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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 01 & Computer Fundamentals & PC Software

Batch : CY 2019

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 advantages of peripheral devices.
2. Briefly describe various elements of communication hardware.
3. Explain various classifications of computer. viruses.
4. Briefly describe the steps involved in creating a powerpoint presentation.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain various types of computer memory with appropriate examples.
2. Explain in detail about various modes of communication with respective communication diagrams.
3. Define SMTP. Explain the basic operations of mail system with SMTP mail flow architecture.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA - 02 & ‘C’ Programming and Data Structure

Batch : CY 2019

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 note scanf and printf of statement with suitable example.
2. Explain switch statement with suitable example.
3. Explain about queues.
4. Write a program to perform a linear search.

**Part – B (2 x 30 = 60 Marks)**

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

1. (a) Write a C program to find the maximum number in single dimensional array using pointer.

(b) Write a program to swap two numbers using functions.

1. Discuss about file input output operations with an example.
2. Briefly explain BFS and DFS.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 03 & Introduction to System Software

Batch : CY 2019

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 various categories of language in detail.
2. What is meant by swapping? Explain.
3. Write the short notes on interpreters.
4. What is an Assembler? Explain its functions in detail.

**Part – B (2 x 30 = 60 Marks)**

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

1. What are the phases of complier? Explain.
2. Explain UNIX Basic commands for working with directories.
3. Discuss the demand paging and its importance.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 04 & Introduction to Computer Organization

Batch : CY 2019

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 floating point representation with examples.
2. Explain any five addressing modes with examples.
3. Write short notes on Boolean algebra.
4. Briefly describe the purpose of assembly language.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain in detail about the various data representations with examples.
2. Explain in detail about general register organization with block diagram.
3. Explain the various kinds of interconnected structures with block diagram.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 05 & Elements of System Analysis and Design

Batch : CY 2019

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 elements of systems Analysis.
2. Describe Prototype Design.
3. What do you mean by quality Assurance? Explain.
4. Discuss the types of documentation.

**Part – B (2 x 30 = 60 Marks)**

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

1. Define Feasibility Study and its types.
2. Write about Database design.
3. Discuss the issues involved in Maintenance of system.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 06 & Introduction to Database Management

Systems

Batch : CY 2019

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 are the elements of DBMS?
2. What are the different methods of file organization?
3. Describe about the 3NF.
4. Discuss the role of knowledge in Database Applications with example.

**Part – B (2 x 30 = 60 Marks)**

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

1. Describe the relation model of database Management System with example.
2. List the duties which an administrator has to do.
3. What are the types of Join operation and explain each.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 01 & Computer Fundamentals & PC Software

Batch : CY 2019

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 purpose of assembly language.
2. Differentiate synchronous and asynchronous data communication.
3. Briefly describe any two types of multimedia.
4. Explain how to

(a) Work with tables

(b) Protect a document

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain various types of operating system with examples.
2. Describe in detail about the simplified model of symmetric encryption scheme with neat diagram.
3. Explain how a computer memory can be managed by Windows operating system.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA -02 & ‘C’ Programming and Data Structure

Batch : CY 2019

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. Distinguish between Break and Continue by giving a suitable example.
2. Write the short note about unions in C.
3. Explain sequential file organizations with its advantages and disadvantages.

4. Explain the following.

* 1. 2 way merge sort.
  2. Heap sort.

**Part – B (2 x 30 = 60 Marks)**

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

1. Give elaborate discussion on arrays.
2. What is Circular linked list? Explain the operations of circular linked list with algorithms.
3. Discuss the preorder traversal of a binary tree in detail.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 03 & Introduction to System Software

Batch : CY 2019

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 are various types of file permissions? Explain.
2. What is shell programming? Explain with example.
3. Explain the Disk, FCFs and Scan scheduling.
4. Explain in detail about preemptive and non-preemptive scheduling.

**Part – B (2 x 30 = 60 Marks)**

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

1. What is meant by paging? Explain how used for memory management.
2. Write note on Backups and Restoration of Unix in detail.
3. Explain Round-Robin scheduling algorithm of process management.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 04 & Introduction to Computer Organization

Batch : CY 2019

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. Briefly explain the error detection code with its circuit diagram.
2. Give the definitions for the following terminologies:

(a) CAR

(b) Control memory

(c) CDR

(d) Control word

(e) Address sequencer

1. Explain with the block diagram of DMA controller.
2. Explain the working principle of interrupts with examples.

**Part – B (2 x 30 = 60 Marks)**

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

1. Discuss in detail about Cache memory.
2. Describe the Combinational circuits with suitable circuit diagram.
3. Discuss in detail about Control memory with suitable diagram.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 05 & Elements of System Analysis and Design

Batch : CY 2019

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 note on Decision Tables.
2. Discuss types of codes.
3. List the components of Multimedia.
4. Describe human problems in automated office.

**Part – B (2 x 30 = 60 Marks)**

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

1. Discuss the characteristics of system.
2. Describe input design and Control.
3. Write about DSS.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 06 & Introduction to Database Management

Systems

Batch : CY 2019

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 difference between a weak and Strong Entity Set.
2. Explain the structure of Distributed database.
3. Discuss the evolution of Client/Server Computing.
4. Discuss the key difference of KBMS and DBMS.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain the ER model with your own example.
2. Discuss the properties of Normalization.
3. Describe object oriented DBMS.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 01 & Computer Fundamentals & PC Software

Batch : CY 2019

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 'instruction cycle' in the execution of programs.
2. What is a Macro Virus? Explain.
3. What is meant by GUI? Explain.
4. Explain Domain Name System (DNS).

**Part – B (2 x 30 = 60 Marks)**

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

1. Draw the memory hierarchy chart and explain them in detail.
2. Write short notes on 'File Directories'.
3. Explain the key features of NTFS briefly.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA -02 & ‘C’ Programming and Data Structure

Batch : CY 2019

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 two operations exclusively available in C.
2. Explain one-dimensional array variables.
3. Define a STACK and explain its application.
4. Classify various file operations normally performed.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain the format control in the scanf ( ) and printf ( ) functions.
2. Explain the pointer implementation of Queue.
3. Illustrate the ‘insertion sort’ with an example.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 05 & Elements of System Analysis and Design

Batch : CY 2019

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 are the components of interpersonal skills expected of a systems analyst?
2. What are the three classes of forms? Explain briefly.
3. Explain management information system briefly.
4. Illustrate cost-benefit analysis with an example.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain in detail about the characteristics of a system.
2. Write short notes on:

(a) Kitchen sink strategy

(b) Smoking strategy

(c) Same thing strategy.

1. Name the performance criteria used for system testing.

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

Programme Code No : 171

Programme Name : Bachelor of Computer Applications

Course Code & Name : BCA – 06 & Introduction to Database Management

Systems

Batch : cY 2019

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 concept of Abstraction and Data Integration.
2. List out the different hashing methods.
3. Write about the Closure of a set of Functional dependencies.
4. List out the pitfalls in RDBMS.

**Part – B (2 x 30 = 60 Marks)**

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

1. Explain the three level architecture of a DBMS.
2. Explain the concept of Index sequential files with suitable example.
3. Explain the aggregate functions in SQL with example.