**Debre Markos University**

**College of Technology**

**Department of Information Technology**

***Advanced programming exit exam model questions***

**Choose the best alternative and write your answer on the answer sheet**

1. One of the following is not true statement.
2. Class is an entity that contains both data and methods.
3. new operator used to create object from a given class
4. In java new operator used to declare variable that used to store single value
5. Classes are model of a given problem domain.
6. None
7. One of the following is not the end result of abstraction in OOP?

A. Possible attributes B. Possible methods

C. Possible class D. Well Organized codes E. None

1. One of the following is true statement about constructors?
   * 1. Constructors are methods of a given class which used to create objects
     2. Constructors are special attributes
     3. Constructors have the same name as class name and can return values
     4. A class can’t have more than one constructor
     5. None
2. Identify false statement among the given.
   * 1. Several classes can be declared as sub classes of the same super class
     2. Several classes can share the same variable.
     3. In inheritance we can have more than one sub class
     4. When we create an object of a sub class, constructor of a subclass executed first and then constructors of super class
     5. None
3. One of the following is not true about inheritance?

A. Inheritance is used for code reusing

B. In inheritance the sub class can introduce its own specific variables.

C. A super class can access its own sub classes unique data members

D. Java uses the word extends to implement inheritance

E. None

1. One of the following is a false statement?
   * 1. Declaring class as final prevents inheritance totally.
     2. Multilevel inheritance can have more than one super class.
     3. Simple inheritance has only one subclass
     4. Declaring a methods or variables as private in super class prevents inheritance totally.
     5. None
2. One of the following keywords is not used to implement inheritance?

A. super B. extends C. super() D. public E. None

1. One of the following statements is false
   * 1. An exception is a compile time error
     2. In java there are predefined classes that used to handle exceptions
     3. In exception handling technique an exception object contains expected error information
     4. Exception handling mechanism decreases your program performance.
     5. None
2. Principles of OOP that used to bind attribute and a method is called\_\_\_\_\_\_\_\_\_\_\_\_\_?

A. Inheritance B. Abstraction

C. Message connection D. Polymorphism E. Encapsulation

1. One of the following statements is false
2. Method overloading is resolved at compile time
3. Method overriding is resolved at run time
4. Overridden methods coexist in the same class
5. Overloaded methods have the same name but different signature
6. None
7. One of the following is false about Java database connectivity (JDBC)
   * 1. It allows you to create Java application that can access data from different types of database systems.
     2. It used to connect Java standalone applications with back-end database servers.
     3. It uses different predefined java classes and methods to handle various data access functions.
     4. Different database systems can use the same JDBC driver, which used to establish the connection interface.
     5. All communication with database is through Connection object only.
8. The JDBC library ***java.sql*** is not used for:
   * 1. Making a connection to a database
     2. Used to handle SQL exceptions
     3. Executing SQL queries in the database
     4. Viewing & modifying the resulting records
     5. None
9. One of the following contains predefined methods that used to submit SQL strings to the database.

A. Connection B. DriverManager C. ResultSet D. Thin E. None

1. Java Database Connection process doesn’t need

A. Address of database B. user name and password of the database

C. Driver name used D. Connection object E. None

1. One of the following is false statement about uses of servlet
2. Processing and storing data submitted by HTML form.
3. Providing dynamic content.
4. Used to handle multiple requests concurrently
5. Processing and returning data to user in HTML form only.
6. None
7. One of the following true statements
8. The servlet is initialized by calling the **main ()** method.
9. The servlet calls **init()** method to process a client's request.
10. The servlet is terminated by calling the **service()** method.
11. The POST method is more reliable method of passing information to a backend program.
12. None
13. Which method execute first when you run Servlet code?

A. Service ( ) B. destroy ( ) C. init( ) D. start( ) E. None

1. What gets printed when the following JSP code is invoked in a browser. Select the correct answer.

<%if(Math.random() < 0.5) {%>

      hello

    <% } else { %>

      hi

    <% } %>

1. The browser will print either hello or hi based upon the return value of random.
2. The string hello will always get printed.
3. The string hi will always get printed.
4. The JSP file will not compile.
5. None
6. One of the following is false statement about Java Server Page.
   * 1. It used to collect input from user through web page form.
     2. It used for processing and returning result to user in different format.
     3. It uses request, response and out objects for communication between client and web server.
     4. It uses similar web and database server port numbers to access and execute data from different database tool.
     5. None
7. One of the following contains predefined methods that used to store temporary data retrieved from database.

A. Connection B.DriverManager C.ResultSet

D. Driver E. Statement

1. The include () method of RequestDispatcher package used to

#### redirect request to another servlet file

#### includes image file to the current page

#### send request to the current servlet file itself

#### forward request to home page

#### None

1. forward () method of RequestDispatcher package used to
   * 1. redirect request to another servlet page
     2. includes image file to the current page
     3. send request to the page itself that runs the method.
     4. Reload current page
     5. None
2. What is multithreaded programming?
   1. It’s a process in which two different processes run simultaneously
   2. It’s a process in which two or more parts of same process run simultaneously
   3. It’s a process in which many different process are able to access same information
   4. It’s a process in which a single process can access information from many sources
   5. None
3. A process can have

A. only one thread B. one or multiple thread

C. multiple sub-threads D. multiple sub-threads & thread E. None

1. Multithreading is also called as \_\_\_\_\_\_\_\_\_\_\_\_

A. Recurrent B. Crosscurrent C. Simultaneity

D. Concurrency E. None

1. What is the name of the thread in output of this program?  
     
   class multithreaded\_programing  
   {  
    public static void main(String args[])  
    {  
    Thread t = Thread.currentThread();  
    System.out.println(t);  
    }  
    }

A. main B. java C. system D. thread E. None

1. Which of these method waits for the thread to terminate?

A. join() B. stop() C. sleep() D. isAlive() E, None

1. Which of this method is used to explicitly set the priority of a thread?

A. set() B. make() C. setPriority() D. makePriority() E. None

1. Which of the following method is not used to suspend the execution of a thread?

A. sleep() B. wait() C. yield() D. join() E. None

1. Which cannot directly cause a thread to stop executing?

A. Calling notify() method on an object

B. Calling the wait() method on an object

C. Calling read() method on an InputStream object

D. Calling the SetPriority() method on a Thread object

E. None

1. What is true about time slicing?

A. Time slicing allocates more resources to thread

B. Time slicing depends on its implementation in OS

C. Time slicing is OS service that allocates CPU time to available runnable thread

D. Time slicing is the process to divide the available CPU time to available runnable thread

E. None

1. What should not be done to avoid deadlock?

A. Use interruptible locks B. Avoid using multiple threads

C. Avoid hold several locks at once D. Execute foreign code while holding a lock

E. None

1. What is true about threading?

A. run() method creates new thread

B. run() method calls start() method and runs the code

C. run() method can be called directly without start() method being called

D. start() method creates new thread and calls code written in run() method

E. None

1. Select the valid thread state transition?

A. ready to running B. ready to waiting

C. waiting to running D. running to ready E. None

1. What is the default priority of a thread in Java?

A.1 B.10 C.5 D.2 E. None

1. Which of these is not a interface in the Collections Framework?

A. Set B. List C. Group D. Collection E. None

1. Which of these packages contain all the collection classes?

A. java.net B. java.awt C. java.lang D. java.util E. None

1. Which of these classes is not part of Java’s collection framework?

A. Maps B. Stack C. Array D. Queue E. None

1. What is Collection in Java?

A. A group of objects B. A group of interfaces

C. A group of data types D. A group of classes E. None

1. Which of these methods sets every element of a List to a specified object?

A. fill() B. add() C. set() D. Complete() E. None

1. Elements of which of the collection can be traversed using Enumeration?

A. ArrayList B. Vector C. HashSet D. TreeMap E. None

1. Which of the following collection is not of Iterable type?

A. ArrayList B. Vector C. TreeSet D. HashMap E. None

1. Which of these methods can convert an object into a List?

A. SetList() B. CopyList() C. singletonList() D. ConvertList() E. None

1. Which collection class allows you to associate its elements with key values, and allows you to retrieve objects in FIFO (first-in, first-out) sequence?

A. java.util.HashMap B. java.util.TreeMap

C. java.util.ArrayList D. java.util.LinkedHashMap E. None

1. How to remove duplicates from List?

A. HashSet listToSet = duplicateList.toSet()

B. HashSet listToSet = new HashSet(duplicateList);

C. HashSet listToSet = Collections.convertToSet(duplicateList);

D. HashSet listToSet = duplicateList.getSet();

E. None