Chp 4:

1. TCP/IP reserves the lower_____ ports for specific protocols
   a) 10 **(b) 1024** (c) 2048 (d) 512.

2. Which of these package contains classes and interfaces for networking?

   a) java.io b) java.util **c) java.net** d)java.sql

3. A ServerSocket can connect to____clients.

a) one client at a time; only b)two clients simultaneously;
c) multiple d) None of the above

4. A set of rules that governs data communication.

a) Protocols   b) Standards
c) RFCs   d) Servers

5. A socket is combination of

a) A MAC address and a logical address

b) A MAC address and a port number

c) Both (a) and (b)
d) None of the choices are correct

6. Access control does not deals with

A. Encryption B. Auditing C. Awareness training. **D. Authentication**

7. A___is responsible for determining whether code executing in
the Java runtime environment has permission to perform a security-sensitive operation.

   a) security object (b) security class **(c) policy object** (d) policy method

8. Class URL represents _____ , a pointer to a "resource" on the World Wide Web

a) Uniform Resource Locator
b) Uniform Resource Latch
c) Universal Resource Locator
d) Universal Resource Latch

9. Communication using TCP protocol is _____ and _____
   a) connection-less, concurrent
   b) connection-oriented, concurrent
   c) connection-less, connection-oriented
   d) None of the above

10. Connection oriented communication is possible using_____classes of Java.
A) Socket B) ServerSocket. **C) Both A and B** D) None of the above

11. How many bits are in a single IPv4 address?
a) 64 **b) 32** c) 1024 d) 16

12. In InetAddress class which method returns the host name of the IPAddress?
a. public String getHostName()   b. public String getHostAddress()
c. public static InetAddress getLocalHost()   d. None of the above

13. In the format for defining the URL what is the last part?
A) file path B) Scheme C) Domain D) none of these

14. In the URL, http://www.osborne.com:80/index.htm, 80 represents
A) file number **B) port number** C) Domain D) none of these

15. In which class the constructors are not visible
a) DatagramPacket b) URL **c) *InetAddress*** d) ContentHandle

16. Port Number for FTP is
a) 25 b)23 **c)21** d) 79

17. Port number of Email is _.
a) 25 b)23 c)21 d) 79

18. Reserved port no of HTTP
a) 80 b)25 c)10 d)65

19. The class which encapsulates both the numerical IP address and the domain name for that address.
a) DatagramPacket b) URL **c) InetAddress** d) ContentHandler

20. The openConnection() is the method of which Class?
a) URL
b) URLDecoder
c) URLConnection
d) All of the mentioned

21. UDP Packets are known as _____

a. datagrams ; b. · segments ; c. · frames ; d. · packets

22. URL class has several constructors; each can throw a_____.

a) URLNotFound b) URLSourceNotFound **c) MalformedURLException**

d) URLNotFoundException

23. What is Second part of URL address

a) The protocol b) The domain name c)The path **d)Host name**

24. _____ protocol supports fast point to point datagram-oriented model.

a) UDP   b)TCP

c)Both (a) & (b)   d) None of the above

25. _____method of URL class is used to obtained file path fromgiven URL.

a) getFile() b) getInetAddress()

c) getLocalHost( ) d)None of the above

26. _____ acts as a mediator between a client program and anexternal servers to filter request , improve performance & share connections.

a) TCP   b) UDP

c) Proxy Server   d) None of the above

27. Which type of exception is throw by InetAddress class Factorymethods?

a) URLNotFound   b) URLSourceNotFound

c) **UnknownHostException** d) MalformedURLException

28. Which of the following class defines accept() method?

a) ServerSocket   b) Socket

c) Both (a) & (b)   d) None of the above

29. The return type of getHostAddress() method is_____

a) int   b) void   **c)String**   d)All the above

30. Select the proper constructor of URL class

a) URL(String address) throwsMalformedURLException

b) URL(String protocol, String host, String file)

c) URL(String protocol, String host, int)

d) All of the above

31. Inet Address class encapsulates_____

a-Ip address

b-DNS

c-Both a and b

d-Only a

32. There are___ kinds of TCP sockets in Java.

a) 1   **b) 2**

c) 3   d) 5

33. Which protocol will be used/printed in the following example:

```
import java.net.*;
public class URLDemo  {
public static void main(String args[]) throws MalformedURLException {
URL hp = new URL("http://www.msbte.com/downloads");
System.out.println("Protocol: " + hp.getProtocol());
System.out.println("Port: " + hp.getPort());
System.out.println("Host: "+ hp.getHost());
System.out.println("File: " + hp.getFile());
System.out.println("Ext:" + hp.toExternalForm()); } }
```

   a) FTP   **b)HTTP**   c)SMTP   d)Telnet

34. What the method getDate() of URLConnection class returns?

a) returns time and date of response in terms of millisecond

b) returns time and date of response in terms of seconds

c) returns time and date of response in terms of hours

d) None of the above

35. What is 1432 in following program.

```
import java.net.*;
import java.io.*;
public class SimpleClient {
public static void main(String args[]) {
try {
Socket s1=new Socket("127.0.0.1",1432);
InputStream is=s1.getInputStream();
BufferedReader br=new BufferedReader(new InputStreamReader(is));
System.out.println(br.readLine());
br.close();
```

```
s1.close();
} catch(Exception e) {}
} }
```

   a) **Port no**   b) ip address   c) file no   d)Both (b) & (c)

36. To create Socket "S" by IP address "127.0.0.1" and port number "12345" Identify the command

A) Socket s = new Socket("127.0.0.1",12345);   B) ServerSocket s = new Socket("127.0.0.1", 12345);

C) Socket s = new Socket("localhost", 12345);   D) None of the above

37. The following program will display _____
```
import java.net.*;
public class MyNetwork {
public static void main(String args[]) throws UnknownHostException {
InetAddress ip [] = InetAddress.getAllByName("www.google.com");
 for(int i=0;i<ip.length;i++) { System.out.println(ip[i].getHostAddress());
}
} }
```

   a) **All IP addresses of www.google.com**
   b) Some IP addresses of www.google.com
   c) Error
   d) Nothing will be printed

38. The connection establishment in TCP is called____
a) one-way handshaking   **b) three way handshaking**
c) two way linking   d) three way handshaking

39. getInputStream( ) and getOuptutStream( ) methods throw a _____ Exception
a) **IOException**   b) URLSourceNotFound

c) UnknownHostException   d) MalformedURLException

40. The queue length tells the system how many client connections it can leave pending before it should simply refuse connections. The default is___.

a) 50   b)65   c)55   d)45

41. int getContentLength( ) Returns the size in bytes of the content associated with the resource. If the length is unavailable, ___ is returned.

a) 0   **b)-1**   c)2   d)1

42. InetAddress can handle_____ addresses.

a) IPv4   b) IPv6   **c) Both (a) & (b)**   d) Only (b)

43. whois port number is ____

a) 47   b)34   **c)43**   d)23

44. TCP/IP sockets are used to implement _____ connections between hosts on the Internet.

a) reliable

b) bidirectional

c) point-to-point, stream-based

d) All the above

45. From given list which address is called as loopback address ?
a) 127.0.0.0   b) 127.0.0.2   c)129.0.0.0   d) 127.1.2.0

46. What is the optional part of URL Address

a) The protocol   b) The domain name   **c)The port number**   d)Host name

47. The factory method which returns an array of InetAddresses that represent all of the addresses that a particular host name resolves to.
a) getAddress() **b)getAllByName( )** c) getInetAddress( )   d) Both (b) & (c)

48. _____ is a bundle of information passed between machines.

a) Protocol   **b) Datagram**   c) Data   d) None of the above

49. Port number 23 is for _____

a) HTTP   b) Email   c) FTP   **d) Telnet**

50. isMulticastAddress( ) has _____ return type

a) String   b) byte[ ]   **c) boolean**   d) int

51. Name the class which is used to create a port where the server will listen.

(a) Server **(b) Socket** (c) ServerSocket (d) SocketServer

52. Which IP address is multicast IP address?

(a) 192.168.2.32 (b) 235.55.45.2 (c) 12.22.1.2 **(d) None of these**

53. Which of these method of DatagramPacket class is used to find the destination address?

(a) findAddress( ) **(b) getAddress( )** (c) address( ) (d) whoIs( )

54. Resolver in DNS system maps .

(a) Domain name to IP address **(b) IP address to domain name**

 (c) Domain name to MAC address (d) MAC address to IP address

55. Which class defines following methods? int getContentLength( ) long getDate( ) long getExpiration( )

(a) URLConnection (b) Datagram (c) Client (d) None of these

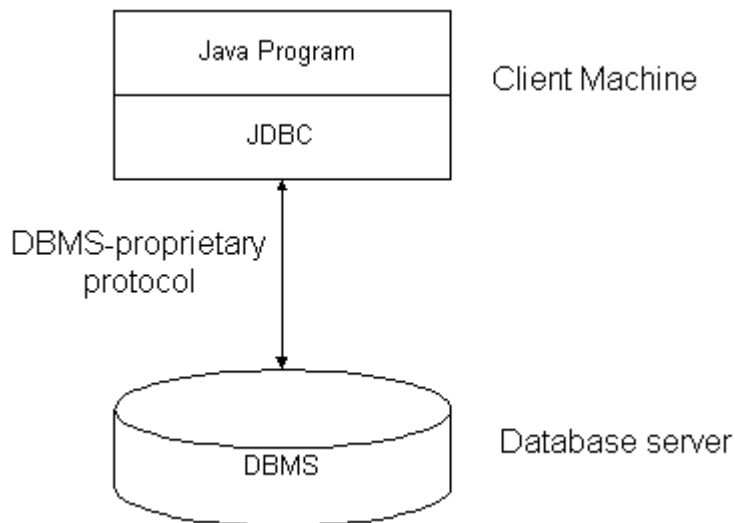56. class Permission in java.security package is .

(a) static **(b) abstract** (c) final (d) None of these

Chp 5:

1. API stands for
   a) **Application Programming Interface**
   b) Application Programming Internet
   c) Application Process Interface
   d) All of the above

2. Application Server used in _____
   a) Two-tier model
   b) Three-tier model
   c) Only (a)
   d) Both (a) & (b)

3. JDBC is used to interact with _____ Database
   a) Oracle, MS Access,
   b) My SQL
   c) SQL Server
   d) All of the above

4. These objects hold data retrieved from a database after you execute an SQL query using Statement objects.
   a) **ResultSet**
   b) SQLException
   c) Statement
   d) Connection

5. JDBC was released as a part of Java development Kit (JDK) 1.1. in the year ____ by SUN Microsoft.
   a) 1995
   b) 1997
   c) 1996
   d) 1993

6. JDBC is ____ level interface .
   a) High   b)medium   **c) low**   d) very high

7. ____introduced ODBC in the year 1992
   a) Microsoft
   b) Google
   c) Apple
   d) TATA

8. Following figure shows:

a) **Two-tier model**
b) Three-tier model
c) Only (b)
d) Both (a) & (b)

9. Sun has divided the implementation types of drivers into ___ categories

a) 5   b) 3   **c) 4**   d)1

10. Oracle does not support the JDBC-ODBC Bridge from Java__.

a) **8**   b) 9   c) 3   d)5

11. _____ type drivers cannot be used for the Internet.

a) 1   **b) 2**   c) 3   d) 4

12. next() has __ return type
   a) boolean   b) char   c) byte   d) int
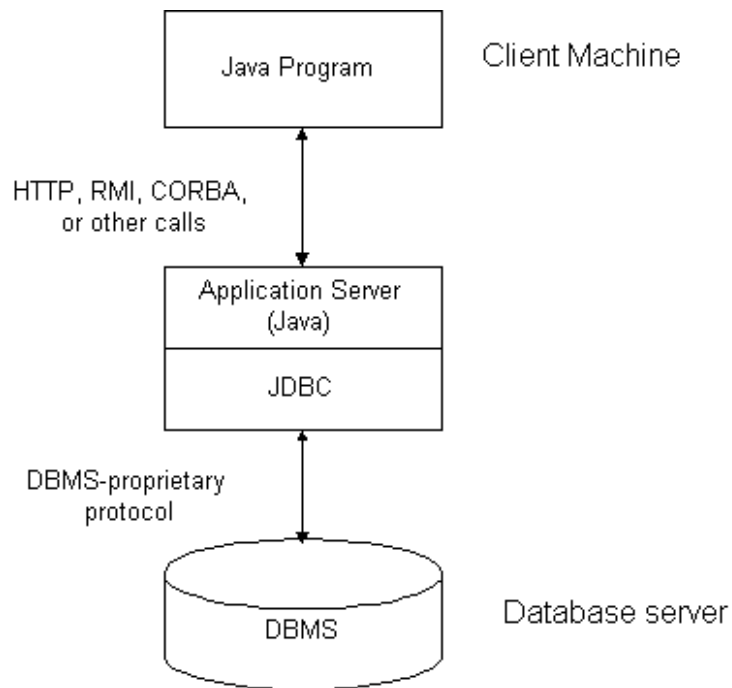
13. public boolean absolute(int row) does_____
   a) is used to move the cursor to the relative row number in the ResultSet object, it may be positive or negative.
   b) is used to move the cursor to the specified row number in the ResultSet object.
   c) is used to move the cursor to the first row in result set object.
   d) is used to move the cursor to the last row in result set object.

14. Abbreviate the term DSN
   a) Domain Name service   b) **Data Source Name**

b) Both (a) & (b)   d) None of the above

15. class.forName() method throws __
   a) **ClassNotFoundException**

   b) URLNotFound

   c) URLSourceNotFound

   d) MalformedURLException

16. DELETE statement of an SQL is executed by _____.
   a) Delete   b) **executeUpdate()**

   c) execute()   d) Only (c)

17. Following is return type of executeUpdate( ):
   a) **int**   b) void   c) char   d) String
18. Which of the following is not a type of JDBC driver?
   (a) 100% pure Java Driver
   (b) JDBC – net pure Java Driver
   (c) JDBC – Native API driver
   (d) JDBC – Native pure Java Driver

19. In JDBC imports all Java classes that are concern with Database connectivity.
   (a) javax.sql (b) java.mysql **(c) java.sql** (d) com.sq

20. Public class DriverManager extends
   (a) Object (b) String (c) Connection (d) Statement

21. In following statement rs is an object of interface of JDBC API.
   System.out.println(rs.getString(3));
   (a) RowSet (b) Statement (c) Connection **(d) ResultSet**

22. How many steps are used to connect any java application with the database using JDBC ?
 (a) 5 (b) 4 (c) 3 (d) 6

23. The JDBC-ODBC bridge supports how many concurrent open statements per connection ?
   (a) 1 (b) 0 (c) Does not support connection (d) None of these

24. Microsoft Access data in file format.
   (a) .DAT **(b) .MDB** (c) .MSSQL (d) .OBJ

25. Following figure shows:

a) Two-tier model
b) **Three-tier model**
c) Only (a)
d) Both (a) & (b)

26. If your Java application is accessing multiple types of databases at the same time,
____is the preferred driver.

a) **type 3**
b) type 1
c) type 2
d) type 4

27. Database programming using Java throws which of the following exception?
(a) SQLException (b) ClassNotFoundException (c) None of these (d) **Both of these**

28. Consider following code and state missing code ?
import java.sql.*;
class exp2 {

public static void main(String args[])throws Exception { try {
Class.forName("_____"); Connection
con=DriverManager.getConnection("Jdbc:Odbc:demo1dsn"); Statement
st=con.createStatement(); ResultSet rs=st.executeQuery("select * from Table1");
System.out.println("After insertion of new record"); while(rs.next()) {
System.out.println(rs.getString(1)); System.out.println(rs.getString(2));
System.out.println(rs.getString(3)); } st.executeUpdate("insert into Table1
values('jasmine',10,'banglore')"); ResultSet rs1=st.executeQuery("select * from Table1
");
while(rs1.next()) { System.out.println(rs1.getString(1));
System.out.println(rs1.getString(2));
System.out.println(rs1.getString(3)); } } catch(Exception e) {} } }

a) **sun.jdbc.odbc.JdbcOdbcDriver**
b) sun.jdbc.odbc.JdbcodbcDriver
c) Sun.jdbc.odbc.JdbcOdbcDriver
d) sun.Jdbc.Odbc.jdbcodbcDriver

29. Consider the following program Which package should be added to the program to get
correct code?.
public class db15 {
public static void main(String args[])throws Exception {
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver"); Connection
c=DriverManager.getConnection("jdbc:odbc:Mybm","","");
PreparedStatement s=c.prepareStatement("update db3 set Name=? where
Roll_no=?");
Statement s=c.createStatement( );
ResultSet rs=s.executeQuery("select* from db3");
System.out.println("Name"+"\t"+"Roll no"+"\t"+"Avg");
while(rs.next()) {
System.out.println(rs.getString(1)+"\t"+rs.getInt(2)+"\t"+rs.getDouble(3)); }
s.close();
c.close(); } }

a) **java.sql.***

b) java.net.*

c) java.awt.*

d) None of these

30. createStatement( ) method returns_____

  a) **Statement object**

  b) Connection object

  c) ResultSet object

d) All of these

31. PreparedStatement object in JDBC is used to execute _____queries

a) Statement

b) Parameterized

c) Only (a)

d) No argument queries

32. PrepareStatement() method is of _____ interface

a) Statement

b) Connection

c) Permission

d) Both (b) & (c)

33. The statement _____ changes the Course title to Java Programming for the CourseID 11111.

a) update Course set title = 'Java Programing' set courseId = '11111'

b) update Course set title = 'Java Programing' where courseId = '11111'

c) set Course set title = 'Java Programing' where courseId = '11111'

d) All of these

34. which are Exception generated following code

```
import java.sql.*;
class Test {
public static void main(String[] args) {
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
String url="jdbc:odbc:xyz"; Connection con = DriverManager.getConnection(url);
Statement s =con.createStatement(); s.execute("create table TEST12345 ( firstcolumn
integer )");
s.execute("insert into TEST12345 values(1)");
s.execute("select firstcolumn from TEST12345");
ResultSet rs = s.getResultSet();
if (rs != null) while ( rs.next() ) {
System.out.println("Data from column_name: " + rs.getString(1) ); } s.close();
con.close(); } }
```

a) NullPointerException
b) ClassNotFoundException
c) SQLException
d) **Both (b) & (c)**

35. Which of the following is correct sequence of steps regarding to establish the connection with database.
1. Creating connection 2. Closing connection 3. Executing queries 4. Creating Statement

a) **1,4,3,2**
b) 1,4,2,3
c) 1,3,4,2
d) 1,2,3,4

36. The executeUpdate() is used to execute ___ commands

a) DDL

b) TCL

c) DML

d) None of the above

37. What will be the Output of following code?

```
import java.sql.*;
public class SmtInterfaceDemo {
public static void main(String args[]) {
try{ Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:db");
System.out.println("Connection established.....");
Statement smt=con.createStatement();
System.out.println("Statement Created....."); String sql="create table t2(Name char,Age int)";
boolean result=smt.execute(sql); if(result==true) { System.out.println("Table Created....."); }
else { System.out.println("Table not Created....."); } con.close(); }
catch(ClassNotFoundException e) { e.printStackTrace(); }
catch(SQLException se) {
se.printStackTrace(); } } }
```

a) **Table is created with two data field in database**
b) Table is created with no data field in database
c) An error has occurred
d) Table is created with one data field in database

38. JDBC-ODBC Bridge is _____
a) Dependent   b) Unreliable   **c) multithreaded**   d) None of these

39. If ResultSet is forward only then which method can not be execute
a) next   b) last   c) previous   **d) first**

40. JDBC Native API calls get converted into native ____API calls.
a)C
b)C++
c) Python
d) Both (a) & (b)

41. Type4 driver is also known as:
a) JDBC-ODBC Bridge Driver
b) JDBC-net Pure Java
c) Native API partly Java driver
d) 100% Pure Java

42. Statement is_____.
a) method
b) class
c) interface
d) function

43. How many transaction isolation levels are defined in java.sql.Connection interface
a) 7
b) 4
c) 1
d) 5

44. Backbone of JDBC Architecture is _____
a) Driver Manager
b) ResultSet
c) Statement
d) Both (b) & (c)

45. The PreparedStatement_____symbol is placeholder that is replaced by the input parameter at seen time.
 a) _ b)/   **c)?**   d)!

46. Consider the following program. What should be the method used in following program to get correct output?

```
import java.sql.*;
class Ddemo1 {
public static void main(String args[]) throws Exception {
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.get**********("jdbc:odbc:ODSN"," "," ");
Statement s=c.createStatement(); ResultSet rs=s.executeQuery("select *from StudTable");
System.out.println("Name" + " \t " + "Roll_No" + " \t " + "Avg");
while(rs.next()) {
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t \t"+rs.getDouble(3));
s.close();
```

c.close(); } } }

    a) ResultSet()
    b) Connection()
    c) Statement()
    d) Driver()

47. Methods such as next(),previous(),last(),first() are of which interface?
    a) ResultSet()
    b) Connection()
    c) Statement()
    d) Driver()

48. SQL stands for .
(a) Structured Query Language (b) Sequential Query Language
(c) Structured Question Language (d) Sequential Question Language

49. Native – protocol pure Java Driver converts into the directly.
(a) JDBC calls, network protocol (b) ODBC class, network protocol
(c) ODBC class, user calls **(d) JDBC calls, user calls**

50. In the below statement, which type of query can be used with executeUpdate( ) method.
statement.executeUpdate(query here)
(a) Insert, Update, Delete (b) Insert, Select, Delete (c) Only Select (d) Any Query

51. Which is main component of JDBC API?
(a) DriverManager (b) Driver (c) Connection **(d) All of these**

52. Which class/interface is used for an SQL statement that is executed frequently? (
a) Statement (b) CallableStatement **(c) PreparedStatement** (d) None of the above

53. Which method executes an SQL statement that may return multiple results?
(a) executeUpdate( ) **(b) executeQuery( )** (c) execute( ) (d) noExecute( )

54. Consider the following program. What will be the output?
```
import java.sql.*;
class Ddemo1 {
public static void main(String args[]) throws Exception {
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:ODSN"," "," ");
Statement s=c.createStatement();
ResultSet rs=s.executeQuery("select * from StudTable");
System .out.println("Name" + " \t " +"Roll_No" + " \t " + "Avg");
while(rs.next())
System.out.println(rs.getString(1)+" \t"+rs.getInt(2)+" \t \t"+rs.getDouble(3));
s.close(); c.close(); } }
```

    a) Display All the Records of StudTable
    b) Display All the Records of StudentTable

c) Display few records of StudTable

d) Nothing will be displayed

55. Permission class is part of_____package

a) java.net

b) java.sql

c) java.security

d) java.awt

56. The _____ method can be used on a _____ object to create its meta data Object

a) getData(),ResultSet

b) getMetaData(),ResultSet

c) getMetaData(),Statement

d) All of these

57. What should be at the place of _____ to get the correct output?

```
import java.sql.*;
public class Updatedbase {
public static void main(String args[]) {
try {
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection con=DriverManager.getConnection("jdbc:odbc:data");
Statement st=con._____;
ResultSet rs=st.executeQuery("select * from emp");
System.out.println("before change");
while(rs.next()) {
System.out.println("id:"+rs.getInt("id"));
System.out.println("salary:"+rs.getString("salary"));
System.out.println("name:"+rs.getString("name1"));
}
int k=st.executeUpdate("Update emp set salary=1000 where id=3");
System.out.println("rows affected:"+k);
System.out.println("\n\nafter change");
rs=st.executeQuery("select * from emp");
while(rs.next()) {
System.out.println("id:"+rs.getInt("id"));
System.out.println("salary:"+rs.getString("salary"));
System.out.println("name1:"+rs.getString("name1"));
} con.close();
}
catch(SQLException e)
{}
catch(Exception e) {}
} }
```

a) createConnection()

b) createStatement()

c) createstatement()

d) createconnection()

58. _____moves the cursor to the specified row
a) **public boolean absolute(int row)**
b) public boolean absolute()
c) public boolean relative(int row)
d) public boolean relative()

1. JSP embeds ____in____
   (a) Servlet, HTML (b) HTML, Java (c) HTML, Servlet **(d) Java, HTML**

2. JSP stands for
   a) Java system Page
   b) Java server Page
   c) Java server Package
   d) None of these

3. Which of the following is the default HttpRequest method?
   (a) doGet( ) (b) doPost( ) (c) doTrace( ) (d) doPut( )

4. Name the http method used to send resources to the server.
   (a) FTP method **(b) PUT method** (c) WRITE method (d) COPY method

5. Which JSP tag is used to transfer for processing another JSP page?
   a) <jsp: include>
   b) <jsp: forward>
   c) <jsp: useBean>
   d) <jsp:use: include>

6. Identify the proper syntax of doGet( ).
   (a) void doGet(HttpResponse res,HttpRequest req) throws IOException, ServletException
   (b) void doGet(HttpRequest req,HttpResponse res) throws IOException, ServletException
   (c) void doGet(HttpResponse res) throws IOException, ServletException
   (d) void doGet(HttpRequest req) throws IOException, ServletException

7. The include( ) method in RequestDispatcher .
   (a) sends a request to another resource like servlet, JSP or html.
   (b) includes resources of file like servlet, JSP or html.
   (c) appends the request and response objects to the current servlet.
   (d) None of these Servlets

8. is a small piece of information that is passed back & forth in HTTP request & response.
   (a) Servlet (b) Applet **(c) Cookie** (d) Session

9. Which life cycle method is used to process a client's request?
   (a) start( ) (b) init( ) **(c) service( )** (d) destroy( )

10. A user types the URL http://www.msbte.com/result.php. Which request gets generated?
    (a) GET method **(b) POST method** (c) HEAD method (d) PUT method

11. Apache Tomcat is .

(a) Servlet (b) Java Program (c) API **(d) Web server capable of running Java programs**

12. What the getSession( ) method with "true" parameter will do?
    (a) The session is completed (b) The session object is passed to another method
    (c) Creates new session if, the session does not exist (d) The session is exist

13. A JSP page consists of which tags?
    (a) HTML tags (b) JSP tags **(c) Both A & B** (d) None of the above

14. Life cycle of a servlet is managed by
    (a) Servlet Context **(b) Servlet Container** (c) Supporting protocol (d) All of the above

15. To send binary output in the response, the following method of HttpServlet response many be used to get the appropriate Writer/Stream object.
    (a) getStream( ) **(b) getOutputStream**( ) (c) getBianaryStream( ) (d) getWriter( )

16. ____is the first Phase of Servlet Life cycle.
    (a) service( ) **(b) init( )** (c) destroy( ) (d) Both B & C

17. How many copies of a JSP page can be in memory at a time?
    (a) 1 (b) 2 (c) 3 (d) Unlimited

18. ____is used to read data from a client request.
    (a) ServletResponse **(b) ServletRequest** (c) Servlet (d) ServletConfig

19. The following methods belongs to the life cycle methods of the servlet.
    (a) init( ) (b) service( ) (c) destroy( ) **(d) All of the above**

20. Java servlet:
    (i) is a key component of the server side java development.
    (ii) is a small pluggable extension to a server that enhances functionality
    (iii) runs only in windows OS
    (iv) allows developers to customize any java enabled server
    (a) i, ii and iii are true (b) i,iii and iv are true (c) ii,iii and iv are true **(d) i,ii and iv are true**

21. Servlet lifecycle has states.
    (a) Two **(b) Three** (c) Four (d) Five

22. JSP life cycle includes number of phases.
    (a) Two (b) Three (c) Four **(d) Five**

23. Which class provides stream to read binary data such as image etc from the request object? **(a) ServletInputStream** (b) ServletOutputStream (c) Both a & b (d) None of the above

24. What is the limit of data to be passed from HTML to doGet() ?

    (a) 8kb (b) 1kb (c) 4kb **(d) 2kb**

25. The major difference between Servlet and CGI is .
    (a) Servlets are thread based and CGI is process based. (b) Servlet executes slower than CGI. (c) Servlet has no platform specific API whereas CGI has. **(d) All of these**

26. By Default, How many variables are available in JSP programs?
    a) 5   **b) 6**   c) 7   d) 1

27. By default, Tomcat runs on port _____.
    a) 8080
    b) 8088
    c) 8008
    d) 0880

28. CGI stands for
    a) Class Gateway Interface
    b) Common Gateway Interface
    c) Common Gas Interface
    d) Common Gateway Internet

29. Filters were officially introduced in the Servlet_____ Specification.
    a) 1.1
    b) 2.5
    c) 2.3
    d) 1.7

30. _____ contains classes and interfaces required to build servlets
    a) javax.servlet
    b) javax.server
    c) java.servlet
    d) javax.sql

31. All the _____ data is kept at the application server_____ data is kept at the web server?
    a) dynamic, static
    b) static ,dynamic
    c) dynamic, dynamic
    d) static, static

32. Choose missing statements in following code from given options.
    import java.io.*;
    import javax.servlet.*;
    public class AddCookieServlet extends HttpServlet {
    public void doPost(HttpServletRequest request,HttpServletResponse response) throws ServletException,IOException {
    String data=request.getParameter("txtdata");
    Cookie c=new Cookie("MyCookie",data);
    response.addCookie(c);

response.setContentType("text/html");
PrintWriter pw=response.getWriter(); pw.println("<B>My cookie has been sent
");
pw.close(); } }

a) javax.servlet.http.*;
b) import javax.servlet.http.*;
c) import java.servlet.http.*
d) import javax.server.http.*;

33. _____method execute at end of servlet life cycle.
init( ) (b) service( ) **(c) destroy( )** (d) All of the above

34. Choose missing statement in following code from given options.
Public class MyHTTPServlet extends HttpServlet {
public void doGet(HttpServletRequest request, HttpServletResponse response)throws ServletException, IOException {
response.setContentType("text/html");
PrintWriter pw =response.getWriter();
pw.println("<B>AJP-17625</B>");
pw.println("
CO-6G"); pw.close(); } }

a) import java.io.*; import javax.servlet.*;
b) import java.io.*; import javax.servlet.*; import javax.servlet.http.*;
c) import javax.servlet.http.*;
d) import javax.servlet.*; import javax.servlet.http.*;

35. Choose the missing statement in the given method syntax:
public void doGet(HttpServletRequest request, HttpServletResponse response) throws _____
a) IOException
b) SQLException
c) ClassNotFoundException
d) None of these

36. A user types the URL http://www.javaprepare.com/scwd/index.html. Which HTTP request gets generated. Select the one correct answer.
a) POST method
b) GET method
c) Both (a) & (b)
d) None of these

37. Consider following code of servlet and find out missing method in the program:
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class Mathservlet extends HttpServlet {
public void (HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

```
response.setContentType("text/html");
PrintWriter out =response.getWriter();
out.println("<html><h1>Table Example</h1>");
out.println("<table border = 1>");
out.println("<tr><td> Number </td><td> Result <td></tr>");
for(int i=1;1<10;i++) {
out.println("<tr><td>"+ i + "\t" + Math.pow(2,i) + "<td><tr>"); }
out.println("</table></html>");
printwriter.close(); } }
```

a) destroy()
b) service()
c) init()
d) None of these

38. DatabaseMetaData gives information about_____
   a) Hardware
   b) Software
   c) Database
   d) All of these

39. getSessioin() is a method of _____ class.
   a) HttpServletRequest
   b) HttpServletResponse
   c) Both (a) & (b)
   d) Only (b)

40. In following Java program fill statement showing _____. import
   java.io.*;
   import javax.servlet.*;
   public class HelloServlet extends GenericServlet {
   public void _____(ServletRequest request,ServletResponse response) throws
   ServletException,IOException {
   response.setContentType("text/html");
   PrintWriter out =response.getWriter();
   out.println("<h1> Welcome to Servlet</h1>"); }
   }

a) request
b) destroy
c) service
d) response

41. In order to run JSP .... is required.
   a) Java Web Server
   b) Web browser
   c) Turbo C++
   d) None of these

42. In Session tracking which method is used in a bit of information that is sent by a web server to a browser and which can later be read back from that browser?
a) Request
b) Cookies
c) Response
d) None of these

43. init(),service() and destroy()methods are define in
    1.javax.servlet.Servlet interface
    2.javax.servlet.ServletHttp class
    3.javax.servlet.ServletRequest interface
    4.javax.servlet.ServletResponse interface

    a) **1**   b) 2   c)5   d)4

44. Cookies and Sessions can be created and used with: A. Generic servlets B. Http servlets Select correct option from following.
    a) Only A   **b) Only B**   c) Both (a) & (b)   d) None of them

45. Dynamic Interception of request and responses to transform the information is done by _____
    a) Client
    b) Servlet filter
    c) Filter
    d) All of these