SECOND ASSIGNMENT
JUNE SEMESTER 2021

BACHELOR OF COMPUTER SCIENCE (HONS.)
(IN COLLABORATION WITH IUKL)

DISTRIBUTED AND PARALLEL COMPUTING
(CSC 2624)

LECTURER'S NAME : MANOJ GAUTAM

GENERAL INSTRUCTIONS

1. This question booklet consists of 2 pages including this page.
2. There is one **SECTION** in this question booklet.
3. Please submit assignment solution in **SOFT COPY (PDF FORMAT).**

SECTION A **(30 Marks)**

This section consists of THREE (3) questions. Answer all question.

1. Develop a java RMI Client and server program to compute the power of a number such that the client will call the ***RemoteCalcObject.computerPower(num)*** object method to compute the power of number and print the result in the screen.

(10 marks)

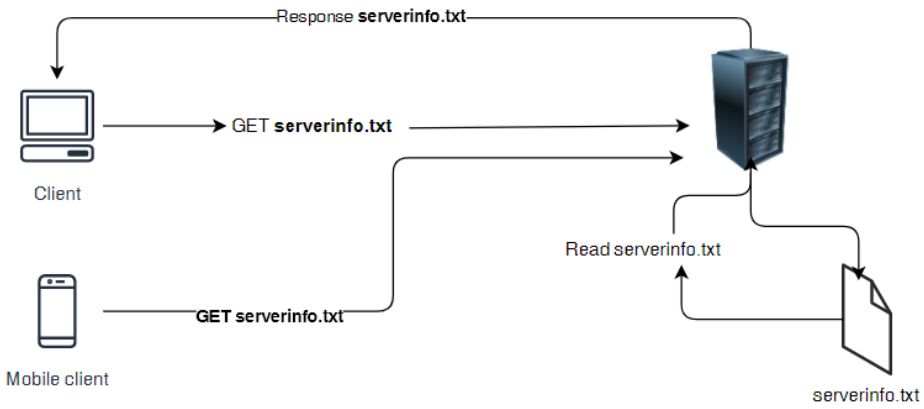
2. Write an OpenMP C++ program to implement FOUR (4) parallel section clause by setting the number of threads to 4 and compute the sum of prime numbers up to (100 billion) using 4 threads.

(10 marks)

3. Develop a multi-threaded web server that receive the file name from the client such that ***serverinfo.txt*** and return the file that resides in server to the client. Client will parse the file content and display it on the screen.

(10 marks)

Note: Your server must implement multithreading to serve the clients concurrently. You can use C++, Java or python to implement the web server.



*****END OF QUESTIONS*****