.
2. Explain activity diagrams.
3. Explain in detail case study.
4. Explain the testing and quality.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain the software development life cycle.
2. What is class and object diagram? Explain.
3. Explain the Architectural modeling.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-5, ADVANCED DATABASES

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Explain the advantage of centralized and client server architecture.
2. Explain the object database standard.
3. Explain the overviews of temporal Database.
4. Discuss the usage of biological.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain about the parallel database and IO parallelism.
2. Explain the class hierarchy and inheritance.
3. Explain the syntax and semantics.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-6 COMPUTER ARCHITECTURE

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Discuss the parallel processing applications.
2. Describe the inter task dependency.
3. Explain the hazard detection and resolutions.
4. Discuss the concept of sorting and searching.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Discuss the trends towards the parallel processors.
2. Explain the uti1izing temporal parallelism.
3. Discuss the internal forwarding and register tagging.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-7 MOBILE COMPUTING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write short notes on Mobile devices.
2. Describe multi model user interface.
3. Explain wireless LAN.
4. Discuss about energy management.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Discuss about the wireless internet.
2. Explain Synchronization protocol.
3. Describe in details Energy model.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC- 8DATA WAREHOUSING AND DATA MINING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. What is Data Warehousing? Write its objectives.
2. Write short notes on Data Reduction.
3. Write decision tree induction algorithm.
4. Write short notes on Outlier Analysis.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Explain OLAP operations in detail.
2. Explain Mining various kinds of Association Rules in detail.
3. Explain Data preparation for classification and prediction in detail.

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-9, ANALYSIS OF ALGORITHMS

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. What is an algorithm? Write its importance.
2. Write the algorithm for Binary Search.
3. Explain the concept of Dynamic Programming in detail.
4. Explain Even Faster Evaluation and interpolation in detail.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Write quick sort algorithm. How it will be analysed?
2. Explain Optimal Binary Search Trees in detail.
3. How the travelling Salesperson problem solved by Branch and Bound method

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|  | **TAMIL NADU OPEN UNIVERSITY****Chennai - 15****School of Computer Science****ASSIGNMENT - 3** |

Programme Code No : 246

Programme Name : M.Sc - Computer Science

Course Code & Name : MSC-10, ADVANCED SOFTWARE ENGINEERING

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum Marks : 100

Weightage : 25%

**Part – A (4 x 10 = 40 Marks)**

Answer the following in 200 words each. Each question carries 10 marks

1. Write a brief note on software requirement.
2. Explain about user interface design.
3. Write short notes on software quality.
4. Write a brief note on software maintenance cost.

**Part – B (2 x 30 = 60 Marks)**

Answer **any two** of the questions given below in 1000 words each.

1. Describe about critical system models.
2. Write a detailed note on critical system development.
3. Discuss briefly about agile software engineering.