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## PROGRAMMING IN JAVA

### Assignment 10

TYPE OF QUESTION: MCQ

Number of questions: 10

Total mark:  $10 \times 1 = 10$

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#### **QUESTION 1:**

Which of the following package contains classes and interfaces for networking?

- a. java.io
- b. java.util
- c. java.net
- d. javax.swing

**Correct Answer: c**

#### **Detailed Solution:**

The java.net packages includes many classes and interfaces for network programming in Java.

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#### **QUESTION 2:**

In the following, which are the protocol follows connection less service?

- a. TCP
- b. TCP/IP
- c. UDP
- d. HTTP

**Correct Answer: c**

#### **Detailed Solution:**

TCP is connection-oriented, IP and UDP are connection-less, TCP/IP is thus connection-less protocol. HTTP is a stateless and not actually connection less. In other words, (a)-(c) are transport layer protocols, whereas HTTP is an application layer protocol.

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#### **QUESTION 3:**

Which of the following statement(s) is(are) NOT true?



- a. TCP is a reliable but slow.
- b. UDP is not reliable but fast.
- c. File Transfer Protocol (FTP) is a standard Internet protocol for transmitting files between computers on the Internet over TCP/IP connections.
- d. In HTTP, all communication between two computers are encrypted.

**Correct Answer: d**

**Detailed Solution:**

HTTPS is the secure version of HTTP, where all communications between two computers are encrypted. The secure communication is not true in case with HTTP.

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**QUESTION 4:**

**In the socket programming, for an IP address, which can be used to find the host name and IP address of a client/ server?**

- a. The ServerSocket class
- b. The Socket class
- c. The InetAddress class
- d. The Connection interface

**Correct Answer: c**

**Detailed Solution:**

An object of the InetAddress class is used to obtain the IP address and the host name of a client/ server computer connected in a network.

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**QUESTION 5:**

**Which of the following statement(s) is(are) TRUE?**

- a. With stream sockets, there is no need to establish any connection and data flows between the processes as continuous streams.
- b. Stream sockets are said to provide a connection-less service and it follows UDP protocol.
- c. Datagram sockets are said to provide a connection-oriented service and it follows TCP protocol.
- d. With datagram sockets there is no need to establish any connection and data flows between the processes as packets.

**Correct Answer: d**



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**Detailed Solution:**

So far the stream sockets are concerned 1) a process establishes a connection to another process, 2) data flows between the processes are continuous streams, 3) provides a connection-oriented service and 4) TCP is used. On the other hand, with datagram sockets, with datagram sockets 1) individual packets of information are transmitted, 2) the transmission of packets follows a connection less service and 3) the UDP protocol is used.

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**QUESTION 6:**

**Which of the following is NOT used to represent a computer uniquely in the Internet?**

- a. URL
- b. Port Number
- c. IP Address
- d. Mac Address

**Correct Answer: a, b**

**Detailed Solution:**

The IP address (a logical address) and Mac address (physical address) are to indicate a unique identification to a computer connected in a network. On the other hand, URL is used to indicate a specific location of a document/ program, for example, an HTML page. Next, a port number is used in TCP/IP and UDP networks, where a port is an endpoint to a logical connection and the way a client program specifies a specific server program on a computer in a network (that is to uniquely identify different applications). Also, a port number is used to identify what type of port it is.

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**QUESTION 7:**

**Which of the following statement is NOT true for RandomAccessFile object?**

- a. It can allow to open a file both in read and write mode.
- b. It can allow to store the data fields of any object and then reading the same.
- c. The seek(0) method of the object place the file pointer at the beginning of the file.
- d. It cannot be used to read a network line.

**Correct Answer: d**

**Detailed Solution:**

The RandomAccessFile is related to secondary storage only.

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### **QUESTION 8:**

Once a JDBC driver has been registered, which of the following method is used to make a database connection?

- a. getConnection(String url, String userID, String password)
- b. setConnection(String url, String userID, String password)
- c. Connect(String url, String userID, String password)
- d. Any one of the above.

**Correct Answer: a**

### **Detailed Solution:**

The getConnection(String url, String userID, String password) method is used to make the database connection.

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### **QUESTION 9:**

Which of the following best describes about JDBC?

- a. JDBC works like a bridge connecting a Java application to a RDBMS, execute SQL commands and return results to the application.
- b. JDBC is a software component, which is both network and database independent.
- c. JDBC should be installed in the same machine from where the Java application will run.
- d. JDBC should be installed in the same server that of the database.

**Correct Answer: a**

### **Detailed Solution:**

The JDBC driver for different databases is different. But, as an end-user, we don't have to bother about their implementation. The networking is also not an issue for the users. Further, JDBC can be installed anywhere in between the client and server.

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### **QUESTION 10:**

Consider the following piece of code.

```
import java.net.*;

class Networking {
    public static void main(String[] args) throws UnknownHostException {
        try{
            URL url=new URL("https://www.google.com");
        }
    }
}
```



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```
        InetAddress obj1 = InetAddress.getByName("www.google.com");  
        InetAddress obj2 = InetAddress.getByName(url.getHost());  
        boolean x = obj1.equals(obj2);  
        System.out.println(x);  
    }  
    catch(Exception e){}  
}  
}
```

**Which of the following is the correct output of the above program?**

- a. 0
- b. 1
- c. true
- d. false

**Correct Answer: c**

**Detailed Solution:**

Objects obj1 and obj2 contains the same host name and IP address, though they have been initialized by different methods.

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\*\*\*\*\*END\*\*\*\*\*