BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Diploma in Computer Science & Engineering
Course Name – OOP with C++
Course Code - DCSE401
(Semester IV)

Time allotted : 1 Hrs.25 Min.   **Full Marks : 70**

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)   1 x 70=70

Choose the correct alternative from the following :

(1) Wrapping data and its related functionality into a single entity is known as

a) Abstraction
b) Encapsulation
c) Polymorphism
d) Modularity

(2) How do structures and classes in C++ differ?

a) In Structures, members are public by default wher eas, in Classes, they are private by default
b) In Structures, members are private by default whe reas, in Classes, they are public by default
c) Structures by default hide every member whereas classes do not
d) Structures cannot have private members whereas classes can have

(3) What is the other name used for functions inside a class?

a) Member variables
b) Member functions
c) Class functions
d) Class variables

(4) How structures and classes in C++ differ?

a) In Structures, members are public by default wher eas, in Classes, they are private by default
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(5) What does polymorphism in OOPs mean?

a) Concept of allowing overriding of functions
b) Concept of hiding data
c) Concept of keeping things in different modules/fil es
d) Concept of wrapping things into a single unit

(6) Which concept allows you to reuse the written code?

a) Encapsulation
b) Abstraction
c) Inheritance
d) Polymorphism

(7) Which of the following is not a type of Constructor in C++?

a) Default constructor
b) Parameterized constructor
c) Copy constructor
d) Friend constructor

(8) Which of the following is not a type of Constructor?

a) Friend constructor   b) Copy constructor

c) Default constructor   d) Parameterized constructor

(9) Which of the following is correct?

a) Base class pointer object cannot point to a derived   b) Derived class pointer object cannot point to a bas
class object   e class object

c) A derived class cannot have pointer objects   d) A base class cannot have pointer objects

(10) How many types of polymorphism are there in C++?

a) 1   b) 2

c) 3   d) 4

(11) How run-time polymorphisms are implemented in C++?

a) Using Inheritance   b) Using Virtual functions

c) Using Templates   d) Using Inheritance and Virtual function

(12) Which of the following is an abstract data type?

a) int   b) float

c) class   d) string

(13) Which data type is used to represent the absence of parameters?

a) int   b) float

c) short   d) void

(14) Which of the following statements are true for the following declaration? int f(float)

a) f is a function taking an argument of type int and r   b) f is a function taking an argument of type float an
eturning a floating-point number   d returning an integer

c) f is a function of type float   d) f is a function of type int

(15) Which of the following accesses the seventh element stored in array?

a) array[6];   b) array[7];

c) array(6);   d) array

(16) What is the difference between references and pointers?

a) References are an alias for a variable whereas poi   b)
nter stores the address of a variable   References and pointers are similar

c) References stores address of variables whereas po   d) Pointers are an alias for a variable whereas refere
inter points to variables   nces stores the address of a variable

(17) The data elements in the structure are also known as …….

a) objects   b) members

c) data   d) objects & data

(18) Which operator is having the highest precedence?

a) postfix   b) unary

c) shift   d) equality

(19) What will be the output of the following C++ code? #include using namespace std; int main() { i
nt i, j; j = 10; i = (j++, j + 100, 999 + j); cout << i; return 0; }

a) 1000   b) 11

c) 1010   d) 1001

(20) Which of the following is the default return value of functions in C++?

a) int   b) char

c) float   d) void

(21) When we define the default values for a function?

a) When a function is defined   b) When a function is declared

c) When the scope of the function is over   d) When a function is called

(22) Which of the following is a correct identifier in C++?

a) 7var_name   b) 7VARNAME

c) VAR_1234

d) $var_name

(23) What are the actual parameters in C++?

a) Parameters with which functions are called

b) Parameters which are used in the definition of a function

c) Variables other than passed parameters in a function

d) variables that are never used in the function

(24) Which of the following is an exception in C++?

a) Divide by zero

b) Semicolon not written

c) Variable not declared

d) An expression is wrongly written

(25) Which specifier makes all the data members and functions of base class inaccessible by the derived class?

a) private

b) protected

c) public

d) both private and protected

(26) What is the use of header

a) Contains the standard exception files

b) Contains the standard library files

c) It is used to arise an exception in the program

d) Reduce the memory size

(27) Which classes allow primitive types to be accessed as objects?

a) Storage

b) Virtual

c) Friend

d) Wrapper

(28) When is std::bad_alloc exception thrown?

a) When new operator cannot allocate memory

b) When alloc function fails

c) When type requested for new operation is considered bad

d) When delete operator cannot delete the allocated (corrupted) object.

(29) Which of the following is the most preferred way of throwing and handling exceptions?

a) Throw by value and catch by reference

b) Throw by reference and catch by reference

c) Throw by value and catch by value

d) Throw the pointer value and provide catch for the pointer type

(30) What's wrong? while((i < 10) && (i > 24))

a) the logical operator && cannot be used in a test condition

b) the while loop is an exit-condition loop

c) the test condition is always false.

d) the test condition is always true

(31) What's wrong? for (int k = 2, k <=12, k++)

a) the increment should always be ++k

b) the variable must always be the letter i when using a for loop

c) there should be a semicolon at the end of the statement

d) the commas should be semicolons

(32) Which of the STL containers store the elements contiguously (in adjacent memory locations)?

a) std::vector

b) std::list

c) std::map

d) std::set

(33) What is the difference between overloaded functions and overridden functions?

a) Overloading is a dynamic or run-time binding and Overriding is static or compile-time binding

b) Redefining a function in a friend class is called function overriding while redefining a function in a derived class is called overloaded function.

c) Overloading is a static or compile-time binding and Overriding is dynamic or run-time binding.

d) Redefining a function in a friend class is called function overloading while Redefining a function in a derived class is called as overridden function.

(34) Which one of the following is not a valid reserved keyword in C++

a) Explicit

b) Public

c) Implicit

d) Private

(35) Each pass through a loop is called a/an

a) enumeration

b) iteration

c) culmination

d) pass through

(36) If class A is friend of class B and if class B is friend of class C, which of the following is true?

a) Class C is friend of class A

b) Class A is friend of class C

c) Class A and Class C do not have any friend relationship

d) None of these

(37) A direct access file is:

a) A file in which records are arranged in a way they are inserted in a file

b) A file in which records are arranged in a particular order

c) Files which are stored on a direct access storage medium

d) None of these

(38) Seek time is

a) time taken to retrieve a data

b) Time taken by read/write head mechanism to position itself over appropriate cylinder

c) Time taken by appropriate sector to come under read/write

d) None of these

(39) *ptr++ is equivalenet to:

a) ptr++

b) *ptr

c) ++*ptr

d) None of these

(40) Originally 'C++' was developed as:

a) System programming language

b) General purpose language

c) Data processing language

d) None of these

(41) Which of the following is not a file operation?

a) Repositioning

b) Truncating

c) Appending

d) d. None of these

(42) How many copies of a class static member are shared between objects of the class?

a) A copy of the static member is shared by all objects of a class

b) A copy is created only when at least one object is created from that class

c) A copy of the static member is created for each instantiation of the class

d) No memory is allocated for static members of a class

(43) Which looping process checks the test condition at the end of the loop?

a) for

b) while

c) do-while

d) no looping process checks the test condition at the end.

(44) Which of the following correctly describes the meaning of 'namespace' feature in C++?

a) Namespaces refer to the memory space allocated for names used in a program.

b) Namespaces refer to space between the names in a program.

c) Namespaces refer to packing structure of classes in a program

d) Namespaces provide facilities for organizing the names in a program to avoid name clashes.

(45) Allocating memory space for names used in a program refers to

a) Namespace

b) Garbage collection

c) Function

d) Exception

(46) class derived: public base1, public base2 { } is an example of

a) Polymorphic inheritance

b) Multilevel inheritance

c) Hierarchical inheritance

d) Multiple inheritance

(47) How do we declare an 'interface' class?

a) By making all the methods pure virtual in a class

b) By making all the methods abstract using the key word 'abstract' in a class

c) By declaring the class as interface with the keyword 'interface'

d) It is not possible to create interface class in C++

(48) How do we declare an abstract class?

a) By providing at least one pure virtual method (function signature followed by ==0;) in a class

b) By declaring at least one method abstract using the keyword 'abstract' in a class

c) By declaring the class abstract with the keyword 'abstract'

d) It is not possible to create abstract classes in C++

(49) The statement i++; is equivalent to

a) i = i + i;

b) i = i + 1;

c) i = i - 1;

d) i --;

(50) Which of the following library function below by default aborts the program?

a) terminate()

b) end()

c) abort()

d) exit()

(51) If a member needs to have unique value for all the objects of that same class, declare the member as

a) Global variable outside class

b) Local variable inside constructor

c) Static variable inside class

d) Dynamic variable inside class

(52) Value of ix+j, if i,j are integer type and ix long type would be

a) integer

b) float

c) long integer

d) double precision

(53) Which of the following below can perform conversions between pointers to related classes?

a) cast_static

b) dynamic_cast

c) static_cast

d) cast_dynamic

(54) When class B is inherited from class A, what is the order in which the constructers of those classes are called

a) Class A first Class B next

b) Class B first Class A next

c) Class B's only as it is the child class

d) Class A's only as it is the parent class

(55) Pointers are widely used in C++ for

a) Exception handling

b) Operator overloading

c) debugging

d) Memory management

(56) In a group of nested loops, which loop is executed the maximum number of times?

a) the outermost loop.

b) the innermost loop.

c) all loops are executed the same number of times.

d) cannot be determined without knowing the size of the loops.

(57) Inline functions are invoked at the time of

a) Run time

b) Compile time

c) Depends on how it is invoked

d) Both b and c above

(58) What is deep copy?

a) A deep copy creates a copy of the dynamically allocated objects too.

b) A deep copy creates a copy of the statically allocated objects too

c) A deep copy just copies the values of the data as they are.

d) Both b and c

(59) Under which of the following circumstances, synchronization takes place?

a) When the file is closed

b) Explicitly, with manipulators

c) an error message

d) When the buffer is empty

(60) Which of the following functions below can be used Allocate space for array in memory?

a) calloc()

b) malloc()

c) realloc()

d) both a and b

(61) STL is based on which of the following programming paradigms?

   a) Object Oriented Programming (OOP)   b) Aspect Oriented Programming (AOP)

   c) Structured Programming   d) Functional Programming

(62) Which is called ternary operator?

   a) &:   b) ?:

   c) &=   d) ?=

(63) Which of the following members do get inherited but become private members in child class?

   a) Public   b) Protected

   c) friendly   d) Private

(64) Which looping process is best used when the number of iterations is known?

   a) for   b) while

   c) do-while   d) all looping processes require that the iterations be known

(65) Which header file should we include for using std::auto_ptr?

   a) memory   b) alloc

   c) autoptr   d) smartptr

(66) What is the implicit pointer that is passed as the first argument for non-static member functions?

   a) 'self' pointer   b) std::auto_ptr pointer

   c) 'myself' pointer   d) 'this' pointer

(67) Which of the following operators can be overloaded?

   a) . (dot or member access operator)   b) & (address-of operator)

   c) sizeof operator   d) >> (right shift operator)

(68) Which of the following operator cannot be overloaded?

   a) #NAME   b) == (equality operator)

   c) -->(row operator)   d) :: (scope resolution operator)

(69) Which of the following operators below allow to define the member functions of a class outside the class?

   a) ::   b) ?

   c) ?:   d) %

(70) Which of the following is not a valid conditional inclusion in pre-processor directives

   a) #ifdef   b) #ifundef

   c) #endif   d) #elif