COA 201

B.A./B.Sc. IIIrd SEMESTER EXAMINATION, 2024-25

COMPUTER APPLICATION

(Object Oriented Programming & C++)

AFFIX PRESCRIBED RUBBER STAMP		Paper ID (To be filled in the OMR Sheet)

Date (तिथि) : _____

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1144

अनुक्रमांक (अंकों में) :
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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 :

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.

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.

महत्वपूर्ण निर्देश :

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. 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. What is C++?

    (A)   C++ is an object oriented programming language

    (B)   C++ is a procedural programming language

    (C)   C++ supports both procedural and object oriented programming language

    (D)   C++ is a functional programming language

2. Which of the following is a correct identifier in C++?

    (A)   VAR_1234

    (B) $var_name,

    (C)   7VARNAME

    (D)   7var_name

3. Which of the following is not a type of Constructor in C++?

    (A)   Default constructor

    (B)   Parameterized constructor

    (C)   Copy constructor

    (D)   Friend constructor

4. Which of the following correctly declares an array in C++?

    (A)   array{10};

    (B)   array array[10];

    (C)   int array;

    (D)   int array[l0];

5. Which keyword is used to define the macros in c++?

    (A)   #macro

    (B)   #define

    (C)   macro

    (D)   define

6. What is Inheritance in C++?

   (A) Deriving new classes from existing classes

   (B) Overloading of classes

   (C) Classes with same names

   (D) Wrapping of data into a single class

7. What is meant by a polymorphism in C++?

   (A) class having only single form

   (B) class having four forms

   (C) class having many forms

   (D) class having two forms

8. Which of the following constructors are provided by the C++ compiler if not defined in a class?

   (A) Copy constructor

   (B) Default constructor

   (C) Copy Assignment Operator

   (D) All of the mentioned

9. Which concept allows you to reuse the written code in C++?

   (A) Inheritance

   (B) Polymorphism

   (C) Abstraction

   (D) Encapsulation

10. Which of the following class allows to declare only one object of it?

    (A) Abstract class

    (B) Virtual class

    (C) Singleton class

    (D) Friend class

11. What is the other name used for functions inside a class?

   (A)   Member variables

   (B)   Member functions

   (C)   Class functions

   (D)   Class variables

12. How run-time polymorphisms are implemented in C++?

   (A)   Using Inheritance

   (B)   Using Virtual functions

   (C)   Using Templates

   (D)   Using Inheritance and Virtual functions

13. Which operator is overloaded for a cout object?

   (A)   >>

   (B)   <<

   (C)   <

   (D)   >

14. Which of the following is correct?

   (A)   Friend functions can access public members of a class

   (B)   Friend functions can access protected members of a class

   (C)   Friend functions can access private members of a class

   (D)   All of the mentioned

15. 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)   A class is an instance of the data type that the class have

   (D)   An object is an instance of the data type of the class

16. What are the parts of the literal constants?

    (A)   integer numerals

    (B)   floating-point numerals

    (C)   strings and boolean values

    (D)   all of the mentioned

17. Which of the following statement is not true about preprocessor directives?

    (A)   These are lines read and processed by the preprocessor

    (B)   They do not produce any code by themselves

    (C)   These must be written on their own line

    (D)   They end with a semicolon

18. What is this operator called ?:?

    (A)   conditional

    (B)   relational

    (C)   casting operator

    (D)   unrelational

19. Where does the execution of the program starts?

    (A)   user-defined function

    (B)   main function

    (C)   void function

    (D)   else function

20. What are mandatory parts in the function declaration?

    (A)   return type, function name

    (B)   return type, function name, parameters

    (C)   parameters, function name

    (D)   parameters, variables

21. Identify the correct statement.

    (A)   Namespace is used to group class, objects and functions

    (B)   Namespace is used to mark the beginning of the program

    (C)   A namespace is used to separate the class, objects

    (D)   Namespace is used to mark the beginning & end of the program

22. What is the general syntax for accessing the namespace variable?

    (A)   namespace::operator

    (B)   namespace,operator

    (C)   namespace#operator

    (D)   namespace$operator

23. What is the mandatory preprocessor directive for c++?

    (A)   #define <iostream>

    (B)   #include <iostream>

    (C)   #undef <iostream>

    (D)   #macro <iostream>

24. What is the other name of the macro?

    (A)   scripted directive

    (B)   executed directive

    (C)   link directive

    (D)   executed & link directive

25. What is the role of a constructor in classes?

    (A)   To modify the data whenever required

    (B)   To destroy an object

    (C)   To initialize the data members of an object when it is created

    (D)   To call private functions from the outer world

26. What is a copy constructor?

   (A)   A constructor that allows a user to move data from one object to another

   (B)   A constructor to initialize an object with the values of another object

   (C)   A constructor to check the whether to objects are equal or not

   (D)   A constructor to kill other copies of a given object

27. What is the role of destructors in Classes?

   (A)   To modify the data whenever required

   (B)   To destroy an object when the lifetime of an object ends

   (C)   To initialize the data members of an object when it is created

   (D)   To call private functions from the outer world

28. What is syntax of defining a destructor of class A?

   (A)   A(){}

   (B)   ~A(){}

   (C)   A::A(){}

   (D)   ~A(){};

29. When destructors are called?

   (A)   When a program ends

   (B)   When a function ends

   (C)   When a delete operator is used

   (D)   All of the mentioned

30. Which of the following is used for generic programming?

   (A)   Virtual functions

   (B)   Modules

   (C)   Templates

   (D)   Abstract Classes

31. Which of the following is correct about templates?

    (A) It is a type of compile time polymorphism

    (B) It allows the programmer to write one code for all data types

    (C) Helps in generic programming

    (D) All of the mentioned

32. What is Inheritance in C++?

    (A) Wrapping of data into a single class

    (B) Deriving new classes from existing classes

    (C) Overloading of classes

    (D) Classes with same names

33. If a class is derived privately from a base class then

    (A) no members of the base class is inherited

    (B) all members are accessible by the derived class

    (C) all the members are inherited by the class but are hidden and cannot be accessible

    (D) no derivation of the class gives an error

34. What is a virtual function in C++?

    (A) Any member function of a class

    (B) All functions that are derived from the base class

    (C) All the members that are accessing base class data members

    (D) All the functions which are declared in the base class and is re-defined/ overridden by the derived class

35. Which is the correct syntax of declaring a virtual function?

    (A) virtual int func();

    (B) virtual int func(){};

    (C) inline virtual func();

    (D) inline virtual func(){};

36. What is operator overloading in C++?

   (A) Overriding the operator meaning by the user defined meaning for user defined data type

   (B) Redefining the way operator works for user defined types

   (C) Ability to provide the operators with some special meaning for user defined data type

   (D) All of the mentioned

37. Which of these following members are not accessed by using direct member access operator?

   (A) public

   (B) private

   (C) protected

   (D) both private & protected

38. Pick out the other definition of objects.

   (A) member of the class

   (B) associate of the class

   (C) attribute of the class

   (D) instance of the class

39. If the user did not supply the value, what value will it take?

   (A) default value

   (B) rise an error

   (C) both default value & rise an error

   (D) error

40. Which of the following will not return a value?

   (A) null

   (B) void

   (C) empty

   (D) free

41. Which of the following is an exit-controlled loop?

 (A)   for

 (B)   while

 (C)   do-while

 (D)   all of the mentioned

42. Which of the following is an entry-controlled loop?

 (A)   for

 (B)   while

 (C)   do-while

 (D)   both while and for

43. What is dynamic binding?

 (A)   The process of linking the actual code with a procedural call during run-time

 (B)   The process of linking the actual code with a procedural call during compile-time

 (C)   The process of linking the actual code with a procedural call at any-time

 (D)   All of the mentioned

44. Which of the following is the scope resolution operator ?

 (A)   .

 (B)   *

 (C)   ::

 (D)   ~

45. Which of the following is accessed by a member function of a class?

 (A)   The object of that class

 (B)   All members of a class

 (C)   The public part of a class

 (D)   The private part of a class

46. Class is pass by :

(A) Value

(B) Reference

(C) Value or Reference, depending on program

(D) Copy

47. Which of the following keywords is used to control access to a class member ?

(A) Default

(B) Break

(C) Protected

(D) Public

48. Identify the feature which can be implemented using encapsulation :

(A) Abstraction

(B) Encapsulation

(C) Polymorphism

(D) Inheritance

49. Total instances of an abstract class that can be created :

(A) 0

(B) 1

(C) 4

(D) 8

50. Which of the following can be considered as the member that can be inherited but not accessible in any class ?

(A) Public

(B) Protected

(C) Private

(D) None of the above

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