



BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Computer Applications

Course Name – Object Oriented Programming with JAVA

Course Code - BCAC303

Semester / Year - Semester III

Time allotted : 75 Minutes

Full Marks : 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

1. (Answer any Sixty)

(i) 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 |

(ii) Which of the following programming language are object oriented in nature?

- | | |
|-------------------------|----------------------|
| a) Smalltalk and Simula | b) FORTRAN and ALGOL |
| c) C and Ada | d) Perl and Python |

(iii) Callback is an operation provided by _____

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

(iv) Dependencies among files can then be asserted using the macro

- | | |
|-------------|-----------|
| a) #define | b) #undef |
| c) #include | d) #endif |

(v) Superclass represents _____ abstractions

- | | |
|-----------------------------|--------------------------------|
| a) Generalized abstractions | b) Specialization abstractions |
|-----------------------------|--------------------------------|

c) Both

d) None of the mentioned

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

a) Persistence

b) Typing

c) Aggregation

d) Concurrency

(vii) :reader, :writer or :accessor are the slot options in

a) Smalltalk

b) LISP

c) Object Pascal

d) CLOS

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

a) Dynamic

b) Architecture Neutral

c) Use of pointers

d) Object-oriented

(ix) _____ is used to find and fix bugs in the Java programs.

a) JVM

b) JRE

c) JDK

d) JDB

(x) Which of the following is a valid declaration of a char?

a) char ch = '\utea';

b) char ca = 'tea';

c) char cr = \u0223;

d) char cc = '\itea';

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

a) Object

b) int

c) long

d) void

(xii) Which of the following is a valid long literal?

a) ABH8097

b) L990023

c) 904423

d) 0xnf029L

(xiii) Which of the following property is associated with objects?

- a) State
- b) Behavior
- c) Identity
- d) All of the mentioned

(xiv) 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

(xv) Which of the following object types are generally autonomous, meaning that they can exhibit some behavior without being operated upon by another object

- a) Passive
- b) Active
- c) Passive and passive
- d) None of the mentioned

(xvi) Which is the special member function whose task is to initialize the objects of its class?

- a) Constructor
- b) Destructor
- c) Selector
- d) Iterator

(xvii) 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 member of a union.
- d) Constructors cannot be virtual.

(xviii) The constructors that can take arguments are called _____

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

(xix) 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

(xx) Destructor is defined as _____

- a) Const matrix X(m, n);
- b) matrix:: ~matrix(){ }
- c) matrix:: matrix(void)
- d) matrix()

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

- a) class
- b) struct
- c) int
- d) none of the mentioned

(xxii) Which of the following is a valid declaration of an object of class Box?

- a) Box obj = new Box();
- b) Box obj = new Box;
- c) obj = new Box();
- d) d. new Box obj;

(xxiii) Which of these statement is incorrect?

- a) Every class must contain a main() method
- b) Every class must contain a main() method
- c) There can be only one main() method in a program
- d) main() method must be made public

(xxiv) Which of the following statements is correct?

- a) Public method is accessible to all other classes in the hierarchy
- b) Public method is accessible only to subclasses of its parent class
- c) Public method can only be called by object of its class
- d) Public method can be accessed by calling object of the public class

(xxv) What will be the output of the following Java program? class Box { int width; int height; int length; } class MainClass { public static void main(String args[]) { Box obj = new Box(); System.out.println(obj); } }

- a) 0
- b) 1
- c) Runtime error
- d) classname@hashcode in hexadecimal form

(xxvi) 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 the mentioned

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

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

(xxviii) In object-oriented programming, new classes can be defined by extending existing classes. This is an example of:

- a) Encapsulation
- b) Interface
- c) Composition
- d) Inheritance

(xxix) 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

(xxx) Object-oriented inheritance models the

- a) "is a kind of" relationship
- b) "has a" relationship
- c) "want to be" relationship
- d) inheritance does not describe any kind of relationship between classes

(xxxi) The wrapping up of data and functions into a single unit is called

- a) Encapsulation
- c) Data Hiding

- b) Abstraction
- d) Polymorphism

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

- a) Student (student s) { }
- c) Private final student () { }

- b) Student student () { }
- d) Void student () { }

(xxxiii) Which method of the Class.class is used to determine the name of a class represented by the class object as a String?

- a) getClass()
- c) getName()

- b) intern()
- d) toString()

(xxxiv) What is Truncation in Java?

- a) Floating-point value assigned to an integer type
- c) Floating-point value assigned to an Floating type

- b) Integer value assigned to floating type
- d) Integer value assigned to floating type

(xxxv) In which process, a local variable has the same name as one of the instance variables?

- a) Serialization
- c) Abstraction

- b) Variable Shadowing
- d) Multi-threading

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

- a) int arr[] = new int[5]
- c) int arr[] = new int[5]

- b) int [] arr = new int[5]
- d) int arr[] = int [5] new

(xxxvii) What will be the output of the following Java code? int arr[] = new int [5]; System.out.print(arr);

- a) 0
- c) 00000

- b) value stored in arr[0]
- d) Class name@ hashCode in hexadecimal

form

(xxxviii) 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 the mentioned

(xxxix) Which of these is necessary to specify at time of array initialization?

- a) Row
- b) Column
- c) Both Row and Column
- d) None of the mentioned

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

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

(xli) Which of these method of Object class can clone an object?

- a) Objectcopy()
- b) copy()
- c) Object clone()
- d) clone()

(xlii) 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 the mentioned

(xliii) 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 the mentioned

(xlv) Which of these class relies upon its subclasses for complete implementation of its methods?

- a) Object class
- b) abstract class
- c) ArrayList class
- d) None of the mentioned

(xlv) String in Java is a?

- a) class
- b) object
- c) variable
- d) character array

(xlvi) Which of these method of String class is used to obtain character at specified index?

- a) char()
- b) Charat()
- c) charat()
- d) charAt()

(xlvii) 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 the mentioned

(xlviii) Which of these method of String class can be used to test to strings for equality?

- a) isequal()
- b) isequals()
- c) equal()
- d) equals()

(xlix) Which of the following is a method having same name as that of its class?

- a) finalize
- b) delete
- c) class
- d) constructor

(l) What is true about time slicing?

- a) Time slicing is OS service that allocates CPU time to available runnable thread
- b) Time slicing is the process to divide the available CPU time to available runnable

thread

c) Time slicing depends on its implementation in OS

d) Time slicing allocates more resources to thread

(li) What should not be done to avoid deadlock?

a) Avoid using multiple threads

b) Avoid hold several locks at once

c) Execute foreign code while holding a lock

d) Use interruptible locks

(lii) Exception is a class/interface/abstract class/other?

a) Class

b) Interface

c) Abstract class

d) Other

(liii) Exception is found in which package in java

a) java.lang

b) java.util

c) java.io

d) java.net

(liv) Which of these class is highest in hierarchy in java

a) java.lang.Exception

b) java.lang.Error

c) java.lang.Throwable

d) java.lang.Object

(lv) FileNotFoundException

a) Is a subclass/extends IOException

b) Is a Compile time exception

c) Found in java.io package

d) All

(lvi) In which condition will the finally block will not be executed?

a) When some Error occurs

b) When Exception is raised

c) When System.Exit(1) is called

d) In all the cases

(lvii) Which of these functions is called to display the output of an applet?

a) display()

b) paint()

c) displayApplet()

d) PrintApplet()

(lviii) Which of these methods is a part of Abstract Window Toolkit (AWT)?

a) display()

b) paint()

c) drawString()

d) transient()

(lix) Which of these modifiers can be used for a variable so that it can be accessed from any thread or parts of a program?

a) transient

b) volatile

c) global

d) No modifier is needed

(lx) Which of these operators can be used to get run time information about an object?

a) getInfo

b) Info

c) instanceof

d) getinfoof