

JAVA

⇒ IMPORTANT POINTS

Java is a high level programming language (initially called OAK) developed by James Gosling

- Byte Code is designed to be executed at runtime by Java Virtual Machine (JVM)
- Java is pure (100%) OOPS programming language
- To run a Java application it requires JRE (Java Runtime Environment)
- Java is extension for Java program
- Java doesn't consist of pointers, go to statement and multiple inheritance.
- Java support four "4" access specifiers
 - 1) Private
 - 2) Public
 - 3) Protect
 - 4) default
- Mark & Sweep is an algorithm used by garbage collector to delete unused variables and object from memory.
- In Java object cannot exist without class but a class can exist without any object.
- Java does not contain header files.
- There are 4a reserved key words in Java language
- J.L (Java Language) supports 3 types of comments.
 - 1. /* comment */ - multi line
 - 2. // comment single line
 - 3. /** comment 1
comment 2
comment 3
Java documentation

Comment h * /. This is known as documentation comment usually used in html files.

Separators.

| Symbol | Purpose |
|-----------|---|
| () | Expression control statements |
| { } | Block of code classes, methods and local scopes |
| [] | dereferencing array values |
| ; | terminating statement |
| . | separate packs from subpackages and classes, method from a variable |
| reference | |
| , | identifiers |

Hash Code : It is a unique identification number allocate to objects by the JVM

- Java is case sensitive language
- Unique code system : It is a system to indicate all the alphabates from all human languages (including characters)
- Java virtual machine (JVM) is system dependent.
- With the help of SUPER keyword we can derive variables and method from base class.
- Object code is machine code is equivalent of source code.

- Coercion : It is automatic conversions between different data types done by the compiler.
- In java all variables are in " Heap" memory.
- Method over riding : Writing two or more methods in super and sub classes such that same name and same signature.
- 1 The processes of assigning smaller type into larger is known as widening or promotion.
- The process of assigning larger type into smaller is known as narrowing
- **Type casting** : Converting one type of data type another data type and it is also known as casting.
- "escape sequences " in Java
 - \r Enter key
 - \b back space
 - \f from field
 - \\ displays slash
- Float can represent upto seven digits quarterly after decimal point where as double can represent upto 15 digits.
- dot operator (.) is also known as member operator
- Priority of operator :

| | |
|-------------------------|------------------------|
| 1) (), // | 2) ++, -- |
| 3) *, /, % | 4) +, - |
| 5) Relational operators | 6) Boolean and Bitwise |
| 7) Logical | 8) ternary |
| 9) Assignment | |
- String is a class it's not a data type
- Jagged array is an array that contains a group of array with in it.
- Runtime errors : The errors that occur
- Boxing : Converting a primitive datatype in to objecting
- Character wrapper class which contains only one constructor.
- JAR : Java Archive file
- Generalization is phenomenon where a sub class is promoted to a super class
- Specialization is phenomenon where super class is narrow down to sub class
- Static polymorphism is polymorphism executed at compile time.
- Positive numbers are represented using one's complement used negative numbers are represented by using two's complement internally.
- System : exit (0) terminates the program normally
- System. exit (1) terminates the program because of sum error encountered in the program
- Return statement is used to come out of it
- Default priority of thread is 5
- Maximum priority of thread is 10
- Minimum priority of thread is 1
- By default "Main thread" always runs in a java program.

- Threads are called "**light-weight**" because they utilize minimum resources of the system, that means they take less memory and less processor time.
- Executing only one job at a time is called single tasking
- Executing several jobs at a time is called multi tasking
- Threads are mainly used in server-side programs
- We can create the threads by two ways
 - i) extends threads class
 - ii) implements Runnable interface
- **Ex :** Class myclass extends Thread
Class myclass implements Runnable
- **To stop the thread :**
First of all, we should create a boolean type variable which stores "False" when the user wants to stop the thread, we should store "true" in to the variable. The status of the variable checked in the run () method and if it is true, the thread executes 'return' statement and then stops.
- 'extends thread' and implements Runnable'
 - * Both are functionally same
 - * When we write the extend thread, there is not scope to extend another class, as multiple inheritance is not supported in java.
- **Eg :** Class Myclass extends Thread, another class //invalid
- If we write implements Runnable, then still there is a scope to extend another class.
- **Ex :** Class Myclass extends another class implements Runnable valid.
- Public void run () method is executed by the thread by default,
- When a thread is already acting on an object, preventing any other thread from acting on the same object called as "thread synchronization" or "thread safe"
- The object on which the threads are synchronized is called "synchronized object"
- Thread synchronized is recommended when multiple threads are used on the same object (in multi threading)
- Synchronized block is useful to synchronize a block of statements.
- Synchronized keyword is useful to synchronize an entire method.
- To test the thread is still alive (t. is Alive () return T/F)
- To weight a thread dies [t. join () ;]
- When a thread has locked an object and waiting for another object to be released by another thread, and the other thread is also waiting for the first thread to release the first object, both the threads will continue for ever. "This is called" thread deadlock"
- **Obj. notify () :** - This method releases an object and sends a notification to a waiting thread that the object is available.
- **Obj. notify All () :** To send the notification to all waiting threads at once that the object is available.
- **Obj. wait () :** - This method makes a thread wait for the object till it receives a notification from a notify () (or) notify all () methods.

ECET(CSE - II)

- Sleep () & Wait () :
Both are used to suspend a thread execution for a specified time.
Generally sleep () is used for making a thread to wait for same time.
But wait () is used in connection with notify () or notify all () methods in thread communication.

Thread Life Cycle

Visibility of Fields in a class :

| | Public Private | Protected | Default | Private Protected | |
|--------------------------------|-------------------|-----------|---------|----------------------|-----|
| Some Class | Yes | Yes | Yes | Yes | Yes |
| Sub class in same package | Yes | Yes | Yes | Yes | No |
| Other classes in same package | Yes | Yes | Yes | No | No |
| Sub class in other package | Yes | Yes | No | Yes | No |
| Non-sub class in other package | Yes | No | No | No | No |

Primitive data type

Corresponding wrapper class

| | |
|---------|-----------|
| Char | Character |
| byte | Byte |
| Short | Short |
| int | Integer |
| long | Long |
| float | Float |
| double | Double |
| boolean | Boolean |

- Character has only one constructor which accept the primitive data type.
- The character wrapper class doesnot contain a construction with string as parameter.
- Byte wrapper class has two constructors :
1) Number parameter 2) String type parameter
- Short class contains two constructors
1) number 2) string
- Integer class contains two constructors
1) number 2) string
- Long class contains two constructors

- 1) long number 2) strings
- Float class contains three constructors
 - 1) float number 2) double number 3) string type
- Double class has two constructors
 - 1) double number 2) string type
- Boolean class has two constructors
 - 1) boolean number 2) string
- Converting primitive datatype into an object is called "Boxing"
- Converting an object into its corresponding primitive datatype is called unboxing
- Errors can't be handled by programmer.
- Exception is an run time error
- If exception occurs the programmer can do some thing to handle it.
- The exception that are checked at compile-time by the java compiler called as "checked exceptions"
- The exceptions that are checked by the JVM are called "Unchecked Exceptions"
- Throwable is a class that represent all errors and exceptions which many occur in java.
- Exception : Is the super class for all the exceptions in Java
- Throwable is the super class for exception
- An exception can be handled using try, catch and finally blocks
- It is possible to handle multiple exceptions using multiple catch blocks.
- Eventhough there is a possibility for several exceptions in try block, at a time only one exception will be raised.
- A single try block can be followed by several catch blocks.
- We cannot write a catch without a try block, but we can write a try without any catch book.
- It is not possible to inset some statements between try and catch.
- It is possible to write a try block within another try, they are called nested try blocks.
- **Throws clause** is used when the programmer does not want to handle the exception and throw it out of a method.
- **Throw clause** is used when the programmer wants to throw an exception explicitly and wants to handle it using catch block.
Hence throws and throw are contradictory
- Types in exceptions
 - i) Built - in exceptions
 - ii) User - defined exceptions

Exception Class

Arithmetic

arithmetic

Array Index out of Bounds

Meaning

thrown when an exceptional condition has occurred in an operation

thrown to indicate that an array has been accessed within illegal index.

| | |
|--------------------------------------|---|
| Exception of | The index is either negative or greater than or equal to the size of the array |
| Class not found exception definition | This exception is raised when we try to access a class whose is not found |
| File not found exception | Raised when a file is not accessible or does not open |
| IO Exception | Thrown when an input-output operation failed or interrupted |
| Interrupted Exception | Thrown when a thread is waiting, sleeping or doing some processing, and it is interrupted |
| No Such field exception specified | Thrown when a class does not contain the field (or variable) |
| No such method exception | Thrown when accessing a method which is not found |
| Null pointer exception represents | Raised when referring to the member of a null object, null nothing |
| Number format exception numeric | Raised when a method could not convert a string in to a format |
| Runtime Exception | This represents any exception which occurs during run time |
| String Index out of either | Thrown by string class methods to indicate that an index is negative or greater |
| Bound exception | than the size of the string |

User - defined Exceptions :

- Created by the programmers.
- Class my exception extends **exception** || checked exception (compiling time)
- Class My Exception extends **Null Pointer Exception** || Unchecked Exception (Run Time)
- We can re throw an exception from catch block to another class where it can be handled
- 1 An interface contains only abstract methods. Which are all incomplete methods.
- It is not possible to create instance to interface
- We can create a reference variable to interface
- The reference variable of interface can hold information about which class implements the interface
- We can declare the methods in the interface those methods will become public abstract by default
- We can declare the variable those variable becomes "Public static final" by default
- The implementation of the interfaces will be done by the third party vender (will implements in another classes)

Eg : Interface MyInter

```
{
    int a ;
        int b ;
            connect ( ) ;
                add ( ) ;
}
```

After Compilation

ECET(CSE - II)

Interface MyInter

```

{
    Public static final int a ;
    Public static final int b ;
    Public abstract connect ( ) ;
    Public abstract add ( ) ;
}

```

- An interface can extend another interface
Eg : Interface my inter extends MyInter 1 P
- An interface can not implement another interface
Eg : Interface MyInter implements myinter 1 O
- It is possible to write a class with in an interface.
- Interfaces forces the implementation classes to implement all of its methods compulsory. Java compiler checks whether all the methods are implemented in the implementation classes or not
- A class can implement (not extend) multiple interfaces
Eg : class myclass implements interface 1, interface 2.....
Class myclass extends class 1 implements inter 1, inter 2
- An Abstract class is a class that contains '0' or more abstract methods
- An abstract method is a method without method body
- An abstract method is written when the same method has to perform different tasks depending on the object calling it.
- Package represents a directory that contains a related group of classes and interfaces.
- Applet = javabyte code + HTML page.
- An applet represents java byte code embeded in a webpage
- applet life cycle
init () , start () , stop () , destroy () .
- An applet born with init () method and starts functions with start () . to stop the applet, the stop () method is called and to terminate the applet completely from memory, the destroy () . called
- One applets are executed by a progress is called as **applet engine** which is similar to a virtual machine that exists inside the web browser at clientside.
- Hot Java is the first applet - enabled browser developed in java to support running of applets
- <APPLET> tag is used to insert applet into HTML page
- An applet can not run any executable program in the client machine.

PREVIOUS ECET BITS

2012

01. Which of the following Inheritance mechanisms is not supported in Java
- 1) Single level 2) Multiple level 3) Multi level 4) All the above

SAIMEDHA

TIRUPATI-9494861234 VIJAYAWADA - 9494891234

02. What is the output of the following given Java code :

```
public class Ecet {
    public static void main (string [] args) {
        new Ecet ( ). go ("hello", 1);
        new Ecet ( ). go ("hello", "word", 2);
    }
    public void go (string y, int x) {
        System.out.print (y[y.length-1] + " ");
    }
}
```

- 1) h. he 2) hello world 3) world world 4) compilation fails

03. Which one of the following statements is TRUE ?

- 1) At once, more than two threads may possibly end up in deadlock.
- 2) The JVM implementation guarantees that multiple threads cannot enter into a deadlock state.
- 3) Deadlock threads release once their sleep () method's sleep duration has expired
- 4) Deadlocking can occur only when the wait (), notify (), and notify All () methods are used incorrectly.

04. Fill up the blank with one of the following statements for the given Java code which allows Ecet class to compile:

```
class Navigation {
    class Navigation {
        public enum Direction {North, South, East, West}
    }
    public class Ecet {
        _____
    }
}
```

- 1) Direction d = North ;
- 2) Navigation.Direction d = Navigation.Direction.North;
- 3) Direction d = Direction.North ;
- 4) Navigation.Direction d = North ;

05. What is the output of the given Java code below ?

```
interface Test A ( String to String ( ) ; }
public class Test {
    public static void main (String [] args) {
        System.out.println(new TestA () {
            public String to String () {return "test";}
        });
    }
}
```

- 1) test
- 2) null
- 3) An exception is thrown at runtime
- 4) Compilation fails because of an error in line 1

06. Given the following Java code, _____ can directly access and change the value of the variable name ?
package exam ;

```
class Ecet {
    public String name = "hello" ;
}
```

- 1) any class
3) any class in the exam package
07. What is the output of the following Java code ?

```
public class EcetString1 {
    public static void main (String [] args) {
        String str = "420";
        System.out.print(str);
    }
}
```

- 2) only the Ecet class
4) any class that extends Ecet

08. Given the following Java code below, what is the output ?

```
int a = 0;
int b = 10;
do {
    b--;
    ++a;
} while (a<5);
system.out.print (+a "," +b);
```

- 1) 42 2) 420 3) 42042 4) 462
- 1) 5,6 2) 5,5 3) 6,5 4) 6, 6

2011

09. Which of the following types of class members can be part of the internal part of a class ?

- 1) Private methods 2) Public instance variables
3) Private constructors 4) Public methods

10. What is an example of polymorphism ?

- 1) Method overloading 2) Anonymous classes
3) Inner class 4) Method over riding

11. What is the result of executing the following fragment of code :

```
boolean
flag = false ;
if (flag = true)
{System.out.println ("false") ;}
else
{System.out.println ("false");}
```

- 1) nothing happens 2) an exception is raised
3) true is printed to standard out 4) false is printed to standard out

12. Which of the following is illegal;

- 1) float f = 45.0; 2) float f = 45.0 3) doubled = 45.0; 4) int i = 32 ;

13. Constructor is a method that determine how an object is

- 1) initialized when destroyed 2) initialized
3) initialized when created 4) initialized when called

14. Which of the following wrapper classes cannot take a "String" in constructor

- 1) Long 2) Boolean 3) Character 4) Integer

15. Final variable should be declared in the

ECET(CSE - II)

- 1) inside constructors
2) outside the methods
3) inside methods
4) inside classes
16. The Java Interpreter is used for the ____ of the source code.
1) debugging 2) execution 3) compiling 4) creation
17. Which one does not extend java.lang.number
1) Integer 2) Boolean 3) Short 4) Long
18. What will happen if you try to compile and run the following code? public class Q
{public static void main (string arg v [])
{int anar [] = new int [5] ;
{system.out.print ln (anar [0]); }
1) Erro 2) null 3) 5 4) 0
19. How can class be imported to a program ?
1) import "class name"
2) import "class name" + + ;
3) import "class name" ;
4) import "class name".* ;
20. Which statement is true about a nonstatic inner class ?
1) it can access private instance variables in the enclosing object
2) it is accessable from any other class
3) it an only be instantiated in the enclosing class
4) it must implement an interface
21. Applets are executed generally in a
1) console 2) browser 3) server 4) network
22. Which one is a key word in a Java?
1) friend 2) size of 3) extends 4) NULL
23. What will be printed out if this code is run with the following command line ?
java my_progr good morning
public class my_prog
{public static void main (string argv[])
{system.out.print ln (argv [2]); }
1) my_prog
2) exception raised : "java.lang.Array IndexOut of Bounds Exception:2"
3) moming 4) good
- 2010**
24. Which of the following is a scalar data type ?
1) Array 2) Char 3) Struct 4) Union
25. Static variables in a function have
1) Global scope and global extent
2) Global scope and local extent
3) Local scope and global extent
4) Local scope and local extent
26. Which character encoding scheme is followed for the 'clear' datatype in Java ?
1) ASCII 2) EBCDIC 3) BCD 4) Unicode
27. ____ Operator is not a bit-wise operator :
1) >>> 2) > 3) >> 4) <<
28. Which of the following features in Java is not a keyword ?
1) Package 2) Volatile 3) Import 4) Null
29. Which of the following is the default access specifiers for class members ?
1) Public access 2) Private access 3) Protected access 4) Package access

- ## PREVIOUS ECET BITS KEY

- | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 01) 3 | 02) 4 | 03) 4 | 04) 4 | 05) 4 | 06) 3 | 07) 3 | 08) 4 | 09) 1 | 10) 1 |
| 11) 4 | 12) 1 | 13) 3 | 14) 2 | 15) 4 | 16) 2 | 17) 2 | 18) 4 | 19) 1 | 20) 4 |
| 21) 2 | 22) 3 | 23) 2 | 24) 2 | 25) 3 | 26) 4 | 27) 2 | 28) 1 | 29) 2 | 30) 1 |
| 31) 3 | 32) 1 | 33) 3 | 34) 4 | 35) 4 | 36) 1 | | | | |

PRACTICE SET - I

- ```

 public A (int x) { }
 public A (int x, int y)
 {
 super (x,y) ;
 }
}

```

1) 2)

- 3) 4) both 2 and 3
02. Which of the following are overloading the method `int sum (int (intn inty)`  
`{`  
 1) `ins sum (intx, int y, int z { }` 2) `float s um (int`  
`x, int y) { }`  
 3) `int sum (int a, int b) { }` 4) both 2 and 3
03. Which key word can protect a class in a package from accessible by the classes outside the package  
 1) private 2) protected  
 3) final 4) don't use any keyword at all (make it default)
04. We would like to make a member of class visible in all subclasses regardless of what package they are in. Which one of the following keywords would achieve this  
 1) private 2) protected  
 3) public 4) private protected
05. A package is a collection of  
 1) classes 2) interfaces  
 3) editing tools 4) classes and interfaces
06. What will be the output of the following program class Main1  
`{`  
`public static void main ( String args [ ])`  
`{`  
`boolean b = true ;`  
`System.out.println ("XXX");`  
`return`  
`System. out, println ("YYY");`  
`}`  
`}`  
 1) XXX 2) YYY  
 3) XXX followed by YYY 4) Error, Won't complete
07. Which exception is thrown by the `read ( )` method of input Stream class ?  
 1) Exception 2) File not Found Exception  
 3) Read Exception 4) IO exception
08. A (n) .....is a software unit that combines a structured set of data with a set of operations for inspecting and manipulating that data  
 1) Class 2) Object 3) Method 4) Signature
09. A(n).....is a blueprint for objects, which defines a type of object according to the data the object can hold and the operations the object an perform  
 1) class 2) object 3) method 4) signature
10. A class declaration is class designed with implementation gaps for sub-classes to fill in  
 1) C 2) Pascal 3) Fortran 4) PL/SQL
11. Which of the following events will cause a thread to die  
 1) the method `sleep ( )` is called 2) the method `wait ( )` is called  
 3) Execution of the `start ( )` method ends 4) Execution of the `run ( )` method ends
12. Given three classes A,B and C, where B is a subclass of A and C are subclasses of B. Which one of these boolean expressions correctly identifies when an object O has actually been instantained from class B as opposed to from A or C

- 1) (0 instance of B) & & (! instance A))  
 2) (0 instance of B) && (!(0 instance of C))  
 3) (0 instances of A) || (0 instance of B))  
 4) (0 instance of B).
13. There are \_\_\_\_ types of Comments in Java  
 1) One 2) Two 3) Three 4) Four
14. \_\_\_\_ is the mechanism that binds together code and the data it manipulates, and keeps both safe from outside interference and misuse  
 1) Encapsulation 2) Class 3) Inheritance 4) Polymorphism
15. Java is Architectural \_\_\_\_  
 1) Dependent 2) Neutral 3) Independent 4) None of the above
16. An \_\_\_\_ is a special kind of Java program that is designed to be transmitted over the Internet  
 1) Viewlet 2) Applet 3) Servlet 4) Object
17. Which of the following methods are methods of the Math class ?  
 1) absolute () 2) log () 3) cosine () 4) sine ()
18. Which operator is used to create and concatenate a string  
 1) ++ 2) && 3) & 4) +
19. Which of the following types of class members can be part of the internal part of a class ?  
 1) Private method 2) Public instance variables  
 3) Private constructors 4) Public methods
20. Which of the following is illegal ?  
 1) Float f = 45.0 ; 2) Float f = 45.0 3) double d = 45.0 ; 4) int i = 32 ;
21. What is the result of executing the following fragment of code ?  

```
boolean
flag = false ;
if (flag = true)
{
system.out.println ("true") ;
}
else
{
system.out.println ("false") ;
}
}
```

 1) Nothing happens 2) An exception is raised  
 3) true is printed to standard out 4) false is printed to standard out
22. Which of the following wrapper classes cannot take a "string" in constructor  
 1) Long 2) Boolean 3) Character 4) Integer
23. Consider the following Java program  

```
Public class Example App {
Public static void main (string [] args) {
int var ;
system.out.println ("The value of var is. "+var);
}
```

Choose the correct statement

- 1) This program will not compile successfully because the local variable var is used without being assigned a value.  
 2) The value of var that is printed is an unpredictable garbage value  
 3) The value of var that is printed is 0  
 4) The value of var that is printed is compiler dependent
24. The finally block is executed  
 1) only when a checked exception is thrown      2) only when an unchecked exception is thrown  
 3) only when an exception is thrown  
 4) irrespective of whether an exception is thrown or not.
25. What is the output of the following program ?  

```

Public class Example App {
Public Static Void Magic (int x) {
System. out. print (x % 10);
If ((x/ 10! = 0)
Magic (x / 10);
System. out. println (x %10);
}
Public static void main (string II args) {
Example App. Magic (2357);
}

```
- 1) 2357      2) 75322357      3) 7532      4) Runtime error
26. The statements  

```

byte var = -9;
system. out. println (var);

```

  
 1) prints - 9      2) prints - 10      3) prints - 119      4) prints 118
27. How many #'s do the following statement print ?  

```

For (int m = 0, n = 10, n - m > 5; ++ m, -- n)
system. out. print (" #");

```

  
 1) 2      2) 4      3) 1      4) 3
28. The statement  

```

System. Out. print ((double 7/4);

```

  
 1) 1.75      2) 1.0      3) 1      4) 2.0
29. When writing comments you can  
 1) use code /\* comment on the same line  
 3) use code and // \* comments on the same line  
 4) use code and < ! - comments on the same line  
 2) use code // comments on the same line
30. In java the Exceptions that are expected to possibly occur are called  
 1) unchecked exceptions  
 3) erroneous exceptions  
 2) checked exceptions  
 4) runtime exceptions
31. In Java the default value for float is  
 1) 10      2) 0.0      3) garbage value      4) None
32. Which of the following is a valid variable declaration in java  
 1) int 9 elements      2) int 4932      3) int elements      4) None
33. Package members are accessible outside the package if they are  
 1) private      2) Public      3) protected      4) None

ECET(CSE - II)

34. In which package the class is stored if package name is not mentioned.  
 1) global package 2) by default package 3) default package 4) None
35. The result of a Relational operation is always  
 1) either True or False 2) is less than or is more than  
 3) is equal or less or more 4) All the above
36. The keyword used to declare constants in Java  
 1) constant 2) const 3) Final 4) None
37. Which of the following is not a Boolean operator  
 1) && 2) ! 3) != 4)
38. JVM stands for  
 1) Java Vertical Mechanism 2) Java Virtual Machine  
 3) Java Virtual Mechanism 4) None of the above
39. In Java garbage collection runs as  
 1) a max - priority thread 2) a medium - priority thread  
 3) a low - priority thread 4) None
40. JVM plays a key role in making Java  
 (1) Robust 2) High performance 3) Portable 4) None
41. Which of the following doesn't have a super class  
 1) Lang 2) system 3) Object 4) Exception
42. What exception is created by the following code?  
 int a,b,c ; a = 7, b = 0 ; c = a/b ;  
 1) Arithmetic Exception 2) Null Pointer Exception  
 3) 10 Exception 4) Out of Memory Exception
43. Static variables of a class are also known as  
 1) instance variables 2) class variables 3) simple variables 4) None
44. Which of the following method is called exactly once in an Applet life cycle ?  
 1) init ( ) 2) destroy ( ) 3) both 1 and 2 4) None
45. An Applet is  
 1) run and delivered as a java byte code  
 2) run and executed in a container where it is cheployed  
 3) both 1 and 2 4) none of the above
46. Servelets are executed in JVM by a service called  
 1) Servlet container 2) Servlet engine 3) Servlet tracker 4) None of the above
47. The following program segment prints \_\_\_\_  
 byte var = ~ 34 ;  
 system. out. print ln (var) ;  
 1) -94 2) -33 3) -35 4) 93
48. What does the statement  
 import java. util \* ; import ;  
 1) All the methods in the class java. util 2) All the classes in the package java. util  
 3) All the packages starting with java. util 4) None
49. Which of the following methods is invored by garbage collector  
 1) finally 2) constructor 3) finalize 4) destructor
50. Which of the following can be used to generate HTML documentation from Java source code ?

- 1) java HTML doc      2) Javadoc      3) jar      4) java C
51. The Java compiler generates code in  
1) byte code    2) OP - code    3) Machine-language    4) assembly language
52. If the member variable of a class is to be shared by all the objects that class, it should be declared  
1) volatile      2) public      3) final      4) static
53. The statement  
system.out.println(-34>>2);  
1) prints - 36      2) prints -136      3) prints 136      4) prints - 9
54. Which of the following statements is valid ?  
statement 1 : float m1 = 2.1 ;  
statement 2 : double m2 = 2.1;  
statement 3 ; long m3 = 2.1 ;  
1) statement 1 & 2      2) statement 2      (3) statement 7      4) none
55. Which of the following operator work with variables but not literals ?  
(A) ++ ( pre - increment)      (B) ++ (post- inc)  
(C) >>      (D) no such operator exists  
1) A and B      2) A only      3) C only      D) D
56. The statements int m = 9, n = 5, P = 3 ;  
system.out.println((m - m/n \* n% p) > (m%n%p));  
1) prints true      2) prints 0      3) prints false      4) prints non-zero
57. Which of the following is not a keyword in Java?  
1) Super      2) Volatile      3) this      4) pointer
58. The statement can be replaced by the statement  
1)      2)      3)      4)
59. Which of the following can be declared final  
(A) A class      (B) A method      (C) A member variable  
1) A and B      2) A and C      3) All the above      4) None
60. Which of the following cannot be used as identifier?  
1) Letter      2) Digits      3) underscores      4) spaces
61. The concept of multiple inheritance is implemented in Java by  
1) extending two or more classes  
2) extending one class and implementing one or more interfaces  
3) implementing two or more interfaces      4) Both 2 and 3
62. We would like to make a member of a class visible in all subclasses regardless of what package they are in. Which one of the following keywords would achieve this?  
1) private      2) protected  
3) private OR protected      4) public
63. Which of the following are valid statements  
1) public class MyCalc extends Math      2) Math.max(s);  
3) Math.round(9.99,1);      4) None of the above.
64. Which of the following are true?  
1) The Void class extends the Class class.  
2) The Float class extends the Double class.



- 1) The double value 8.6
  - 2) The string ""8.6"
  - 3) The long value 8.
  - 4) The String "5.453.2"

79. What is the value of a[3] as the result of the following array declaration?

  - 1) 2
  - 2) 3
  - 3) 1
  - 4) 4

80. You would use the \_\_\_\_\_ operator to create a single instance of a named class.

  - 1) new
  - 2) dot
  - 3) equal to
  - 4) none of the above

81. You can explicitly drop a object reference by setting the value of a variable whose data type is a reference type to \_\_\_\_\_

  - 1) null
  - 2) object
  - 3) class
  - 4) method

82. What are all the methods available in the Thread class?

  - 1) isAlive()
  - 2) join()
  - 3) resume()
  - 4) suspend()

83. Which of the following statements correctly describes an interface?

  - 1) It's a concrete class
  - 2) It's a superclass
  - 3) It's a type of abstract class
  - 4) none of the above

84. All the classes in a package can be simultaneously imported using \_\_\_\_\_.

  - 1) =
  - 2) \*
  - 3) dot
  - 4) new

85. When might your program wish to run the garbage collector?

  - 1) before it enters a compute-intense section of code
  - 2) before it enters a memory-intense section of code
  - 3) when it knows there will be some idle time
  - 4) All the above

86. Which of the following types of class members can be part of the internal part of a class?

  - 1) Public instance variables
  - 2) Private instance variables
  - 3) Private methods
  - 4) both 1 and 3

87. What is the range of the char type?

  - 1) 0 to 216
  - 2) 0 to 215
  - 3) 0 to 216-1
  - 4) 0 to 215-1

88. Because finalize () belongs to the java.lang.Object class, it is present in all \_\_\_\_\_.

  - 1) objects
  - 2) classes
  - 3) methods
  - 4) All the above

89. Which of the following methods are methods of the Math class?

  - 1) absolute ( )
  - 2) log ( )
  - 3) cosine ( )
  - 4) sine ( )

90. What will happen if you attempt to compile and run the following code?

```
Integer ten=new Integer(10);
Long nine=new Long (9);
System.out.println(ten + nine);
int i=1;
System.out.println(i + ten);
```

  - 1) 19 followed by 20
  - 2) 19 followed by 11
  - 3) Error: Can't convert java lang Integer
  - 4) 10 followed by 1

91. The use of protected keyword to a member in a class will restrict its visibility as follows:

  - 1) Visible in all classes in the same package and subclasses in other packages.
  - 2) Visible only in the class and its subclass in the same package.
  - 3) Visible only inside the package.
  - 4) Visible only in the class where it is declared.

92. Package p1 contains the following code:

```
package p1;
```

- public class Student
- 1) Class result should be declared public.      2) Test class is not available.  
3) Student class is not available.      4) Result body is not fully defined.
93. Which of the following are keywords?  
1) switch & default      2) integer & byte      3) Boolean      4) object & class
94. Consider the following code:  
interface Area  
1) Method compute() in class Room should be declared public  
2) Interface definition is incomplete  
3) Method compute() in interface Area should be declared public  
4) All of these
95. Which of the following will output -4.0  
1) System.out.println(Math.floor(-4.7));  
2) System.out.println(Math.round(-4.7));  
3) System.out.println(Math.ceil(-4.7));  
4) System.out.println(Math.Min(-4.7));
96. Which of the following methods are methods of the String class?  
1) delete( )      2) append( )      3) reverse( )      4) replace( )
97. What is the method available for setting the priority?  
1) getPriority( )      2) setPriority( )      3) Both 1 and 2      4) none
98. What is an example of polymorphism?  
1) Inner class      2) Anonymous classes  
3) Method overloading      4) Method overriding
99. Which of the following can be referenced by this variable?  
1) The instance variables of a class only      2) The methods of a class only  
3) The instance variables and methods of a class  
4) none of the above
100. Which method is used to garbage collect an object?  
1) finalize( )      2) get( )      3) throw( )      4) sleep( )

## PRACTICE SET - I KEY

|       |       |       |       |       |       |       |       |       |        |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 01) 4 | 02) 4 | 03) 4 | 04) 4 | 05) 4 | 06) 3 | 07) 4 | 08) 2 | 09) 1 | 10) 1  |
| 11) 4 | 12) 2 | 13) 3 | 14) 1 | 15) 2 | 16) 2 | 17) 1 | 18) 4 | 19) 1 | 20) 1  |
| 21) 4 | 22) 3 | 23) 1 | 24) 4 | 25) 2 | 26) 2 | 27) 4 | 28) 1 | 29) 4 | 30) 2  |
| 31) 2 | 32) 3 | 33) 2 | 34) 3 | 35) 1 | 36) 3 | 37) 3 | 38) 2 | 39) 3 | 40) 3  |
| 41) 3 | 42) 1 | 43) 2 | 44) 3 | 45) 1 | 46) 2 | 47) 3 | 48) 1 | 49) 3 | 50) 2  |
| 51) 1 | 52) 4 | 53) 4 | 54) 2 | 55) 1 | 56) 1 | 57) 4 | 58) 2 | 59) 3 | 60) 4  |
| 61) 4 | 62) 3 | 63) 4 | 64) 4 | 65) 1 | 66) 4 | 67) 4 | 68) 4 | 69) 1 | 70) 1  |
| 71) 4 | 72) 4 | 73) 3 | 74) 1 | 75) 3 | 76) 4 | 77) 4 | 78) 4 | 79) 4 | 80) 1  |
| 81) 1 | 82) 1 | 83) 3 | 84) 2 | 85) 4 | 86) 4 | 87) 4 | 88) 2 | 89) 3 | 90) 3  |
| 91) 1 | 92) 2 | 93) 1 | 94) 1 | 95) 3 | 96) 4 | 97) 2 | 98) 3 | 99) 3 | 100) 3 |

## PRACTISE SET - II

01. Which of the following defines a legal abstract class
  - 1) abstract vehicle {  
    abstract void display ( ) ; }
  - 2) abstract class Vehicle {  
    abstract void supply ( ) ; }
  - 3) class abstract vehicle {  
    abstract void supply ( ) ; }
  - 4) none
02. The concept of multiple inheritance is implemented in Java by
  - 1) extending two or more classes
  - 2) extending one class and implementing one or more interfaces
  - 3) implementing two or more interfaces
  - 4) both 2 and 3
03. Which of the following statements are valid array declaration
  - 1) int number ( ) ;
  - 2) float average [ ] ;
  - 3) double [ ] marks ;
  - 4) both 2 and 3
04. Consider the following code  
 int number [ ] = new int [ 5 ] ;  
 After execution of this statement, which of the following are true ?
  - 1) number [5] is undefined
  - 2) number [2] is 0
  - 3) number length ( ) is 5
  - 4) all the above
05. What will be the content of array available table after executing the following code  
 for (int i = 0 ; i < 3; i ++)  
 for (int j = 0, j < 3; j ++)  
 if (j == i) table [i] [j] = 1;  
 else table [i] [j] = 0;
  - 1)
  - 2)
  - 3)
  - 4)
06. ....Class is a class designed with implementation gaps for sub-classes to fill in
  - 1) An instance
  - 2) An abstract
  - 3) A class
  - 4) None of the above
07. The keyword gives a class explicit access to the constructors, methods, and variables of its second arguments
  - 1) final
  - 2) super
  - 3) instance of
  - 4) implicit
08. ....is a class defined in the java lang package, whereas it is primitive data type defined in the Java language
  - 1) int
  - 2) float
  - 3) char
  - 4) integer
09. Which of the following is not a reserved keyword in Java
  - 1) abstract
  - 2) boolean
  - 3) break
  - 4) count
10. In a method invocation, does java pass
  - 1) arguments by reference
  - 2) arguments by value
  - 3) arguments by pointer
  - 4) arguments by variable
11. Which one of the following methods must a subclass of Applet implement
  - 1) destroy ( )
  - 2) init ( )
  - 3) start ( )
  - 4) none of the above
12. Which of the following methods are never run by the applet context
  - 1) destroy ( )
  - 2) init ( )
  - 3) main ( )
  - 4) stop ( )
13. Java Virtual Machine is an interpreter for byte code
  - 1) True
  - 2) False
14. When Java source code is completed, each individual class is put into its own output file named after the class and using the \_\_\_\_ extension

- Page 119

- 4) /n can't be used with cout.
26. Which of the following are Java variables type  
 (A) instance variable (B) local variables  
 (C) class variable (D) None of the above  
 1) A and C 2) A,B and C 3) A and B 4) D
27. Constructor is called  
 1) When the class is declared 2) when the object of class is created  
 3) when the class is defined 4) none of the above
28. Which of the following is not a type of exception  
 1) runtime 2) checked 3) unchecked 4) routine
29. The main thread of Java program is controlled by  
 1) a thread class 2) an object of thread class  
 3) an object of main thread itself 4) None
30. In Java the Exception class is a subclass of  
 1) Error class 2) Throwable class 3) System class 4) None of the above
31. A class variable is a variable that is declared inside a class as  
 1) Static 2) abstract 3) final 4) extends
32. In threads  
 1) a lower priority thread can pre-empt a higher priority thread  
 2) a higher priority thread can pre-empt a low priority thread  
 3) no thread can be pre-empted 4) none
33. \_\_\_\_\_ class is used for creating string objects which are to be changed  
 1) string 2) string buffer 3) both 1 and 2 4) None
34. To promote encapsulation, Java provides an access modifier  
 1) protected 2) private 3) public 4) none
35. Which of the following packages is imported by default?  
 1) java. lang 2) java. io 3) java. text 4) java. math
36. What does the statement  
 System.out.println( ++ 5 ); print ?  
 1) 6 2) 5  
 3) Results in a compilation error 4) Results in Runtime error
37. How many concrete classes can you have inside an interface?  
 1) 4 2) 3 3) 1 4) None
38. Which of the following statements accurately describe the use of access modifiers within a class definition?  
 1) They can be applied to both data & methods  
 2) They must precede a class's data variables or methods  
 3) They can appear in any order 4) All of the above
39. Which of the following are primitive types?  
 1) byte 2) String 3) integer 4) Float
40. What are all the methods used for Inter Thread communication and what is the class in which these methods are defined?  
 1) wait() 2) notify() 3) notifyall() 4) All the above
41. If you run the code below, what gets printed out?  
 String s=new String("Bicycle");

ECET(CSE - II)

- int iBegin=1;  
char iEnd=3;  
System.out.println(s.substring(iBegin,iEnd));
42. Which of the following statements about abstract methods/classes in Java are true?  
1) Bic 2) ic 3) icy 4) error: no
43. What is meant by "Passing by value" and "Passing by reference"?  
1) objects - pass by reference ; Methods - pass by value  
2) Method - pass by reference ; Objects - pass by value  
3) class - pass by value ; Objects - Pass by reference  
4) None of the
44. Which of the following statements correctly describes the relation between an object and the instance variable it stores?  
1) Each new object has its own distinctive set of instance variables  
2) Each object has a copy of the instance variables of its class  
3) the instance variable of each object are separate from the variables of other objects  
4) All the above
45. The this reference is used in conjunction with \_\_\_\_\_ methods.  
1) static 2) non-static 3) final 4) none of the
46. What are the values of x and y ?  
x = 5; y = ++x;  
1) x = 5 ; y = 5 2) x=6 ; y = 5 3) x=5 ; y=6 4) x = 6 ; y = 6
47. Which keyword is used to create an instance of a class?  
1) object 2) new 3) final 4) friend
48. What is the output of the following program?  
public class Question {  
public static void main(String args[]) {  
String s1 = "abc";  
String s2 = "def";  
String s3 = s1.concat(s2.toUpperCase() );  
System.out.println(s1+s2+s3);  
}  
}
49. Which Java operator is right associativity?  
1) \* 2) / 3) + 4) None of the above
50. Which of the following are true?  
1) The Class class is the superclass of the Object class.  
2) The Class class can be used to load other classes.  
3) The ClassLoader class can be used to load other classes.  
4) both 2 and 3
51. Which of the following not declare an array of string objects?

- 1) String[ ] s;                      2) String [ ]s:                      3) String[ s]:                      4) String s[ ]:
52. What are the values of x and z?  
`x = 5; z = x++;`  
 1) x = 6 ; z = 6                      2) x = 5 ; z = 6                      3) x = 6 ; z = 5                      4) x = 5 ; z = 5
53. Which priority Thread can prompt the lower primary Thread?  
 1) Lower Priority                      2) Higher Priority  
 3) Normal Priority                      4) none
54. Which of the following keywords are used to control access to a class member?  
 1) public                      2) abstract                      3) protected                      4) All of the above
55. Package p1 contains the following code:  
`package p1;`  
`public class Student`  
 1) Class result should be declared public.                      2) Test class is not available.  
 3) Student class is not available.                      4) Result body is not fully defined.
56. A package is a collection of  
 1) classes                      2) classes and interfaces  
 3) interfaces                      4) editing tools
57. The concept of multiple inheritance is implemented in Java by  
 1) extending two or more classes  
 2) extending one class and implementing one or more interfaces  
 3) implementing two or more interfaces                      4) Both 2 & 3
58. What are the constants defined by both Float and Double classes?  
 1) MAX\_RADIX                      2) MIN\_RADIX  
 3) MAX\_VALUE                      4) MIN\_VALUE and TYPE.
59. Given the following declarations  
`String s1=new String("Hello")`  
`String s2=new String("there");`  
`String s3=new String();`  
 Which of the following are legal operations?  
 1) `s3=s1 + s2`                      2) `s3=s1 - s2`                      3) `s3=s1 & s2`                      4) `s3=s1 && s2`
60. Which of the following is not a wrapper class?  
 1) String                      2) Integer                      3) Boolean                      4) Character
61. Garbage collector thread belongs to which priority?  
 1) High priority                      2) low-priority                      3) normal priority                      4) none of these
62. What are the possible access modifiers when implementing interface methods?  
 1) Protected                      2) Private                      3) public.                      4) none
63. Which of the following methods is used to get the error message for the exception that was thrown ?  
 1) print message                      2) extract message                      3) thrown message                      4) get message
64. Java is a  
 1) course                      2) Island                      3) Subject                      4) None
65. Java runs on  
 1) windows                      2) Unix/linux                      3) Mac                      4) All of the above

## PRACTICE SET - II KEY

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 01) 2 | 02) 4 | 03) 4 | 04) 4 | 05) 4 | 06) 2 | 07) 3 | 08) 4 | 09) 4 | 10) 2 |
| 11) 4 | 12) 3 | 13) 1 | 14) 2 | 15) 1 | 16) 2 | 17) 2 | 18) 4 | 19) 1 | 20) 2 |
| 21) 1 | 22) 2 | 23) 1 | 24) 4 | 25) 3 | 26) 2 | 27) 2 | 28) 4 | 29) 2 | 30) 2 |
| 31) 1 | 32) 2 | 33) 2 | 34) 2 | 35) 1 | 36) 3 | 37) 4 | 38) 4 | 39) 1 | 40) 4 |
| 41) 2 | 42) 4 | 43) 1 | 44) 4 | 45) 2 | 46) 4 | 47) 2 | 48) 3 | 49) 4 | 50) 4 |
| 51) 3 | 52) 3 | 53) 2 | 54) 4 | 55) 2 | 56) 2 | 57) 4 | 58) 1 | 59) 1 | 60) 1 |
| 61) 2 | 62) 3 | 63) 4 | 64) 2 | 65) 4 |       |       |       |       |       |

## PRACTISE SET - III

01. Which of the following classes are available in the java. lang package  
 1) math                                      2) string                                      3) string buffer                                      4) all the above
02. Which of the following are the wrapper classes  
 1) byte                                      2) integer                                      3) short                                      4) all the above
03. Which of the following methods belong to the string class  
 1) length ( )                                      2) compare to ( )                                      3) Equals                                      4) all the above
04. Given the code  
 String s1 = "yes"  
 String s2 = "yes"  
 String s3 = new String (s1) ;  
 Which of the following would equate to true ?  
 1) s1 = s2                                      2) s3 equals (s1)                                      3) s3 equals (s1)                                      4) all the above
05. Given the following code  

```
class Base {int x = 10 ; }
class Derived extends Base
{ int x = 20 ; }
Base b = new base () ;
Derived d = new derived () ;
Base bd = new derived () ;
```

 The statement  
 system. out println (b.x + " " + d. x + " " + bd. x) ;  
 will produce the output  
 1) 10 20 20                                      2) 10 20 10                                      3) 20 10 20                                      4) 20 20 10
06. Consider the following code snippet  

```
.....
.....
try {
int x = 0;
int y = 50/x ;
system.out.println("Division by zero");
System. out. println ("Catch block");
}
```

\*\*\*\*\*

What will be the output

1) Error. Won't compile

3) Catch block

2) Division by zero

4) Division by zero Catch block

07. An.....is a Java compatible program that you can embed in a web page

1) javap

2) applet

3) servlet

4) tag

08. A class from which another class derived

1) Subclass

2) Derived class

3) Child class

4) all the above

09. A class from which other classes are derived

1) Base class

2) Parent class

3) Super class

4) all the above

10. Which of the following array declaration and instantiation are not legal

1) `int [ ] a [ ] = new int [4] [4];`2) `int a [ ] [ ] = new int [4] [4];`3) `int a [ ] [ ] = new int [ ] [4];`4) `int [ ] a [ ] = new int [4] [ ];`

11. Given a variable x of type int (which may contain a negative value), which of the following are correct ways of doubling type value of x

1) `x << 1;`2) `x = x * 2;`3) `x * = 2;`

4) both 2 and 3

12. Which of the following methods is executed first when an applet is run

1) `destroy ( )`2) `init ( )`3) `main ( )`4) `stop ( )`

13. What does J2SE mean ?

1) Java 2 Platform Standard Edition

2) Java 2 Internet Standard Edition

3) Java 2 Platform Independent Standard Edition

4) Java 2 Systems Edition

14. An interface contains \_\_\_\_ methods

1) Non-abstract

2) Implemented

3) unimplemented

15. Given the following declarations

`String s1 = new String ("Hello")``String s2 = new String ("there");``String s3 = new String ( );`

Which of the following are legal operations ?

1) `s3 = s1 + s2;`2) `s3 = s1 - s2;`3) `s3 = s1 & s2`4) `s3 = s1 & &`

16. Which one is a key word in Java ?

1) Friend

2) Size of

3) extends

4) Null

17. What will be printed out if this code is run with the following command line ?

`Java my-prog good morning``Public class my - prog``{Public static void main (string argv [ ])``{system.out.println (argv [2])}`

1) my - prog

2) Exception raised : "java. long. Array index out of Bounds exception : 2"

3) Morning

4) good

18. Which character encoding scheme is followed for the "char" datatype in Java ?

1) ASCII

2) EBCDIC

3) BCD

4) Unicode

19. \_\_\_\_ operator is not a bit-wise operator

1) `>>>`2) `>`3) `>>`4) `<<`

20. Which of the following feature in Java is not a keyword ?

ECET(CSE - II)

- 1) package  
2) volatile  
3) import  
4) Null
21. Which of the following operations in Java has the highest precedence than the other operator ?  
1) &  
2) %  
3) ++  
4) ::
22. Which of the following ways of declaring and initialization a 1-dimensional integer array of size there is / are statically correct ?  
(A) int [ ] var = {1, 5, 6}; (B) int var [ ] = { 1, 5, 6}  
(C) int [3] var = new int [ ] { 1, 5, 6} (D) int [ ] var = new int [ ] { 1, 5, 6};  
1) A and B  
2) A,B and D  
3) A and C  
4) None of the above
23. Consider the statement  
System.out.print(Math.round(Math.random()));  
The statement can print  
1) only 0  
2) only 1  
3) only 0 or 1  
4) any non - negative integer
24. Is null an object  
1) Yes  
2) no  
3) sometimes yes  
4) none of the above
25. Which of the following statements will result in compilation error ?  
(A) signed int abc; (B) unsigned int abc; (C) signed byte abc; (D) signed long abc;  
1) A,B and C  
2) A,B and D  
3) all the above  
4) None
26. The statements  
double what is this = -1.010.0;  
system.out.print(what is this);  
1) results in compilation error  
2) results in overflow error  
3) prints - Infinity  
4) prints a garbage value
27. The operators !, &&, \*, !, if arranged in the ascending order of precedence, read  
1) &&, \*, !  
2) !, &&, \*  
3) !, \*, &&  
4) !, &&, \*
28. Which of the following is a well-defined state of a thread  
1) Ready state  
2) Running state  
3) Waiting state  
4) All the above
29. A new thread can be created  
1) by extending thread class  
2) by implementing the runnable interface  
3) both 1 and 2  
4) none of the above
30. Which of the following statement is correct  
1) An interface does not have instance variable  
2) Every method of an interface is abstract  
3) All the methods of an interface are automatically public  
4) All the above
31. The keyword used to include a particular package  
1) package  
2) include  
3) import  
4) None
32. In Java Error class  
1) defines those exceptions which are not expected by the programmer to handle  
2) is used to handle exceptional conditions  
3) both 1 and 2  
4) None

ECET(CSE - II)

33. Which of the following can be used to copy data from one array to another  
 1) system. array copy  
 2) system. clone  
 3) java. lang. clone  
 4) java. lang. clone
34. Which of the following keyword is not related to exception in Java  
 1) Catch  
 2) Throws  
 3) thrown  
 4) Finally
35. The Java util package contains two classes that are designed to work with hashtables. They are \_\_\_ and \_\_\_  
 1) Hashtable, Hashmap class  
 2) Hashtable, list  
 3) Vector, List  
 4) Vector, Hashtable
36. Data members of the Hashtable class stored in the \_\_\_  
 1) private access specifier  
 2) Public access specifier  
 3) common access specifier  
 4) None
37. The number of byte needed to store a number of data type double is  
 1) JVM dependent  
 2) Operating system dependent  
 3) Compiler dependent  
 4) 8
38. The following program segment prints \_\_\_  

```
int m = 1;
For (; m < 20 ; m ++)
system.out.print (m * = 1 + m);
```

 1) 21230  
 2) 21220  
 3) 212182  
 4) 2642
39. The statement  

```
System.out.println(2 == 2.0);
```

 1) prints false  
 2) prints true  
 3) will not complete successfully  
 4) will compile successfully but raises an exception
40. The fact that any program can use  

```
System.out.println
```

 implies that  
 1) out is declared public  
 2) out is declared static  
 3) both 1 and 2  
 4) none
41. Which of the following features are not common to both Java & C++?  
 1) The class declaration  
 2) The access modifiers  
 3) The encapsulation of data & methods with in objects  
 4) The use of pointers
42. What is the value of  $111 \% 13$ ?  
 1) 3  
 2) 5  
 3) 7  
 4) 9
43. A \_\_\_ is used to separate the hierarchy of the class while declaring an Import statement.  
 1) Object  
 2) Method  
 3) Package  
 4) Static
44. How many threads at a time can access a monitor?  
 1) Two  
 2) Four  
 3) one  
 4) none
45. Which of the following statements are true?  
 1) The String class is implemented as a char array, elements are addressed using the stringname[] convention  
 2) Strings are a primitive type in Java that overloads the + operator for concatenation  
 3) Strings are a primitive type in Java and the StringBuffer is used as the matching wrapper type  
 4) The size of a string can be retrieved using the length property.

ECET(CSE - II)

46. Which keyword can protect a class in a package from accessibility by the classes outside the package? 3) final  
1) private 2) protected  
4) don't use any keyword at all (make it default)
47. Which of the following statements are true?  
1) An abstract class may not have any final methods.  
2) A final class may not have any abstract methods.  
3) An inner class may be declared with any accessibility keyword.  
4) Both 2 and 3
48. Which of the following are true about the Error and Exception classes?  
1) Both classes extend Throwable.  
2) The Error class is final and the Exception class is not.  
3) The Exception class is final and the Error is not.  
4) Both classes implement Throwable.
49. What is the data type for the parameter of the sleep() method? 4) Boolean  
1) byte 2) long 3) float  
50. When a program does not want to handle exception, the \_\_\_\_\_ class is used. 4) wait  
1) throws 2) catch 3) notify

PRACTICE SET - III KEY

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 01) 4 | 02) 4 | 03) 4 | 04) 4 | 05) 2 | 06) 3 | 07) 2 | 08) 4 | 09) 4 | 10) 3 |
| 11) 4 | 12) 2 | 13) 1 | 14) 3 | 15) 1 | 16) 3 | 17) 2 | 18) 4 | 19) 2 | 20) 1 |
| 21) 1 | 22) 2 | 23) 3 | 24) 2 | 25) 3 | 26) 3 | 27) 2 | 28) 4 | 29) 3 | 30) 4 |
| 31) 3 | 32) 1 | 33) 1 | 34) 3 | 35) 1 | 36) 1 | 37) 4 | 38) 3 | 39) 2 | 40) 3 |
| 41) 4 | 42) 3 | 43) 3 | 44) 3 | 45) 2 | 46) 4 | 47) 4 | 48) 1 | 49) 2 | 50) 1 |

SELF TEST

01. Suppose that following and s2 are two strings. Which of the statements or expressions are correct  
1) String s3 = s1 + s2 2) s1 compare to (s2); 3) int m = s1.length(); 4) all the above
02. The methods wait() and notify() are defined in  
1) java.lang.string 2) java.lang.Runnable 3) java.lang.Object 4) java.lang.Thread
03. When we implement the Runnable interface, we must define the method  
1) start() 2) int() 3) run() 4) runnable()
04. DataInput is  
1) an abstract class defined in java.io. 2) a class we can use to read primitive data types  
3) an interface that defines methods to open  
4) an interface that defines methods to read primitive data types
05. Which are the valid ways to create data input Stream streams?  
1) new DataInput Stream(); 2) new DataInput Stream("in.dat", "r")  
3) new DataInput Stream(new File("in.dat"));

- public class Student
- 1) Class result should be declared public. 2) Test class is not available.  
3) Student class is not available. 4) Result body is not fully defined.
93. Which of the following are keywords?  
1) switch & default 2) integer & byte 3) Boolean 4) object & class
94. Consider the following code:  
interface Area  
1) Method compute() in class Room should be declared public  
2) Interface definition is incomplete  
3) Method compute() in interface Area should be declared public  
4) All of these
95. Which of the following will output -4.0  
1) System.out.println(Math.floor(-4.7));  
2) System.out.println(Math.round(-4.7));  
3) System.out.println(Math.ceil(-4.7));  
4) System.out.println(Math.Min(-4.7));
96. Which of the following methods are methods of the String class?  
1) delete( ) 2) append( ) 3) reverse( ) 4) replace( )
97. What is the method available for setting the priority?  
1) getPriority( ) 2) setPriority( ) 3) Both 1 and 2 4) none
98. What is an example of polymorphism?  
1) Inner class 2) Anonymous classes  
3) Method overloading 4) Method overriding
99. Which of the following can be referenced by this variable?  
1) The instance variables of a class only 2) The methods of a class only  
3) The instance variables and methods of a class  
4) none of the above
100. Which method is used to garbage collect an object?  
1) finalize( ) 2) get( ) 3) throw( ) 4) sleep( )

### PRACTICE SET - I KEY

|       |       |       |       |       |       |       |       |       |        |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 01) 4 | 02) 4 | 03) 4 | 04) 4 | 05) 4 | 06) 3 | 07) 4 | 08) 2 | 09) 1 | 10) 1  |
| 11) 4 | 12) 2 | 13) 3 | 14) 1 | 15) 2 | 16) 2 | 17) 1 | 18) 4 | 19) 1 | 20) 1  |
| 21) 4 | 22) 3 | 23) 1 | 24) 4 | 25) 2 | 26) 2 | 27) 4 | 28) 1 | 29) 4 | 30) 2  |
| 31) 2 | 32) 3 | 33) 2 | 34) 3 | 35) 1 | 36) 3 | 37) 3 | 38) 2 | 39) 3 | 40) 3  |
| 41) 3 | 42) 1 | 43) 2 | 44) 3 | 45) 1 | 46) 2 | 47) 3 | 48) 1 | 49) 3 | 50) 2  |
| 51) 1 | 52) 4 | 53) 4 | 54) 2 | 55) 1 | 56) 1 | 57) 4 | 58) 2 | 59) 3 | 60) 4  |
| 61) 4 | 62) 3 | 63) 4 | 64) 4 | 65) 1 | 66) 4 | 67) 4 | 68) 4 | 69) 1 | 70) 1  |
| 71) 4 | 72) 4 | 73) 3 | 74) 1 | 75) 3 | 76) 4 | 77) 4 | 78) 4 | 79) 4 | 80) 1  |
| 81) 1 | 82) 1 | 83) 3 | 84) 2 | 85) 4 | 86) 4 | 87) 4 | 88) 2 | 89) 3 | 90) 3  |
| 91) 1 | 92) 2 | 93) 1 | 94) 1 | 95) 3 | 96) 4 | 97) 2 | 98) 3 | 99) 3 | 100) 1 |

## PRACTISE SET - II

JAVA

01. Which of the following defines a legal abstract class
  - 1) abstract vehicle {  
    abstract void display ( ) ; }
  - 2) abstract class Vehicle {  
    abstract void supply ( ) ; }
  - 3) class abstract vehicle {  
    abstract void supply ( ) ; }
  - 4) none
02. The concept of multiple inheritance is implemented in Java by
  - 1) extending two or more classes
  - 2) extending one class and implementing one or more interfaces
  - 3) implementing two or more interfaces
  - 4) both 2 and 3
03. Which of the following statements are valid array declaration
  - 1) int number ( ) ;
  - 2) float average [ ] ;
  - 3) double [ ] marks ;
  - 4) both 2 and 3
04. Consider the following code  
 int number [ ] = new int [ 5 ] ;  
 After execution of this statement, which of the following are true ?
  - 1) number [ 5 ] is undefined
  - 2) number [ 2 ] is 0
  - 3) number length ( ) is 5
  - 4) all the above
05. What will be the content of array available table after executing the following code  
 for (int i = 0 ; i < 3; i ++)  
 for (int j = 0, j < 3; j ++)  
 if (j == i) table [ i ] [ j ] = 1;  
 else table [ i ] [ j ] = 0;  
  - 1)
  - 2)
  - 3)
  - 4)
06. ....Class is a class designed with implementation gaps for sub-classes to fill in
  - 1) An instance
  - 2) An abstract
  - 3) A class
  - 4) None of the above
07. The keyword gives a class explicit access to the constructors, methods, and variables of its second arguments
  - 1) final
  - 2) super
  - 3) instance of
  - 4) implicit
08. ....is a class defined in the java lang package, whereas it is primitive data type defined in the Java language
  - 1) int
  - 2) float
  - 3) char
  - 4) integer
09. Which of the following is not a reserved keyword in Java
  - 1) abstract
  - 2) boolean
  - 3) break
  - 4) count
10. In a method invocation, does java pass
  - 1) arguments by reference
  - 2) arguments by value
  - 3) arguments by pointer
  - 4) arguments by variable
11. Which one of the following methods must a subclass of Applet implement
  - 1) destroy ( )
  - 2) init ( )
  - 3) start ( )
  - 4) none of the above
12. Which of the following methods are never run by the applet context
  - 1) destroy ( )
  - 2) init ( )
  - 3) main ( )
  - 4) stop ( )
13. Java Virtual Machine is an interpreter for byte code
  - 1) True
  - 2) False
14. When Java source code is completed, each individual class is put into its own output file named after the class and using the \_\_\_\_ extension

- SAIMEDHA**

- 4) /n can't be used with cout.
26. Which of the following are Java variables type  
(A) instance variable (B) local variables  
(C) class variable (D) None of the above  
1) A and C 2) A,B and C 3) A and B 4) D
27. Constructor is called  
1) When the class is declared 2) when the object of class is created  
3) when the class is defined 4) none of the above
28. Which of the following is not a type of exception  
1) runtime 2) checked 3) unchecked 4) routine
29. The main thread of Java program is controlled by  
1) a thread class 2) an object of thread class  
3) an object of main thread itself 4) None
30. In Java the Exception class is a subclass of  
1) Error class 2) Throwable class 3) System class 4) None of the above
31. A class variable is a variable that is declared inside a class as  
1) Static 2) abstract 3) final 4) extends
32. In threads  
1) a lower priority thread can pre-empt a higher priority thread  
2) a higher priority thread can pre-empt a low priority thread  
3) no thread can be pre-empted 4) none
33. \_\_\_\_\_ class is used for creating string objects which are to be changed  
1) string 2) string buffer 3) both 1 and 2 4) None
34. To promote encapsulation, Java provides on access modifier  
1) protected 2) private 3) public 4) none
35. Which of the following packages is imported by default ?  
1) java. lang 2) java. io 3) java. text 4) java. math
36. What does the statement  
System.out.println( ++ 5) ; print ?  
1) 6 2) 5  
3) Results in a compilation error 4) Results in Runtime error
37. How many concrete classes can you have inside an interface?  
1) 4 2) 3 3) 1 4) None
38. Which of the following statements accurately describe the use of access modifiers within a class definition?  
1) They can be applied to both data & methods  
2) They must precede a class's data variables or methods  
3) They can appear in any order 4) All of the above
39. Which of the following are primitive types?  
1) byte 2) String 3) integer 4) Float
40. What are all the methods used for Inter Thread communication and what is the class in which these methods are defined?  
1) wait() 2) notify() 3) notifyall() 4) All the above
41. If you run the code below, what gets printed out?  
String s=new String("Bicycle");

```
int iBegin=1;
char iEnd=3;
System.out.println(s.substring(iBegin,iEnd));
```

- 1) Bic                                      2) ic                                      3) icy                                      4) error: no  
method matching substring(int,char)

42. Which of the following statements about abstract methods/classes in Java are true?  
1) An abstract class cannot be instantiated.                      2) Constructors cannot be abstract.  
3) A subclass of an abstract class must defined the abstract methods.  
4) Both 1 and 2
43. What is meant by "Passing by value" and "Passing by reference"?  
1) objects – pass by reference ; Methods - pass by value  
2) Method – pass by reference ; Objects – pass by value  
3) class – pass by value ; Objects – Pass by reference                      4) None of the above
44. Which of the following statements correctly describes the relation between an object and the instance variable it stores?  
1) Each new object has its own distinctive set of instance variables  
2) Each object has a copy of the instance variables of its class  
3) the instance variable of each object are seperate from the variables of other objects  
4) All the above
45. The this reference is used in conjunction with \_\_\_\_\_ methods.  
1) static                                      2) non-static                                      3) final                                      4) none of the above
46. What are the values of x and y ?  
x = 5; y = ++x;  
1) x = 5 ; y = 5                                      2) x=6 ; y = 5                                      3) x=5 ; y=6                                      4) x = 6 ; y = 6
47. Which keyword is used to create an instance of a class?  
1) object                                      2) new                                      3) final                                      4) friend
48. What is the output of the following program?  
public class Question {  
public static void main(String args[]) {  
String s1 = "abc";  
String s2 = "def";  
String s3 = s1.concat(s2.toUpperCase( ));  
System.out.println(s1+s2+s3);  
}  
}
- 1) abcdefabcdef                      2) abcabcDEFDEF                      3) abcdefabcDEF                      4) None of the above
49. Which Java operator is right associativity?  
1) \*                                      2) /                                      3) +                                      4) =
50. Which of the following are true?  
1) The Class class is the superclass of the Object class.  
2) The Class class can be used to load other classes.  
3) The ClassLoader class can be used to load other classes.  
4) both 2 and 3
51. Which of the following not declare an array of string objects?

- 1) String[ ] s;                      2) String [ ]s:                      3) String[ s]:                      4) String s[ ]:
52. What are the values of x and z?  
x = 5; z = x++;  
1) x = 6; z = 6                      2) x = 5; z = 6                      3) x = 6; z = 5                      4) x = 5; z = 5
53. Which priority Thread can prompt the lower primary Thread?  
1) Lower Priority                      2) Higher Priority  
3) Normal Priority                      4) none
54. Which of the following keywords are used to control access to a class member?  
1) public                      2) abstract                      3) protected                      4) All of the above
55. Package p1 contains the following code:  
package p1;  
public class Student  
1) Class result should be declared public.                      2) Test class is not available.  
3) Student class is not available.                      4) Result body is not fully defined.
56. A package is a collection of  
1) classes                      2) classes and interfaces  
3) interfaces                      4) editing tools
57. The concept of multiple inheritance is implemented in Java by  
1) extending two or more classes  
2) extending one class and implementing one or more interfaces  
3) implementing two or more interfaces                      4) Both 2 & 3
58. What are the constants defined by both Float and Double classes?  
1) MAX\_RADIX                      2) MIN\_RADIX  
3) MAX\_VALUE                      4) MIN\_VALUE and TYPE.
59. Given the following declarations  
String s1=new String("Hello")  
String s2=new String("there");  
String s3=new String();  
Which of the following are legal operations?  
1) s3=s1 + s2                      2) s3=s1 - s2                      3) s3=s1 & s2                      4) s3=s1 && s2
60. Which of the following is not a wrapper class?  
1) String                      2) Integer                      3) Boolean                      4) Character
61. Garbage collector thread belongs to which priority?  
1) High priority                      2) low-priority                      3) normal priority                      4) none of these
62. What are the possible access modifiers when implementing interface methods?  
1) Protected                      2) Private                      3) public.                      4) none
63. Which of the following methods is used to get the error message for the exception that was thrown?  
1) print message                      2) extract message                      3) thrown message                      4) get message
64. Java is a  
1) course                      2) Island                      3) Subject                      4) None
65. Java runs on  
1) windows above                      2) Unix/linux                      3) Mac                      4) All of the

## PRACTICE SET - II KEY

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 01) 2 | 02) 4 | 03) 4 | 04) 4 | 05) 4 | 06) 2 | 07) 3 | 08) 4 | 09) 4 | 10) 2 |
| 11) 4 | 12) 3 | 13) 1 | 14) 2 | 15) 1 | 16) 2 | 17) 2 | 18) 4 | 19) 1 | 20) 2 |
| 21) 1 | 22) 2 | 23) 1 | 24) 4 | 25) 3 | 26) 2 | 27) 2 | 28) 4 | 29) 2 | 30) 2 |
| 31) 1 | 32) 2 | 33) 2 | 34) 2 | 35) 1 | 36) 3 | 37) 4 | 38) 4 | 39) 1 | 40) 4 |
| 41) 2 | 42) 4 | 43) 1 | 44) 4 | 45) 2 | 46) 4 | 47) 2 | 48) 3 | 49) 4 | 50) 4 |
| 51) 3 | 52) 3 | 53) 2 | 54) 4 | 55) 2 | 56) 2 | 57) 4 | 58) 1 | 59) 1 | 60) 1 |
| 61) 2 | 62) 3 | 63) 4 | 64) 2 | 65) 4 |       |       |       |       |       |

### PRACTISE SET - III

01. Which of the following classes are available in the java. lang package  
1) math 2) string 3) string buffer 4) all the above
02. Which of the following are the wrapper classes  
1) byte 2) integer 3) short 4) all the above
03. Which of the following methods belong to the string class  
1) length () 2) compare to () 3) Equals 4) all the above
04. Given the code  
String s1 = "yes"  
String s2 = "yes"  
String s3 = new String (s1);  
Which of the following would equate to true ?  
1) s1 = s2 2) s3 equals (s1) 3) s3 equals (s1) 4) all the above
05. Given the following code  
class Base {int x = 10 ; }  
class Derived extends Base  
{ int x = 20 ; }  
Base b = new base ( ) ;  
Derived d = new derived ( ) ;  
Base bd = new derived ( ) ;  
The statement  
system.out.println (b.x + " " + d.x + " " + bd.x) ;  
will produce the output  
1) 10 20 20 2) 10 20 10 3) 20 10 20 4) 20 20 10
06. Consider the following code snippet  
.....  
.....  
try {  
int x = 0;  
int y = 50/x ;  
system.out.println("Division by zero") ;  
System.out.println ("Catch block");  
}

- What will be the output  
 1) Error. Won't compile  
 3) Catch block
07. An.....is a Java compatible program that you can embed in a web page  
 1) javap  
 2) applet  
 3) servlet  
 4) tag
08. A class from which another class derived  
 1) Subclass  
 2) Derived class  
 3) Child class  
 4) all the above
09. A class from which other classes are derived  
 1) Base class  
 2) Parent class  
 3) Super class  
 4) all the above
10. Which of the following array declaration and instantiation are not legal  
 1) `int [ ] a [ ] = new int [4] [4];`  
 2) `int a [ ] [ ] = new int [4] [4];`  
 3) `int a [ ] [ ] = new int [ ] [4];`  
 4) `int [ ] a [ ] = new int [4] [ ];`
11. Given a variable x of type int (which may contain a negative value), which of the following are correct ways of doubling type value of x  
 1) `x << 1;`  
 2) `x = x * 2;`  
 3) `x * = 2;`  
 4) both 2 and 3
12. Which of the following methods is executed first when an applet is run  
 1) `destroy ( )`  
 2) `init ( )`  
 3) `main ( )`  
 4) `stop ( )`
13. What does J2SE mean ?  
 1) Java 2 Platform Standard Edition  
 2) Java 2 Internet Standard Edition  
 3) Java 2 Platform Independent Standard Edition  
 4) Java 2 Systems Edition
14. An interface contains \_\_\_\_ methods  
 1) Non-abstract  
 2) Implemented  
 3) unimplemented
15. Given the following declarations  
`String s1 = new String ("Hello");`  
`String s2 = new String ("there");`  
`String s3 = new String ( ) ;`  
 Which of the following are legal operations ?  
 1) `s3 = s1 + s2 ;`  
 2) `s3 = s1 - s2 ;`  
 3) `s3 = s1 & s2`  
 4) `s3 = s1 & & s2`
16. Which one is a key word in Java ?  
 1) Friend  
 2) Size of  
 3) extends  
 4) Null
17. What will be printed out if this code is run with the following command line ?  
`Java my-prog good morning`  

```
Public class my - prog
{Public static void main (string argv [])
{system.out.println (argv [2])}}
```

 1) my - prog  
 2) Exception raised : "java. lang. Array index out of Bounds exception : 2"  
 3) Morning  
 4) good
18. Which character encoding scheme is followed for the "char" datatype in Java ?  
 1) ASCII  
 2) EBCDIC  
 3) BCD  
 4) Unicode
19. \_\_\_\_ operator is not a bit-wise operator  
 1) `>>>`  
 2) `>`  
 3) `>>`  
 4) `<<`
20. Which of the following feature in Java is not a keyword ?

21. Which of the following operations in Java has the highest precedence than the other operator ?  
 1) package                      2) volatile                      3) import                      4) Null
22. Which of the following ways of declaring and initialization a 1-dimensional integer array of size there is / are statically correct ?  
 1) &                      2) %                      3) ++                      4) ::  
 (A) int [ ] var = {1, 5, 6} ;    (B) int var [ ] = { 1, 5, 6}  
 (C) int [3] var = new int [ ] { 1, 5, 6}    (D) int [ ] var = new int [ ] { 1, 5, 6} ;  
 1) A and B                      2) A,B and D                      3) A and C                      4) None of the above
23. Consider the statement  
 System.out.print(Math.round(Math.random()));  
 The statement can print  
 1) only 0                      2) only 1                      3) only 0 or 1                      4) any non - negative integer
24. Is null an object  
 1) Yes                      2) no                      3) sometimes yes                      4) none of the above
25. Which of the following statements will result in compilation error ?  
 (A) signed int abc ;    (B) unsigned int abc ;    (C) signed byte abc ;    (D) signed long abc ;  
 1) A,B and C                      2) A,B and D                      3) all the above                      4) None
26. The statements  
 double what is this = -1.010.0 ;  
 system.out.print(what is this) ;  
 1) results in compilation error                      2) results in overflow error  
 3) prints - Infinity                      4) prints a garbage value
27. The operators ||, &&, \*, !, if arranged in the ascending order of precedence, read  
 1) &&, \*, !                      2) ||, &&, \*, !                      3) ||, &&, ! \*                      4) !, ||, &&, \*
28. Which of the following is a well-defined state of a thread  
 1) Ready state                      2) Running state                      3) Waiting state                      4) All the above
29. A new thread can be created  
 1) by extending thread class                      2) by implementing the runnable interface  
 3) both 1 and 2                      4) none of the above
30. Which of the following statement is correct  
 1) An interface does not have instance variable    2) Every method of an interface is abstract  
 3) All the methods of an interface are automatically public  
 4) All the above
31. The keyword used to include a particular package  
 1) package                      2) include                      3) import                      4) None
32. In Java Error class  
 1) defines those exceptions which are not expected by the programmer to handle  
 2) is used to handle exceptional conditions                      3) both 1 and 2                      4) None

- SAIMEDHA**

46. Which keyword can protect a class in a package from accessibility by the classes outside the package?  
 1) private 2) protected 3) final 4) don't use any keyword at all (make it default)
47. Which of the following statements are true?  
 1) An abstract class may not have any final methods.  
 2) A final class may not have any abstract methods.  
 3) An inner class may be declared with any accessibility keyword.  
 4) Both 2 and 3
48. Which of the following are true about the Error and Exception classes?  
 1) Both classes extend Throwable.  
 2) The Error class is final and the Exception class is not.  
 3) The Exception class is final and the Error is not.  
 4) Both classes implement Throwable.
49. What is the data type for the parameter of the sleep() method?  
 1) byte 2) long 3) float 4) Boolean
50. When a program does not want to handle exception, the \_\_\_\_\_ class is used.  
 1) throws 2) catch 3) notify 4) wait

### PRACTICE SET - III KEY

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 01) 4 | 02) 4 | 03) 4 | 04) 4 | 05) 2 | 06) 3 | 07) 2 | 08) 4 | 09) 4 | 10) 3 |
| 11) 4 | 12) 2 | 13) 1 | 14) 3 | 15) 1 | 16) 3 | 17) 2 | 18) 4 | 19) 2 | 20) 1 |
| 21) 1 | 22) 2 | 23) 3 | 24) 2 | 25) 3 | 26) 3 | 27) 2 | 28) 4 | 29) 3 | 30) 4 |
| 31) 3 | 32) 1 | 33) 1 | 34) 3 | 35) 1 | 36) 1 | 37) 4 | 38) 3 | 39) 2 | 40) 3 |
| 41) 4 | 42) 3 | 43) 3 | 44) 3 | 45) 2 | 46) 4 | 47) 4 | 48) 1 | 49) 2 | 50) 1 |

### SELF TEST

01. Suppose that following and s2 are two strings. Which of the statements or expressions are correct  
 1) String s3 = s1 + s2 2) s1 compare to (s2) ; 3) int m = s1. length ( ); 4) all the above
02. The methods wait ( ) and notify ( ) are defined in  
 1) java. lang. string 2) java. lang. Runnable 3) java. lang. object 4) java. lang. Thread
03. When we implement the Runnable interface, we must define the method  
 1) start ( ) 2) int ( ) 3) run ( ) 4) runnable ( )
04. DataInput is  
 1) an abstract class defined in java. io. 2) a class we can use to read primitive data types  
 3) an interface that defines methods to open  
 4) an interface that defines methods to read primitive data types
05. Which are the valid ways to create data input Stream streams?  
 1) new DataInput Stream ( ) ; 2) new Datainput Stream ("in.dat", r")  
 3) new DataInput Stream (new File ("in.dat"));

- 4) New DataInput Stream (new File input Stream ("in.dat");
06. The Java Virtual Machine performs  
 1) loading  
 2) Linking  
 3) initialization  
 4) none of the above
07. Java...is a language of machine instructions understood by the Java Virtual Machine and usually generated (Compiled) from Java language source code  
 1) Javap  
 2) Applet  
 3) Beans  
 4) bytecodes
08. The Java compiler program is  
 1) compjava  
 2) javac  
 3) javacomp  
 4) jc
09. The Java interpreter program is  
 1) java  
 2) intjava  
 3) javaint  
 4) none of the above
10. Which of the following command is used to compile the java program HelloJavaApp.java  
 1) comp HelloJavaApp.java  
 2) javac helloJavaApp.java  
 3) java comp HelloJavaApp.java  
 4) None of the above
11. HelloJavaApp. java is the file you created in the text editor, and ...is the class file that java compiler created  
 1) hellojavaapp.class  
 2) helloJavaApp.cc  
 3) HelloJavaApp.exe  
 4) HelloJavaApp.com
12. Which of the following cannot be used with the throw statement ?  
 1) Error  
 2) Event  
 3) Throwable  
 4) Exception
13. Consider the following Java code  
`int x, y, z;  
 y = 1 ; z = 5 ; x = 0 - (x + y) + z ++ ;`  
 After execution of this code, what will be the values of x,y and z ?  
 1) x = 3, y = 2, z = 6  
 2) x = 4, y = 2, z = 6  
 3) x = 4, y = 1, z = 5  
 4) x = -7, y = 1, z = 5
14. In Java, what is the advantage of inheritance ?  
 1) security  
 2) Portability  
 3) Reusability  
 4) Abstraction
15. The following methods are used for Inter Thread communication ?  
 1) Stop ( ) and start ( )  
 2) Start ( ) and destroy ( )  
 3) Sleep and suspend ( )  
 4) wait ( ) and notify ( )
16. What is the sequence for calling the method by AWT for Applets ?  
 1) init ( ), start ( ), paint ( )  
 2) init ( ), stop ( ), destroy ( )  
 3) start ( ), destroy ( )  
 4) init ( ), start ( ), repaint ( )
17. Which of the following is a correct comment ?  
 1) \* / comments \* /  
 2) \*\* comment \*\*  
 3) /\* comment \*/  
 4) { comment }
18. Which of the following is not a primitive data type in java ?  
 1) byte  
 2) boolean  
 3) string  
 4) double
19. What is the output of the following java program ?  

```
Public class Example App {
Public Static Void Main (String [] args) {
System . out . print in
((1 = 1) ? (7 == 8) ? 5 : 6 : 4) ;
}
```

  
 1) 4  
 2) 6  
 3) 5  
 4) 1
20. Which of the following methods is used to get the error message for the exception that was thrown?  
 1) print message  
 2) extract message  
 3) thrown message  
 4) get message

21. Which of the following is the boolean operator for logical - AND ?  
 1) &                                      2) &&                                      3) 1                                      4) 1&
22. A block comment can be written by  
 1) Starting every line with double slashes ( // )                                      2) starting with / \* and ending with \* /  
 3) starting with // \* and ending with \* //                                      4) starting with < ! - and ending with - ! >
23. Which of the following identifiers is invalid ?  
 1) Papername                                      2) wrtername                                      3) typename                                      4) printname
24. Which of the following cannot be used as valid identifier ?  
 1) bitand                                      2) bittand                                      3) biand                                      4) band
25. Which of the following is not a valid escape code?  
 1) \t                                      2) \v                                      3) \f                                      4) \w
26. Let m be a variable of data type byte. The value of m < 4 is same as  
 1)                                      2)                                      3)                                      4)
27. Which of the following operator take(s) only integer operands  
 1) %                                      2) ++ (Post - increment)                                      3) ++ (Pre-increment)                                      4) None
28. Which of the following is the correct operator to compare two variables ?  
 1) ; =                                      2) =                                      3) equal                                      4) ==
29. A variable is / is  
 1) string that varies during program execution  
 2) A portion of memory to store a determined value.  
 3) Those numbers that are frequently required in programs 4) None of the above
30. A 'thread' is  
 1) a program is path of execution                                      2) a program in execution  
 3) a set of programs                                      4) None

### SELF TEST KEY

- 01) 4    02) 3    03) 3    04) 4    05) 4    06) 1    07) 4    08) 2    09) 1    10) 2  
 11) 1    12) 3    13) 1    14) 3    15) 4    16) 4    17) 3    18) 3    19) 2    20) 4  
 21) 2    22) 2    23) 3    24) 1    25) 4    26) 1    27) 4    28) 4    29) 2    30) 1