

2022

COMPUTER SCIENCE

[Honours]

(B.Sc. Second Semester End Examination-2022)

PAPER-C3T

[Programming in Java]

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Group A

1) Answer any five questions: 5x2= 10

- a. What is the meaning of the following line in a Java program:
"public static void main (string args[])"?
- b. What do you understand by Java virtual machine? What is the difference between JDK, JRE, and JVM?
- c. What is the use of "this" keyword?
- d. What is use of final keyword?
- e. What are the various access specifiers in Java? What is the main difference between friendly access and public access modifier?
- f. What is a class? How does it accomplish data hiding?
- g. When do we declare a variable or a method or a class final?
- h. Is Empty.java file name a valid source file name?

(2)

Group B

Answer any four Questions:

4x5 = 20

2. Explain Java garbage collection mechanism. Why string in Java are called as immutable? 3+2
3. What do you mean by dynamic binding? Explain different string handling functions in Java. 2+3
4. What is method overriding? Compare and contrast method Overloading with method Overriding.
5. What is multithreading? How multi threading is achieved in Java? 2+3
6. What is string class in Java? How does string class differs from the String buffer class? Write a java program to check whether a string is palindrome or not.
7. What is an applet? Describe the complete life cycle of an applet.

Group C

Answer any One Question:

1x10 = 10

8. a) What is a thread? What are the differences between multithread and multi-tasking?
b) How to create a thread?
c) Describe the complete lifecycle of a thread. (2+2)+2+4
9. What do you mean by an exception? What are different types of exceptions in Java? Explain exception handling in Java.

2+2+6