



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Master of Computer Applications

Course Name – Object Oriented Programming Using Java

Course Code - MCA201

(Semester II)

Time : 1 Hr.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) Which is private member functions access scope?

a) Member functions which can only be used within the class	b) Member functions which can used outside the class
c) Member functions which are accessible in derived class	d) Member functions which can't be accessed inside the class
- (2) The essential characteristics of an object that distinguish it from all other kinds of objects and thus provide crisply defined conceptual boundaries, relative to the perspective of the viewer is called:

a) Encapsulation	b) Modularity
c) Hierarchy	d) Abstraction
- (3) Abstraction is classified into _____ types

a) 4	b) 3
c) 2	d) 1
- (4) The process of compartmentalizing the elements of an abstraction that constitute its structure and behavior is called as

a) Hierarchy	b) Encapsulation
c) Modularity	d) Entity Abstraction
- (5) In which of the following mechanisms, types of all variables and expressions are fixed at compilation time.

a) Strong Typing	b) Weak Typing
c) Static Binding / early binding	d) Dynamic Binding / late binding
- (6) In which of the following mechanisms, types of all variables and expressions are not known until runtime

- a) Strong Typing
- b) Weak Typing
- c) Static Binding/ early binding
- d) Dynamic Binding/ late binding

(7) Which of the following statements about Persistence is correct?

- a) It is the enforcement of the class of an object, such that objects of different types may not be interchanged, or at the most they may be interchanged only in very restricted ways.
- b) It is the property of an object through which its existence transcends time and/or space.
- c) Both of the mentioned
- d) None of the mentioned

(8) What is that concept in type theory in which a single name may denote objects of many different classes that are related by some common super class referred to _____

- a) Monomorphism
- b) Type Checking
- c) Polymorphism
- d) Generalization

(9) Object oriented technology is built upon a sound engineering foundation, whose elements are collectively called as _____

- a) Von Neumann Model
- b) Object Model
- c) Structured Model
- d) Programming Model

(10) Callback is an operation provided by _____

- a) Inheritance
- b) Encapsulation
- c) Modularity
- d) Abstraction

LIBRARY
 Brahmacharya
 Barasat, Kolkata

(11) Superclass represents _____ abstractions

- a) Generalized abstractions
- b) Specialization abstractions
- c) Generalized and Specialization abstractions
- d) None of these

(12) _____ is the property that distinguishes an active object from one that is not active.

- a) Persistence
- b) Typing
- c) Aggregation
- d) Concurrency

(13) Which of the following is not a Java features?

- a) Dynamic
- b) Architecture Neutral
- c) Use of pointers
- d) Object-oriented

(14) What is the return type of the hashCode() method in the Object class?

- a) Object
- b) int
- c) long
- d) void

(15) Which of the property of an object encompasses all of the (usually static) properties of the object plus the current (usually dynamic) values of each of these?

- a) Semantics
- b) Behavior
- c) State
- d) Identity

(16) A _____ is a description of a set of objects that share the same attributes, operations, relationships, and semantics.

- a) Structure
- b) Class
- c) Constructor
- d) Function

(17) Which of the following statements about a constructor is not true?

- a) We cannot refer to their addresses.
- b) They cannot be inherited, though a derived class can call the base class constructor.
- c) An object with a constructor can be used as a
- d) Constructors cannot be virtual.

member of a union.

(18) When an object is created and initialized at the same time, a _____ constructor gets called.

- a) Inline Constructor
- b) Copy Constructor
- c) Default Constructor
- d) Parameterized Constructor

LIBRARY
Bramhara University
Barasat, Kolkata - 700

(19) Which of these keywords is used to make a class?

- a) class
- b) struct
- c) int
- d) None of these

(20) Which of these statements is incorrect?

- a) Every class must contain a main() method
- b) Applets do not require a main() method at all
- c) There can be only one main() method in a program
- d) main() method must be made public

(21) Evaluate the following Java expression, if x=3, y=5, and z=10: ++z + y - y + z + x++

- a) 20
- b) 23
- c) 24
- d) 25

(22) Which of the following tools is used to generate API documentation in HTML format from doc comments in source code?

- a) javap tool
- b) javaw command
- c) Javadoc tool
- d) javah command

(23) Which statement is true regarding an object?

- a) An object is what classes instantiated are from
- b) An object is an instance of a class
- c) An object is a variable
- d) An object is a reference to an attribute

(24) Which component is used to compile, debug and execute a Java program?

- a) JVM
- b) JDK
- c) JIT
- d) JRE

(25) Which component is responsible to run a Java program?

- a) JVM
- b) JDK
- c) JIT
- d) JRE

(26) Which of the below is an invalid identifier with the main method?

- a) public
- b) static
- c) private
- d) final

(27) How can we identify whether a compilation unit is a class or interface from a .class file?

- a) Java source file header
- b) Extension of compilation unit
- c) We cannot differentiate between class and interface
- d) The class or interface name should be prefixed with unit type

(28) Which of these is used to access a member of a class before an object of that class is created?

- a) public
- b) private
- c) static
- d) protected

(29) What is the process by which we can control what parts of a program can access the members of a class?

- a) Polymorphism
- b) Abstraction
- c) Encapsulation
- d) Recursion

(30) Which of these access specifier must be used for class so that it can be inherited by another subclass?

- a) public
- b) private
- c) protected
- d) None of these

(31) What is the prototype of the default constructor of this Java class? `public class prototype { }`

- a) `prototype()`
- b) `prototype(void)`
- c) `public prototype(void)`
- d) `public prototype()`

(32) Which of the following does not belong: If a class inherits from some other class, it should

- a) Make use of the parent class's capabilities
- b) Over-ride or add the minimum to accomplish the derived class' purpose
- c) Over-ride all the methods of its parent class
- d) Make sure the result "IS-A-KIND-OF" its base class

(33) If an expression contains double, int, float, long, then the whole expression will be promoted into which of these data types?

- a) long
- b) int
- c) double
- d) float

(34) Given a class named student, which of the following is a valid constructor declaration for the class?

- a) `Student (student s) { }`
- b) `Student student () { }`
- c) `Private final student () { }`
- d) `Void student () { }`

(35) What is Truncation in Java?

- a) Floating-point value assigned to an integer type
- b) Integer value assigned to floating type
- c) Floating-point value assigned to an Floating type
- d) Integer value assigned to floating type

(36) Which of these is an incorrect array declaration?

- a) `int arr[] = new int [5]`
- b) `int [] arr = new int[5]`
- c) `int arr[] = new int[5]`
- d) `int arr[] = int [5] new`

(37) Which of these is an incorrect Statement?

- a) It is necessary to use new operator to initialize an array
- b) Array can be initialized using comma separated expressions surrounded by curly braces
- c) Array can be initialized when they are declared
- d) None of these

(38) Which of these class is superclass of every class in Java?

- a) String class
- b) Object class
- c) Abstract class
- d) ArrayList class

(39) Which of these method of Object class is used to obtain class of an object at run time?

- a) `get()`
- b) `void getClass()`
- c) `Class getClass()`
- d) None of these

(40) Which of these keywords cannot be used for a class which has been declared final?

- a) abstract
- b) extends
- c) abstract and extends
- d) None of these

- (41) String in Java is a?
a) class
b) object
c) variable
d) character array
- (42) Which of these keywords is used to refer to member of base class from a subclass?
a) upper
b) super
c) this
d) None of these
- (43) Which of the following statements are incorrect?
a) String is a class
b) Strings in java are mutable
c) Every string is an object of class String
d) Java defines a peer class of String, called StringBuffer, which allows string to be altered
- (44) Which keyword is used by the method to refer to the object that invoked it?
a) import
b) catch
c) abstract
d) this
- (45) Which operator is used by Java run time implementations to free the memory of an object when it is no longer needed?
a) delete
b) free
c) new
d) None of these
- (46) Which of the following statements are incorrect?
a) default constructor is called at the time of object declaration
b) constructor can be parameterized
c) finalize() method must be declared protected
d) finalize() method is called when an object goes out of scope and is no longer needed
- (47) What is the process of defining more than one method in a class differentiated by parameters?
a) Function overriding
b) Function overloading
c) Function doubling
d) None of these
- (48) Which of these data type can be used for a method having a return statement in it?
a) void
b) int
c) float
d) int and float
- (49) Which of these class is used to create an object whose character sequence is mutable?
a) String()
b) StringBuffer()
c) String() & StringBuffer()
d) None of these
- (50) Which of these method of class StringBuffer is used to find the length of current character sequence?
a) length()
b) Length()
c) capacity()
d) Capacity()
- (51) Which of these keywords are used to define an abstract class?
a) abst
b) abstract
c) Abstract
d) abstract class
- (52) If a class inheriting an abstract class does not define all of its function then it will be known as?
a) Abstract
b) A simple class
c) Static class
d) None of these
- (53) Which of these packages contains abstract keyword?

- a) java.lang
- c) java.io

- b) java.util
- d) java.system

(54) What is the process of defining a method in a subclass having same name & type signature as a method in its superclass?

- a) Method overloading
- b) Method overriding
- c) Method hiding
- d) None of these

(55) Which of these is correct way of calling a constructor having no parameters, of superclass A by subclass B?

- a) super(void);
- b) superclass.();
- c) super.A();
- d) super();

(56) Which of this keyword must be used to inherit a class?

- a) super
- b) this
- c) extent
- d) extends

(57) What is not type of inheritance?

- a) Single inheritance
- b) Double inheritance
- c) Hierarchical inheritance
- d) Multiple inheritance

(58) All classes in Java are inherited from which class?

- a) java.lang.class
- b) java.class.inherited
- c) java.class.object
- d) java.lang.Object

(59) Which of these is a mechanism for naming and visibility control of a class and its content?

- a) Object
- b) Packages
- c) Interfaces
- d) None of these

(60) Which of these access specifiers can be used for a class so that its members can be accessed by a different class in the different package?

- a) Public
- b) Protected
- c) Private
- d) No Modifier

LIBRARY
Birla Institute of Technology
Kharagpur, Kolkata - 721302