॥卐॥

NARENDERA®

DAWN

GUESS PAPER

Strictly as per New Rationalised and Reduced Syllabus issued by JKBOSE

12th Class

SCIENCE

1. English	2. Physics
3. Chemistry	4. Biology
5. Mathematics	6. Physical Education
7. Environmental Science	8. Computer Science
9. Informatic Practices	10. Functional English

By

PANEL OF EXPERTS

For Best Results

2024

NARENDERA PUBLISHING HOUSE

Price : ₹150.00

COMPUTER SCIENCE

Time: 2.30 Hours *Maximum Marks: 70*

Section - 1

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

Or

Explain concepts of Data Encapsulation and Data Hiding. 4

(ii) What is Class? Describe the syntax of class declaration. 3

(iii) Write a program to implement concept of function overloading. 3

(iv) Explain Public and Private Access Specifier. 2

* Explain Scope Resolution Operator.

* Explain Data Abstraction.

(v) Define a Data Member. 1

* Define a Member Function.

* Define an Object.

(vi) Class is called logical construct. (True/False) 1

* Objects are called physical constructs. (True/False)

* Members of class are by default private. (True/False)

(vii) Data members can be accessed using object as: 1

(a) Object @ datamember (b) Object @ datamember

(c) Object* datameter (d) All of these 1

* Correct way of declaring object of class is:

(a) Class classname objectname (b) Class object objectname

(c) Classname objectname (d) None of these

* We can define member funcition outside the class:

(a) Using structures (b) Using pointers

(c) Using scope resolution operator (d) None of these

Section - 2

Q.2. (i) What is a Constructor? Describe parameterized constructor. 3

(ii) Destructors does not allow any parameters. (True/False) 1

* Destructors is not return type function. (True/False)

* Constructor does not allow any parameters. (True/False)

(iii) Syntax for destructor in C++ :

(a) ! classname ( ) (b) @ classname ( )

(c) $ classname ( ) (d) ~ classname ( ) 1

* A constuctor that accepts no parameters is called:

(a) Perameterized constructor (b) Default constructor

(c) Both (A) and (B) (d) None of these

* A Destructor:

(a) destroys classes

(b) can be overloaded

(c) destroys the objects created by a constructor

(d) None of these

Section - 3

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

(ii) Define a Base Class. 1

* Define a Derived Class.
* Define Public Visibility Mode.

(iii) In a single inheritance, a subclass is derived from another derived class. (True/False) 1

* In mulitple inheritance, a subclass is derived from one base class. (True/False)
* In multilevel inheritance, a subclass inherits from mulitple baseclasses. (True/False)

Section - 4

Q.4. (i) Giving a suitable example, explain a "Pointer". 3

(ii) An integer can be added to or subtracted from a pointer. (True/False) 1

(iii) The content of memory location that pointer points can be accessed with:

(a) New operator (b) Delete operator

(c) Dereference operator (d) None of these 1

* A pointer is a user defined data type. (True/False) 1
* A pointer can be incremented/decremented. (True/False)
* A new operator is used to:

(a) Allocate the memory (b) Deallocate the memory

(c) Both (a) and (b) (d None of these

* 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

Q.5. (i) Explain Binary Search.

Or

Define an Array. Describe its Memory Representation. 4

(ii) Define Stack. Describe two main operations performed on a stack. 3

(iii) Define term 'Searching'. 2

* Define term sorting.
* Define Multidimensional Array.

(iv) Insertion operation in queue take place at:

(a) Front of the queue (b) End of the queue

(c) Both (A) and (B) (d) None of these 1

* Queue is a data structure which folows:

(a) FIFO principle (b) LIFO principle

(c) Both (A) and (B) (d) None of these

* Stack is a data structure which follows:

(a) FIFO principle (b) LIFO priniciple

(c) Both (a) and (b) (d) None of these

Section - 6

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

Or

What is DDL? Discuss its commands. 4

(ii) Define SQL. What are its advantages? 3

(iii) Write various type of DML commands. 2

* Write the use of Insert Command and Delete Command.
* Define Degree and cardinality of relation. 1

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

* Write the use of SQL function Marx ( ).
* Write the use of SQL function Min ( ).

Section - 7

Q.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. 4

(ii) State and explain De Morgan's laws using truth table. 3

(iii) Define Logic Gate and write names of four basic logic gates. 2

* Explain AND Operator using truth table.
* Explain NOT Operator using truth table.

(iv) If the input of NOT Gate is 0, output will be:

(a) 0 (b) 1

(c) 2 (d) None of these 1

* The output of NOR Gate is 1 when the two inputs are:

(a) 0 and 1 (b) 1 and 1

(c) 0 and 0 (d) None of these

* 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

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

Or

Define Cyber Bullying. Wht are its preventive measure? 4

(ii) Write down a note on Safe Sacial Networking. 3

(iv) Describe the use of Modem. 2

(iv) In networking MAN stands for 1

* In networking LAN stands for .....
* In networking PAN stands for .....