

Computer Science and Engineering

II M.Tech CSE-LAB TEST

03-06-2020

Time: 2 Hrs[1Hr & 30 Min.-write up, & 30 Min.-upload]

Total Marks:20 M

Note:

- Students must write the answers in their own handwriting on a white sheet of paper.
- The details to be mandatorily written on the answer sheet are: Name, Semester, Section, Roll Number, Registration Number, Course name, Signature with date.
- On completion of answering the assignment, students need to scan/image (using device of your choice) all the answer sheet/s in sequence and save it with file name of their registration number in PDF/ Image format.
- Upload the above pdf/image file containing the answers to MS Teams Assignment platform within the given schedule.
- CLICK ON "ADD WORK" OPTION, ATTACH THE PDF/IMAGE AND THEN CLICK ON "TURN IN".
- Student to contact faculty member concerned through mail/phone in case of any difficulty faced by them during the assessment process.

Q 1. A)Write a program in **Python**, to identify the relational operators from the given input 'C' file.

5M

1.B) Write a **PYTHON** program for a recursive descent parser, and the language defined by the following grammar for the parser. Test your parser with the inputs: Test Data. The test cases include a number of strings to accept and a number to reject.

10M

E ---> E + T | T

T ---> T * F | F

F ---> (E) | id

Test Data

a+b*c\$

a*b*c\$

a+b*c*d\$

(a+b)*c\$

a*(b+c)\$

(a*b*(c+d)+e)+f\$

((a*b*(c+(d))+e)+i)\$

\$

(plus error entries)

a+b*\$

b*&\$

*a+b\$

a+*b\$

(a+b\$

(a+b)+c)*d)\$

1.C) Write a **Python** program, to implement a server that communicates with clients using the TCP Internet protocol.

5M