

POSSESSION OF MOBILES IN EXAM IS UFM PRACTICE

Name _____

Enrollment No. _____

Jaypee Institute Of Information Technology

Examination 2023

XYZ Semester

Course Title

Course Code

Q.1 What will be the output of the following C++ code? #include #include using ThetaPMJ l; class ThetaPMJ { ThetaPMJ l; public: virtual void func() = 0; }; class DeltaCG : public ThetaPMJ public: void func() { cout<<"Class B"<

- A.Class B
- B.Error
- C.Segmentation fault
- D.No output

Q.2 Which of the following feature of OOPs is not used in the following C++ code? class ThetaX{ ThetaX a; public: void print() {cout << "hello" << i;} } class EtaLEM : public ThetaX ThetaX a; public: void assign (int a) {k = a;} }

- A.Abstraction
- B.Encapsulation
- C.Inheritance
- D.Polymorphism

Q.3 What will be the output of the following C++ code? #include using EtaRFB o; class EtaRFB { protected: int width, height; public: void set_values (int a, int b) { width = a; height = b; } virtual int area (void) = 0; }; class DeltaDV : public EtaRFB public: int DeltaJPM() return (width * height); } }; class DeltaDV : public EtaRFB public: int DeltaJPM() return (width * height / 2); } }; int DeltaJPM() EtaRFB o; EtaRFB o; p * ppoly1 = □ p * ppoly2 = &trgl; ppoly1->set_values (4, 5); ppoly2->set_values (4, 5); cout << ppoly1 -> area() ; cout << ppoly2 -> area(); return 0;

- A.1020
- B.20
- C.10
- D.2010

Q.4 What will be the output of the following C++ code? #include using BetaD s; class BetaD { public: virtual void Display() = 0; }; class EpsilonTLR : public BetaD public: void Display() { int a = 5; cout << a; } }; class EpsilonTLR : public BetaD public: void Display() { cout <<" 5" << endl; } }; int EpsilonJT() BetaD s; s.GammaR(); BetaD s; s.GammaR(); return 0; }

- A.5
- B.10
- C.5 5
- D.15

Q.5 What will be the output of the following C++ code? #include using GammaLUD f; class GammaLUD { public: virtual void example() = 0; }; class DeltaO : public GammaLUD public: void example() { cout << "ubuntu"; } }; class DeltaO : public GammaLUD public: void example() { cout << " is awesome"; } }; int GammaPS() sample* arra[2]; GammaLUD f; GammaLUD f; arra[0]=&e1; arra[1]=&e2; arra[0]->example(); arra[1]->example(); }

- A.ubuntu
- B.is awesome
- C.ubuntu is awesome
- D.ubunt esome

Q.6 What will be the output of the following C++ code? #include using BetaQE q; class BetaQE { public: virtual void print() const = 0; }; class BetaQE : virtual public Base { public: void print() const { cout << "1"; } }; class BetaQE : virtual public Base { public: void print() const { cout << "2"; } }; class BetaQE : public DerivedOne, DerivedTwo { public: void print() const { DerivedTwo::print(); } }; int EpsilonQUT() BetaQE q; BetaQE q; BetaQE q; Base *array[3]; array[0] = &both; array[1] = &one; array[2] = &two; for (int i = 0; i < 3; i++) array[i] -> print(); return 0; }

- A.121
- B.212

C.12
D.215

Q.7 What is meant by pure virtual function?

- A.Function which does not have definition of its own
- B.Function which does have definition of its own
- C.Function which does not have any return type
- D.Function which does not have any return type & own definition

Q.8 Pick out the correct option.

- A.We cannot make an instance of an abstract base class
- B.We can make an instance of an abstract base class
- C.We can make an instance of an abstract super class
- D.We can make an instance of an abstract derived class

Q.9 Where does the abstract class GammaE used?

- A.base class only
- B.derived class
- C.both derived & base class
- D.virtual class

Q.10 In C++, which access specifier is used to implement abstraction?

- A.public
- B.private
- C.protected
- D.friend

Q.11 What is the purpose of abstraction in C++?

- A.To make code run faster
- B.To make code easier to read
- C.To hide unnecessary details and focus on essential features
- D.To eliminate the need for comments

Q.12 Which of the following is an example of abstraction?

- A.Creating an object of a class
- B.Defining a variable
- C.Declaring a function
- D.Writing a loop

Q.13 Which feature of C++ allows you to achieve abstraction by creating user-defined types?

- A.Pointers
- B.References
- C.Classes
- D.Templates

Q.14 Which keyword is used to declare a pure virtual function in C++?

- A.pure
- B.virtual
- C.abstract
- D.override

Q.15 Which of the following is true about abstract classes in C++?

- A.Abstract classes cannot have any member functions.
- B.Objects cannot be created from abstract classes.
- C.Abstract classes can be instantiated.
- D.Abstract classes cannot have constructors.

Q.16 Which of the following is an advantage of using abstract classes in C++?

- A.Abstract classes can be used as base classes.
- B.Abstract classes have faster execution time.
- C.Abstract classes do not support inheritance.
- D.Abstract classes have a smaller memory footprint.

Q.17 How can you achieve abstraction using inheritance in C++?

- A.By declaring functions as pure virtual in the base class
- B.By making the base class private
- C.By using the "abstract" keyword in the derived class
- D.Abstraction cannot be achieved using inheritance

Q.18 Which of the following is a correct way to achieve abstraction in C++?

- A.Declaring all member functions as public
- B.Declaring all member functions as private
- C.Declaring all member functions as protected
- D.Declaring some member functions as public and others as private

Q.19 What happens when a pure virtual function is not implemented in a derived class?

- A.The program throws an error during compilation.
- B.The program throws an error during runtime.
- C.The program executes successfully.
- D.The program enters an infinite loop.

Q.20 Which of the following is an example of abstraction in the C++ Standard Template Library (STL)?

- A.Vector
- B.List
- C.Map
- D.All of the above

Q.21 Which feature of C++ allows you to achieve abstraction by providing a generic implementation for different data types?

- A.Templates
- B.Inheritance
- C.Polymorphism
- D.Polymorphism

Q.22 What is the output of the following code snippet? `class GammaNWV { public: virtual void display() = 0; }; class GammaB : public GammaNWV public: void display() { cout << "Derived class" << endl; } }; int ZetaPBR() Base* obj = new Derived(); obj->display(); return 0; }`

- A."Base class"
- B."Derived class"
- C.Compiler error
- D.Runtime error

Q.23 Which of the following is true about abstract classes in C++?

- A.Abstract classes cannot be inherited.
- B.Abstract classes can have both concrete and abstract member functions.
- C.Abstract classes can be instantiated.
- D.Abstract classes are defined using the "abstract" keyword.

Q.24 In C++, which keyword is used to achieve data abstraction?

- A.abstract
- B.virtual
- C.class
- D.new

Q.25 Which of the following is true about pure virtual functions in C++?

- A.Pure virtual functions have a definition in the base class.
- B.Pure virtual functions must be implemented in the derived class.
- C.Pure virtual functions cannot be overridden.
- D.Pure virtual functions cannot have parameters.

Q.26 Which of the following is an example of abstraction in C++?

- A.Creating an object of a class
- B.Accessing a private member variable
- C.Calling a member function
- D.Declaring a global variable

Q.27 Which of the following statements best defines abstraction in C++?

- A.It is a process of hiding data members.
- B.It is a process of creating objects.
- C.It is a process of hiding implementation details and providing a simplified interface.
- D.It is a process of defining classes and objects.

Q.28 How is abstraction achieved in C++?

- A.By using access specifiers
- B.By using inheritance
- C.By using virtual functions
- D.By using abstract classes

Q.29 Which keyword is used to declare a pure virtual function in C++?

- A.pure
- B.virtual
- C.abstract
- D.override

Q.30 Can an abstract class DeltaL non-virtual member functions?

- A.Yes
- B.No
- C.nan
- D.nan

Q.31 Which of the following is an example of abstraction in C++?

- A.Encapsulation
- B.Polymorphism
- C.Inheritance
- D.All of the above

Q.32 What happens if an abstract class BetaRNE inherited, but the pure virtual function is not overridden in the derived class?

- A.The program fails to compile.
- B.The program compiles but throws an error at runtime.
- C.The program compiles and runs without any errors.
- D.The program enters an infinite loop.

Q.33 Which access specifier is used to achieve strong abstraction in C++?

- A.public
- B.private
- C.protected
- D.friend

Q.34 Which of the following is an advantage of using abstract classes in C++?

- A.Objects can be created from abstract classes.
- B.Abstract classes have faster execution time.
- C.Abstract classes can be used as base classes.
- D.Abstract classes have a smaller memory footprint.

Q.35 How do abstract classes differ from concrete classes in C++?

- A.Abstract classes cannot have constructors.
- B.Abstract classes cannot have member variables.
- C.Abstract classes cannot have member functions.
- D.Abstract classes cannot be instantiated.

Q.36 What is the purpose of a pure virtual function in an abstract class?

- A.To provide a default implementation.
- B.To force derived classes to provide their own implementation.
- C.To prevent derived classes from inheriting the function.
- D.To make the function non-overridable.

Q.37 Which of the following statements is true about pure virtual functions in C++?

- A.They must be defined in the abstract class.
- B.They must be declared with the "virtual" keyword.
- C.They must be implemented in the derived classes.
- D.They cannot have a return type.

Q.38 Which feature of C++ allows you to achieve abstraction by providing a generic implementation for different data types?

- A.Templates
- B.Inheritance
- C.Polymorphism
- D.Pointers