COA 201

B.A./B.Sc. IIIrd SEMESTER EXAMINATION, 2023-24

COMPUTER APPLICATION

(Object Oriented Programming and C⁺⁺)

Date (तिथि) : _____

Paper ID
(To be filled in the OMR Sheet)

1144

अनुक्रमांक (अंकों में) :
Roll No. (In Figures)

अनुक्रमांक (शब्दों में) :

Roll No. (In Words) : _____

Time : 1:30 Hrs.
समय : 1:30 घण्टे

Max. Marks : 75
अधिकतम अंक : 75

नोट : पुस्तिका में 50 प्रश्न दिये गये हैं, सभी प्रश्न करने होंगे। प्रत्येक प्रश्न 1.5 अंक का होगा।

Important Instructions :	**महत्वपूर्ण निर्देश :**
1. The candidate will write his/her Roll Number only at the places provided for, i.e. on the cover page and on the OMR answer sheet at the end and nowhere else.	1. अभ्यर्थी अपने अनुक्रमांक केवल उन्हीं स्थानों पर लिखेंगे जो इसके लिए दिये गये हैं, अर्थात् प्रश्न पुस्तिका के मुख्य पृष्ठ तथा साथ दिये गये ओ०एम०आर० उत्तर पत्र पर, तथा अन्यत्र कहीं नहीं लिखेंगे।
2. Immediately on receipt of the question booklet, the candidate should check up the booklet and ensure that it contains all the pages and that no question is missing. If the candidate finds any discrepancy in the question booklet, he/she should report the invigilator within 10 minutes of the issue of this booklet and a fresh question booklet without any discrepancy be obtained.	2. प्रश्न पुस्तिका मिलते ही अभ्यर्थी को जाँच करके सुनिश्चित कर लेना चाहिए कि इस पुस्तिका में पूरे पृष्ठ हैं और कोई प्रश्न छूटा तो नहीं है। यदि कोई विसंगति है तो प्रश्न पुस्तिका मिलने के 10 मिनट के भीतर ही कक्ष परिप्रेक्षक को सूचित करना चाहिए और बिना त्रुटि की दूसरी प्रश्न पुस्तिका प्राप्त कर लेना चाहिए।

1. Who invented OOP ?
    (A) Andrea Ferro
    (B) Adele Goldberg
    (C) Alan Kay
    (D) Dennis Ritchie

2. The feature by which one object can interact with another object's :
    (A) Message reading
    (B) Message passing
    (C) Data transfer
    (D) Data binding

3. Single level inheritance is _____ inheritance.
    (A) Language independency
    (B) Multiple inheritance
    (C) Compile time
    (D) Runtime

4. Which feature of OOP is exhibited by the function overriding ?
    (A) Polymorphism
    (B) Encapsulation
    (C) Abstraction
    (D) Inheritance

5. Instance of which type of class cannot be created ?
    (A) Parent class
    (B) Abstract class
    (C) Anonymous class
    (D) Nested class

6. C^{++} is
    (A) Procedural Programming language
    (B) Object oriented Programming language
    (C) Functional Programming language
    (D) Both Procedural and object oriented Programming language

7. Out of the following, which is not a member of the class ?
   (A) Static function
   (B) Friend function
   (C) Constant function
   (D) Virtual function

8. How many type of polymorphism are there in C^{++} ?
   (A) 1
   (B) 2
   (C) 3
   (D) 4

9. Which of the following approach is used by C^{++} ?
   (A) Top- down
   (B) Bottom-up
   (C) Left-right
   (D) Right-left

10. Which of the following is correct ?
    (A) A class is an instance of its objects
    (B) An object is an instance of its class
    (C) An object is an instance of the data type of the class
    (D) None of the above

11. Which of the following features of OOPS is not used in the following C^{++} code?

    class A{
    int i ;
    public :
    void print () {count << "Hello" << i ;}
    }
    class B: Public A {
    int j ;
    public :
    void Assign (int a) < x = a ;}
    }

    (A) Abstraction
    (B) Encapsulation
    (C) Inheritance
    (D) Polymorphism

12.	Which of the following is an abstract data type ?

(A)	Int

(B)	Float

(C)	Class

(D)	String

13.	Which operator is overloaded for a cout object ?

(A)	>>

(B)	<<

(C)	<

(D)	>

14.	Which members are inherited but are not accessible in any case ?

(A)	Protected

(B)	Public

(C)	Private

(D)	Both private and protected

15.	Identify the scope resolution operator in the following :

(A)	:

(B)	::

(C)	?:

(D)	None

16.	Under which Pillar of OOP do base class and derived class relationship come ?

(A)	Polymorphism

(B)	Inheritance

(C)	Encapsulation

(D)	Abstraction

17.	What is an object in C^{++} ?

(A)	It is a function of class

(B)	It is an Instance of the class

(C)	It is the data type of class

(D)	It is part of the syntax of class

18. Total access specifiers in OOPS for C^{++} are ?

(A)   4

(B)   3

(C)   2

(D)   1

19. How do encapsulation and abstraction Diller ?

(A)   Hiding and Binding

(B)   Binding and hiding

(C)   Hiding and hiding

(D)   None

20. Choose the option below which overloads using friend function :

(A)   ()

(B)   ->

(C)   *

(D)   =

21. Total instances of an abstract class that can be created is /are :

(A)   0

(B)   1

(C)   4

(D)   8

22. What is cout ?

(A)   Operator

(B)   Object

(C)   Function

(D)   Macro

23. Which among the following feature is not in the general definition of OOPS ?

(A)   Modularity

(B)   Efficient code

(C)   Code reusability

(D)   Duplicate or redundant data

24. Which of the following feature is not supported by C^{++} ?
    (A) Exception handling
    (B) Reflection
    (C) Operator overloading
    (D) Namespace

25. Which concept is not supported by object based programming language ?
    (A) Inheritance
    (B) Dynamic binding
    (C) Only (A)
    (D) Both (A) and (B)

26. Which feature's behaviour of OOP depends upon the types of data used is the operation ?
    (A) Inheritance
    (B) Poly morphism
    (C) Abstraction
    (D) Encapsulation

27. Which functions are declared inside a class have to be defined seperately outside the class ?
    (A) Static functions
    (B) Const functions
    (C) Inline functions
    (D) Member functions

28. How many types of object diagrams in OOP ?
    (A) 2
    (B) 3
    (C) 4
    (D) None

29. Which access specifiers have strict access control ?
    (A) Private
    (B) Public
    (C) Protected
    (D) None

30. How many types of Valid inheritance in OOP ?
   (A)   4
   (B)   5
   (C)   6
   (D)   3

31. The default visibility mode in heritance is :
   (A)   Protected
   (B)   Public
   (C)   Private
   (D)   None

32. What is the most striking features of class ?
   (A)   Data encapsulation
   (B)   Collection of objects of similar types
   (C)   Inheritance
   (D)   All of the above

33. Which of the following is not true for polymorphism ?
   (A)   It is a feature of OOP
   (B)   Ease in the readability of a program
   (C)   Helps in redefining the same functionality
   (D)   Increases overhead of function definition always

34. Which of the following can have polymorphism ?
   (A)   Only functions
   (B)   Only operators
   (C)   Both (A) and (B)
   (D)   None of these

35. Where friend keyword placed for friend function ?
   (A)   Function definition
   (B)   Function declarations
   (C)   Main function
   (D)   Both (A) and (C)

36. What is the syntax of friend function ?
    (A) Class Classname

    {friend return type functionName (Parameters) ; };
    (B) Class ClassName

    { return type friend functionName (Parameters) ; };
    (C) Class ClassName

    { return type functionName friend (Parameters) ; };
    (D) None of these

37. Global function can be friend functions for which of the following class ?
    (A) Base class
    (B) Derived class
    (C) Any classes
    (D) None of these

38. If class B is declared friend inside class A , than what will happen ?
    (A) A can access data members of B
    (B) B can access data members of A
    (C) Both (A) and (B)
    (D) None of these

39. Friend functions have objects as :
    (A) Class
    (B) Arguments
    (C) Child
    (D) Parent

40. In which year the name of the language was changed from "C with classes" to C^{++} ?
    (A) 1979
    (B) 1972
    (C) 1983
    (D) 1986

41. Which of the following is NOT an OOP language ?
    (A) C^{++}
    (B) Java
    (C) C
    (D) None of these

42. How many keywords are in C^{++} ?

(A)   32

(B)   84

(C)   99

(D)   95

43. Which of the following is used for multi-line comments in C^{++} ?

(A)   //

(B)   \\

(C)   /* ... */

(D)   ##

44. Which of the following header file is used to define cin, cout ?

(A)   < iomanip.h >

(B)   < iostream.h >

(C)   < fstream.h >

(D)   None of these

45. Which of the following are types of datatypes in C^{++} ?

   1.   Basic datatype

   2.   Derived datatype

   3.   Enumeration datatype

   4.   User defined datatype

(A)   1 and 2

(B)   1, 2 and 4

(C)   1, 2 and 3

(D)   All 1, 2, 3 and 4

46. Which of the following is not a basic type in C^{++} ?

(A)   Int

(B)   Float

(C)   Array

(D)   Char

47. Which of the following is the default storage class in C++ ?

(A) Auto

(B) Extern

(C) Register

(D) Static

48. How many sequences of statements are available in C++ ?

(A) 6

(B) 5

(C) 4

(D) 3

49. Which stream class is to only write on files ?

(A) Offstream

(B) Ifstream

(C) Fstream

(D) Iostream

50. When fopen () is not able to open a file, it returns :

(A) EOf

(B) Null

(C) Runtime error

(D) Compiler dependent

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