

Roll No. Y18271031

C

CBC-1952-U

MCA Third Semester

(End Semester)

Examination Dec. 2019

COMPUTER SCIENCE AND

APPLICATION

Paper - CSA-CC-323

(Java Programming)

Time : Three Hours]

[Maximum Marks : 60

Note :- Attempt all sections.

[P. T. O.

SECTION-A**(Objective Type Questions) 10×1=10**

Note :- Choose the correct option.

1. Class variable in Java is :

- (a) Shared by all the objects
- (b) Variable will have different value for different objects
- (c) Basically static variables
- ☒ (d) Both (a) and (c)

2. What will be outcome of the following code :

```
Class A {Public static void main (string args [])
```

```
{
```

```
    int x = 4; int x = 10;
```

```
    system.out.print (x); }}
```

- (a) 4
- ☒ (b) 10
- (c) Error
- (d) None of these

3. Which access specifier is used for describing applet class :

- (a) Private
- ☒ (b) Public
- (c) Protected
- (d) Either (a) or (b)
- (e) Either (b) or (c)

4. Which method of Java cannot be over ridden :

- (a) All methods
- ☒ (b) Final method
- (c) No method
- (d) Temporary method

5. The point () method of applet class requires.....object as an argument :

- (a) Applet
- (b) Graphics
- ☒ (c) Swings
- (d) None of the above

6. A static method can directly call :

- ☒ (a) Static methods only
- (b) Non-static methods
- (c) Both static and non-static methods
- (d) No method

7. Consider the following program :

```
Import my library. * ;
```

```
Public class show some class
```

```
{
```

```
    "code for the class
```

```
}
```

What is the name of the Java file containing this program?

- (a) Mylibrary. Java
- ☒ (b) Show some class. java
- (c) Show some class
- (d) Show some class. Class

8. Which will legally declare, construct, and initialize an array :

- (a) `int [] my list = {"1", "2", "3"};`
- (b) `int [] my list = (5, 8, 2, 7)`
- (c) `int my list [] [] = { 4, 9, 7, 0}`
- ☒ (d) `int my list [] = {4, 3, 7}`

9. The type of operand (s) for a bitwise operator must be :

- ☒ (a) int
- (b) float
- (c) boolean
- (d) char

10. Which of the following may be the part of a class definition :

- (a) Instance variable
- (b) Instance methods
- (c) constructors
- ☒ (d) All of the above
- (e) None of the above

SECTION-B

(Short Answer Type Questions) 4x5=20

Note :- Attempt any **four** questions. All questions carry **five** marks.

- ① What do you understand with JVM? Describe the method for compilation and execution of a Java program.
- ② Describe the various operators used in during the development of Java program.
3. What is multi threading? What is the need of threading in Java? How would you add threads to a class already inherits from a class other than the thread class? Explain with example.
- ④ What is AWT in Java? Explain the hierarchy of AWT components with used.
5. What is meant by stream and what are the types of streams and classes of the streams? Why is pushback input stream used?
- ⑥ Create a Java applet with two text boxes and a button. Write a program so that on entering two numbers in the text box and clicking of a button it displays the greater of the two numbers.

SECTION - C

(Long Answer Type Questions) 3x10=30

Note :- Attempt any **three** questions of the following.

1. (a) What is object serialization? Write a java program that writes the state of an object to a file which includes user name and password. Also ensure that the password is not stored in the file.
- (b) What will be the result of attempting to compile and run the following code :
- (i) Public class it test {

Public static void vain (string args){

if (true)

if (false)

system. out. print ln ("a");

else

system. out. print ln ("b");

3

3

(ii) Class my class {

Public static void vain (string arge []){

boolean b = false;

int i = 1;

do

{

i ++;

b = !b;

} while (b);

system. out. print ln (i);

}

}

2. What are a class and object? How is an object related and different from a class? Write a program that displays all the prime numbers between 2 and 100.

3. (a) What is thread in Java? Write a Java program to implement runnable class to create a thread.

(b) What do you understand by event handling in Java? Give example as key board event, window event and house event.

4. (a) Differentiate between abstract class and interface specifying matrices of differences write a program to define abstract class, with two methods addition () and subtractions (). addition () is abstract method. Implement the abstract method and call that method using a program (s).

(b) Explain the hierarchy of stream classes in the I/O package. What is the difference between Binary stream and text stream?

5. Write notes on the following (any two) :

(a) Java stack and heap

(b) Life cycle of applet

(c) Wait (), notify () and notify all () methods

(d) Container class and component class