A–31–C

Total No. of Questions : 8] [Total No. of Printed Pages :

12thSZARJD22

6031-C

COMPUTER SCIENCE

Time : 2.30 Hours] **[Maximum Marks : 70**

Section-1

1. (i) Explain the concept of Object Oriented Programming. Enlist its advantages.

Or

Explain concepts of Data Encapsulation and Data Hiding.

(ii) What is Class? Describe the syntax of class declaration.

(iii) Write a program to implement concept of function overloading.

(iv) Explain Data Abstraction.

(v) Define an Object.

(vi) Members of class are by default private.

(vii) We can define member funciton outside the class :

(A) Using structures

(B) Using pointers

(C) Using scope resolution operator

(D) None of these

Section-2

2. (i) What is a Constructor? Describe parameterized constructor.

(ii) Constructor does not allow any parameters.

(iii) A Destructor:

(A) destroys classes

(B) can be overloaded

(C) destroys the objects created by a constructor

(D) none of these

Section-3

3. (i) What is Inheritance? Describe the concept of multiple inheritance.

(ii) Define Public Visibility Mode.

(iii) In multilevel inheritance, a subclass inherits from multiple base-classes.

Section-4

4. (i) Giving a suitable example, explain a "Pointer".

(ii) A pointer can be incremented/decremented.

(iii) A delete operator is used:

(A) To reallocate the memory

(B) To deallocate the memory

(C) Both (A) and (B)

(D) None of these

Section-5

5. (1) Explain Binary Search.

Or

Define an Array. Describe its Memory Representation.

(ii) Define Stack. Describe two main operations performed on a stack.

(iii) Define Multidimensional Array.

(iv) Stack is a data structure which follows:

(A) FIFO principle

(B) LIFO principle

(C) Both (A) and (B)

(D) None of these

Section-6

6. (i) Define Database. What are its advantages?

Or

What is DDL? Discuss its commands.

(ii) Define SQL. What are its advantages?

(iii) Define Degree and cardinality of relation.

(iv) Write the use of SQL function Min( ).

Section-7

7. (i) Explain Universal Gate behaviour of a NAND Gate.

Or

Giving Logic Gate Symbol and truth table, describe the principle operation of OR Gate.

(ii) State and explain De Morgan's laws using truth table.

(iii) Explain NOT Operator using truth table.

(iv) The output of AND Gate is 1 when the two inputs are:

(A) 0 and 1

(B) 1 and 1

(C) 1 and 0

(D) None of these

Section-8

8. (i) Define Network Topology. Explain Star Topology.

Or

Define Cyber Bullying. What are its preventive measures?

(ii) Write down a note on Safe Social Networking.

(iii) Describe the use of Modem.

(iv) In networking PAN stands for