

JHARSUGUDA ENGINEERING SCHOOL

Department of Math & Science

SUBJECT – Computer Application

SEM – 2nd

Unit-1: Computer Organisation

Section – I Short Questions (2 Marks)

1. What are used in 2nd and 3rd generation of computer?
2. Draw & Explain Functional Block Diagram of Computer.
3. Write down the classification of Memory.
4. How many types of ROM are there? Explain them.
5. Define Output device with example.
6. Write down the Memory Hierarchy.
7. Difference between impact and non-impact printer.
8. Difference between RAM and ROM.

Section – II Long Question (5 Marks or 7 Marks)

1. Describe about different Generations of Computer.
2. Describe the Evolution of Computer.
3. Write down about classification of memory.
4. What is Computer? Draw and explain functional block diagram of Computer.
5. Write the short notes on the following
 - a) Input devices
 - b) Inkjet Printer
 - c) RAM
 - d) ENIAC
 - e) Abacus

Unit-2: Computer Software

Section – I Short Questions (2 Marks)

1. Define software and its type.
2. Write down the difference between System Software and Application Software.
3. Write down the functionality of operating system.
4. Define Operating system and its type.
5. Write down the difference between Windows and UNIX.
6. Write down the features of DOS.
7. What is a Real Time Operating System? Name some Real Time Operating System.
8. What is the use of cd and mkdir command in windows?
9. Define Computer virus and its type.
10. What is a Programming Language? Write down the types of Programming Languages.
11. Differentiate between Compiler and Interpreter.

Section – II Long Question (5 Marks or 7 Marks)

1. Write down the detection and prevention steps of Virus.
2. Describe life cycle of virus.
3. What is Operating System and explain task of OS?
4. Describe the Operating System with its types in details.
5. Write down the difference between Multiprogramming and Multi-tasking Operating System.
6. Write the short notes on the following:
 - a) Time Sharing OS
 - b) UNIX
 - c) Application Software
 - d) DOS

Unit-3: Computer Network and Internet

Section – I Short Questions (2 Marks)

1. What do you mean by Network and How many types of Networks are there?
2. What is a protocol and Why it has been used?
3. What do you mean by Data Transmission Mode & Write down its types?
4. Differentiate between LAN and WAN and MAN.
5. What is a Networking Device? Write down some Networking Devices.
6. Differentiate between Switch and Hub.
7. Write down network topologies with Example.
8. Write down the different types of Internet Connectivity.
9. What is an ISP?
10. Write down the working method of Repeater.
11. How links are there using Mesh Topology when the no. of node is 5.

Section – II Long Question (5 Marks or 7 Marks)

1. Explain Network Topologies with neat diagram.
2. Describe the Networking devices that are available in computer network.
3. Explain different types of Internet connectivity.
4. Write the short Notes on the following:
 - a) E-Mail
 - b) FTP
 - c) Router
 - d) Switch
 - e) ISP
 - f) Chatting
 - g) WWW
 - h) Online Shopping
 - i) E-Commerce

Unit-4 File Management & Data Processing

Section – I Short Questions (2 Marks)

1. What is a File?
2. Differentiate between File & Folder.
3. Write down Data storage method with example.
4. What do you mean by Sequential Access?
5. What do you mean by Data Retrieval?

Section – II Long Question (5 Marks or 7 Marks)

1. Describe the File access method in detail.
2. Describe the Storage Method in details.
3. Write the procedure for Data Processing and Retrieval.
4. Write the short notes on following:
 - a) ISAM
 - b) CD-ROM
 - c) Pen drive
 - d) File

Unit-5 Problem Solving Methodology

Section – I Short Questions (2 Marks)

1. What do you mean by Algorithm?
2. What is a Pseudo Code?
3. Differentiate between Structural and Procedural Program Language.
4. What is the use of Square and Diamond notation in Flowchart?

Section – II Long Question (5 Marks or 7 Marks)

1. Describe Flow Chart with all its notation.
2. Write the algorithm and draw the flowchart to input a text and display them.
3. Write the algorithm and draw the flowchart for performing arithmetic operation.
4. Write the algorithm and draw the flowchart to check whether a number is even or odd.
5. Write the algorithm and draw the flowchart to whether a number is prime or not.
6. Write the algorithm and draw the flowchart to check whether a number is perfect or not

Unit-6 Overview of C Programming Language

Section – I Short Questions (2 Marks)

1. Why and When do we use the #include directive?
2. Write down the different types of Data types that are available in C.
3. Distinguish between Implicit & Explicit Type Conversion.
4. Why do we use stdio.h library?
5. What is a header file in C and where it has been used?
6. Write down the different forms of if statement.
7. Write down the syntax of switch statement.
8. Write the syntax of the conditional operator.
9. Write the difference between goto and break statement.
10. What is a null statement? Explain a typical use of it.
11. Write the syntax of for loop.
12. What are the relational operator available in C?
13. Which function has been used reading a character and printing a character?

Section – II Long Question (5 Marks or 7 Marks)

1. Write a C program to input two number and perform arithmetic operation.
2. Write a C program to input a number and reverse it.
3. Write the program to print the following output.

a) 1	b) *	*	*	*	*
2 2		*	*	*	*
3 3 3			*	*	*
4 4 4 4				*	*
5 5 5 5 5					*
4. Write a C program to input a number between 1 to 7 and print the day of the week based on the input.
5. Write a C program to input a number 'm' and print first 'm' Fibonacci number.
6. Write a C program to input a number and check whether the number is even or odd.
7. Write a C program to input a number and print all the prime numbers up to that number.
8. Write a C program to input a number and check whether it is prime or not.

9. Write a C program to input a number and it is perfect or not.
10. Write a C program to input two number and find out the largest and smallest number.
11. Write a C program to input three number and find out the largest and smallest number.
12. Write a C program to input Name, Roll No, Address and print it in the following format:

Name: INPUTED_NAME;

Roll No: INPUTED_ROLLNO;

Address: INPUTED_ADDRESS;

13. Write a C program to print the multiplication table of 25.
14. Write a C program to find GCD of two number.
15. Write a C program to find the simple interest of a loan amount.
16. Write a C program to input the Mark and print the grade based upon the mark.

Mark	Grade
Marks \geq 90	'O' grade
80-90	'E' grade
70-80	'A' grade
60-70	'B' grade
50-60	'C' grade
40-50	'D' grade
Mark $<$ 40	'F' grade

Unit-7 Advanced Feature of C

Section – I Short Questions (2 Marks)

1. What is a function?
2. What do you mean by scope of variable?
3. What do you mean by storage class in C? Write its type.
4. What do you mean by global & local variable?
5. What do you mean by recursion function?
6. What is an array? Write down its type.
7. What is a pointer?
8. Differentiate between Structure and Union.
9. Write down the types of recursion.
10. Write down the uses of getchar() and putchar() function in C.
11. Write down the uses of &(and) operator in pointer.
12. Write down the steps to initialize a multi-dimensional array.

Section – II Long Question (5 Marks or 7 Marks)

1. Explain Call by Value, Call by Reference with example.
2. Write a C program to initialize an array and print it.
3. Write a C program to initialize an array and sort it.
4. Write a C program to initialize an array and search an element using binary search.
5. Write a C program to initialize an array and find largest and smallest number of that array.
6. Write a C program to input a string and check string is palindrome or not.
7. Write a C program to input two string and compare it using strcmp().
8. Write a C program to input a string and replace the string with another string.
9. Write a C program to call to function to check number a number is prime or not.
10. Write a C program to initialize two number and perform arithmetic operation using pointer.
11. Write a C program to initialize two matrix and perform matrix multiplication.
12. Write a C program to initialize a matrix and find its transpose matrix.