Code No. : A.C-394

Annual Examination, 2020

B.C.A. Part III
JAVA
Paper I

[Programming in Java]

Time : Three Hours]   [Maximum Marks : 100

Note : *Section 'A', containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.*

Section 'A'

Answer the following very short answer type questions in one or two sentences.   **2×10=20**

1. What is Byte code in Java ?

2. Define abstraction in Java.

3. What do you mean by JVM ?

4. What is the use of interface ?

5. What is Runtime exception in Java ?

6. Define Thread Synchronization.

7. Write the package name, used in network programming in Java.

8. Define Applet.

9. What is the use of Graphics class in applet ?

10. Write the output of the following Java program :

```
Class for Demo  {

Public static void main (string args [   ] )

    {

int    ar [   ] = {1, 2, 3, 4, 5};

    for (int i : ar )  {

    system-out-printin ( i );

    }

   }

}
```

[2]

4. Differentiate between byte stream and character stream. Write name of five classes of byte stream and character stream.
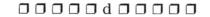
Or

Write the steps of JDBC connectivity and explain with suitable example.

5. Write a java program to implement Applet and explain.

Or

Write short notes on the following (any two) :

(a)   AWT Controls,

(b)   Delegation Even Model,

(c)   Action Event Class,

(d)   Frame Class.

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Section 'B'

Answer the following short answer type questions with word limit 150–200.   6×5=30

1. Differentiate between String Class and String Buffer class.

Or

Explain Wrapper classes in Java.

2. What are the uses of final keyword ? Explain

Or

Differentiate between *'this'* keyword and *'super'* keyword.

3. Differentiate between *throw* and *throws* clause.

Or

Explain the concept of Thread priorities.

4. Write a java program to read your name and display it in the console using scanner class.

Or

Discuss the TCP/IP client and server sockets in Java.

5. Draw a suitable life cycle of applet and explain.

Or

Explain the following (any two) :

(a) Frame class,

(b) Panel class,

(c) Event class.

Section 'C'

Answer the following long answer type questions with word limit 300–350.   **10×5=50**

1. Discuss vector class with suitable example.

Or

Explain various types of nested class in brief.

2. How can we implement multiple inheritance using interface in Java ? Explain with suitable example.

Or

Discuss the concept of dynamic method dispatching with example.

3. What is exception in Java ? Write a Java program to define and access user. Define exception.

Or

How can we implement multiple threads in Java ? Explain in brief.