

UNIVERSITY CENTRE FOR DISTANCE LEARNING (UCDL)
CHAUDHARY DEVI LAL UNIVERSITY, SIRSA
(From the academic session 2019-20)
MCA - 1st SEMESTER
SUBJECT: COMPUTER FUNDAMENTALS
(MCA-11)
Assignment-I

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What is Computer? Name the different units of computer.
b) Define Boolean Algebra.
c) What are Pseudocodes?
d) Write a short note on Spooling.
e) What do you mean by Digital and Analog Transmission?

Unit-I

- Q2. Discuss the block diagram of Computer.

OR

What are Positional and Non-Positional Numbers? Explain.

Unit-II

- Q3. What do you mean by Logic gates? Discuss the various types of logic gates.

OR

What do you mean by memory hierarchy? Explain its different types.

Unit-III

- Q4. Define Hardware and Software. Write the difference between hardware and software.

OR

What are the different modes of Transmission media? Explain.

Unit-IV

- Q5. Write a detailed note on different types of Computer Languages.

OR

Define Testing and Debugging. Also explain the various kinds of maintenance with example.

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Assignment-II

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What is ASCII?
b) What do you mean by Multimedia?
c) What do you mean by Flow Charts?
d) Write the characteristics of a good language.
e) What do you mean by Virtual Storage?

Unit-I

- Q2. Discuss the various generations of Computer.

OR

What do you mean by Binary Arithmetic? Discuss its various operations with example.

Unit-II

- Q3. Discuss the various types of Boolean functions with example.

OR

Write a detailed note on various Input and Output devices.

Unit-III

- Q4. What are Decision Tables? What are various types of Application Software packages?

OR

What do you mean by a Computer Program? Discuss Planning and Purpose of a Program.

Unit-IV

- Q5. What is Operating System? Discuss the various functions of Operating system.

OR

Define the followings: Multiprogramming, Batch Processing, Compilers and Interpreter.

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(From the academic session 2019-20)
MCA - 1st SEMESTER
SUBJECT: C PROGRAMMING
(MCA-12)
Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What are keywords?
b) What do you mean by repetition?
c) What do you mean by prototype?
d) Write the characteristics of a pointers.
e) What do you mean by Sequencing?

Unit-I

- Q2. What are various types of Data types? Discuss with example.

OR

Write a program in C to find the greatest number between three given numbers.

Unit-II

- Q3. What are the various control statements? Explain with example.

OR

What is modular programming? Explain Types of modular programming?

Unit-III

- Q4. What is function? Discuss the various type of function with their syntax?

OR

Write a program in C to show the use of recursion.

Unit-IV

- Q5. What is the role of Pointer? Discuss with example.

OR

How will you define the concept of Array of Pointer? Justify.

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(MCA-12)
Assignment-II

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) Define identifiers.
b) What is Character set?
c) What are variable and constant?
d) What are Constructors?
e) What is operator overloading?

Unit-I

- Q2. Discuss the different types of operators with priorities.

OR

What do you mean by Input and Output in C? Justify with example

Unit-II

- Q3. What are the difference between if and switch statements?

OR

Write a program in C to show the use of while and do while.

Unit-III

- Q4. What is the concept of Parameter passing?

OR

Write the difference between Array and Structure.

Unit-IV

- Q5. Write a program in C to show the use of Pointer.

OR

How will you define the concept of Pointer of Array? Justify.

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CHAUDHARY DEVI LAL UNIVERSITY, SIRSA
(From the academic session 2019-20)
MCA - 1st SEMESTER
SUBJECT: COMPUTER ORGANISATION
(MCA-13)
Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What is Number System?
b) What are Comparators?
c) What are Optical storage devices?
d) What are counters?
e) Write the difference between binary and decimal number system.

Unit-I

- Q2. What are BCD codes? Explain.

OR

What do you mean by Error detecting and error Correcting codes? Explain.

Unit-II

- Q3. Write a detailed note on Canonical and standard forms of number system.

OR

What are Multiplexers? Explain.

Unit-III

- Q4. What do you mean by RAM and ROM? Discuss their various types .

OR

What are Instruction Cycles? Discuss in detail.

Unit-IV

- Q5. What do you mean by Shift Registers? Discuss.

OR

Discuss the concept of transfer of Information between CPU and Memory.

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MCA - 1st SEMESTER

SUBJECT: COMPUTER ORGANISATION

(MCA-13)

Assignment-11

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What are Character Codes?
b) What is Truth Table?
c) What are Memory parameters?
d) What are Flip-flops?
e) Define Encoder and decoder.

Unit-I

Q2. Discuss the fixed-point and floating point representation of numbers.

OR

What are various Binary Arithmetic operations in number system? Explain.

Unit-II

Q3. What do you mean by Adder and Subtractors? Explain

OR

Write the methods for the simplifications of Boolean functions.

Unit-III

Q4. What are addressing modes? Discuss various kinds of addressing modes.

OR

Write the difference between Magnetic and optical storage devices.

Unit-IV

Q5. Discuss the structure on an interrupt.

OR

How will you transfer the information between CPU and Memory?

UNIVERSITY CENTRE FOR DISTANCE LEARNING (UCDL)
CHAUDHARY DEVI LAL UNIVERSITY, SIRSA
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MCA - 1st SEMESTER
SUBJECT: SOFTWARE ENGINEERING
(MCA-14)
Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What is Software Engineering?
b) Define Metrics?
c) Explain Exception Handling.
d) What is debugging?
e) Explain Personal Planning.

Unit-I

Q.2 What are the characteristics and crisis related to software?

OR

Explain and differentiate between the waterfall and iterative waterfall models?

Unit-II

Q3. What do you understand by quality assurance in Software configuration Management?

OR

Differentiate between Cohesion and Coupling?

Unit-III

Q4. What are addressing modes? Discuss various kinds of addressing modes.

OR

Write the difference between Magnetic and optical storage devices.

Unit-IV

Q5. Differentiate between the following:

- (a) Unit Testing and Integration Testing.
(b) Verification and Validation.

OR

Write the difference between White Box Testing and Black Box testing?

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(MCA-14)
Assignment-11

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What do you understand by Software Engineering Paradigms?
b) What is Exception handling?
c) What are Case tools?
d) What is validation testing?
e) What are characteristics of a software?

Unit-I

- Q.2 What do you understand by planning a software project? What is the significance of COCOMO in planning a software project?

OR

Explain the following:

- (a) Project Scheduling (b) Personnel Planning (c) Team Structure

Unit-II

- Q3. Why do you need a SRS? Explain Software Requirements document and its format?

OR

What do you understand by project monitoring and risk management? Explain

Unit-III

- Q4. Explain function oriented design and object oriented design.

OR

What do you understand by Fault avoidance and tolerance, exception handling and defensive programming in Software reliability?

Unit-IV

- Q5. What do you understand by software maintenance? Explain in detail.

OR

Discuss the importance and side effects of software maintenance.

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CHAUDHARY DEVI LAL UNIVERSITY, SIRSA
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MCA - 1st SEMESTER
SUBJECT: Computer Oriented Numerical Methods

(MCA-15)

Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What is Polynomial evolution?
b) Define Linear Equation.
c) What do you understand by Difference tables.
d) Define Test of significance.
e) Derive the order of convergence for Regula-Falsi Method.

Unit-I

- Q.2 What do you understand by Netwon- Raphson method? Explain with example.

OR

Explain the bisection method with example.

Unit-II

- Q3. What are ILL-condition equations? Discuss with example.

OR

Solve a problem with the help of Gauss Elimination method.

Unit-III

- Q4. Given $dy/dx = x+y$ and $x=0$ when $y=1$. Find the value of y when $x=0.1$ & 0.2 by R-K fourth order method.

OR

What do you understand by Euler's Method? Explain with example

Unit-IV

- Q5. What is ANOVA? Discuss its various types with example.

OR

What are the components of Time-Series? Explain.

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MCA - 1st SEMESTER
SUBJECT: Computer Oriented Numerical Methods
(MCA-15)

Assignment-II

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15

- Q1. a) What do you mean by sample distribution?
b) What are the different types of errors?
c) Define Curve Fitting.
d) What is Cyclic Movement?
e) Define Ordinary differential equations.

Unit-I

Q.2 What is Computer Arithmetic? Discuss.

OR

What are the floating Point representation of numbers? Also discuss their consequences.

Unit-II

Q3. Solve the system: $27x+6y-z=85$, $6x+15y+2z=72$, $x+y+54z=110$ by Gauss-Seidal iterative method.

OR

Solve a problem by using Taylor's series.

Unit-III

Q4. What are Pitfalls in computing? Discuss.

OR

Solve a problem by using Simpson's 3/8 method.

Unit-IV

Q5. Discuss the Two way classification of ANOVA table.

OR

Differentiate between chi square and t-test by taking a suitable example.