### 2nd Semester

# COMPUTER SCIENCE

(Honours)

PAPER-C3P Set 1

(Practical)

Full Marks: 20

Time: 2 Hours

The figures in the right hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

# Answer one question.

- Write a program to find the sum of any number of integers interactively, i.e. entering every number from the keyboard, whereas the total number of integers is given 15 as a command line argument.
- 2. Write a program to demonstrate multiple inheritance.

3.	Write a program that takes two number a and b as inp					ut,
	computes a	/b, and	invokes	Arithmetic	Exception	to
	generate a n	essage	when the	denominato	r is zero.	15

- Write a program to demonstrate priorities among multiple threads.
- Write a program to show the use of static functions and to pass variable length arguments in a function.
- 6. Write a program to convert a decimal to binary number.

7. Create an applet to accept two integer numbers from the user using two text-boxes and display the sum as a result:

,	Applet
	2 3
	Input a number in each box
	THE SUM is : 5

	Write a java program to find the sum of any number	of
	integers entered as command line arguments.	15

- 9. Write a java program to find the factorial of a given number.
- 10. Write a java program to check if a number is prime or not, by taking the number as input from the keyboard.
  15
- 11. Write a program to show function overloading.
- 12. Write a program to show the difference between public and private access specifiers.
  - Write a program to show function overriding and use of final keyword.
  - 14. Write a JAVA Program using

-1

- (a) Default constructor.
- (b) Arguments constructor.
- (c) Copy constructor.
- To find the area of a rectangle using the following formulae area = length\*breadth.

15. Design a class to represent a bank account. Include the following members:

Data members:

Name of the depositor

Account number

Type of account

Balance amount

Methods:

To assign initial values

To deposit an amount

To withdraw an amount after checking balance

To display the name and balance.

15

Practical Note Book: 2 Marks

Viva-Voce : 3 Marks]

## 2nd Semester

## COMPUTER SCIENCE

(Honours)

PAPER-C3P Set-2

(Practical)

Full Marks: 20

Time: 2 Hours

The figures in the right hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answer any one question (Lottery Basis).

1×15

- 1. Write a JAVA program to display the exact middle character of a string. For example if the input string is "The rose is red" them the output will be 'e'.
- 2. Write a JAVA program to show function overriding.

- 3. Write a JAVA program to convert binary to decimal.
- 4. Write a Java program to show the "multilevel inheritance".
- 5. Write a JAVA program to show the use of "THROWS" and "FINALLY" keywords.
- 6. Write a JAVA program to print first 100 prime non-Fibonacci numbers.
- Write a JAVA program to check whether an inputted string in Palindrome or not.
- 8. Write a JAVA program to find the factorial of 5 using  $a_{ij}$ , let.
- 9. Write a JAVA program to use an abstract class.
- 10. Write a  $\Lambda$  JAVA applet to draw the following figures:



- Write a JAVA applet which will read five numbers through applet and find their maximum.
- 12. Write a JAVA program that takes two numbers, a and b as input, computes a/b, and invokes arithmetic exception to generate a message when the dominator is 0.
- 13. Write a JAVA program to print the following,

- \* \* \* \* \* and so on
- 14. Write a JAVA Program to calculate factorial of a number.

  The function for calculating the factorial shall be written in a package created by you.
- 15. Write a JAVA program which will show the use of multiple thread.

[Practical Note Book: 2 Marks

Viva-Voce : 3 Marks]