

UCS301 –Data Structures

Instructions for MST Lab Evaluation and Sessional Quiz

The MST Lab Evaluation and Sessional Quiz will be conducted in two sessions as per the following schedule:

Session 1: September 15, 2022 (Thursday) @ 17:30 Hrs to 20:00 Hrs.

Session 2: September 16, 2022 (Friday) @ 17:30 Hrs to 20:00 Hrs.

Half of the students will be evaluated in Session 1 and remaining will be evaluated in Session 2. The seating plan will be shared later. In each session, the first 10 minutes are reserved for Sessional Quiz followed by Lab Evaluation. Two hours are reserved for Lab evaluation including one hour of network delay. Students are directed to submit within an hour or at the earliest they can.

- **Sessional Quiz**

Syllabus

Analysing algorithms: Importance of efficient algorithms, Order arithmetic, time and space complexity.

Linear Data Structures: Arrays, Linked lists (Singly, Doubly, Circular), Strategies for choosing the appropriate data structure, Abstract data types, their implementation and applications: Stacks (using Arrays and Linked-list), Queues (using Arrays and Linked-list)

Instructions

- It will be on Thapar LMS.
- It is of 08 marks and has a weightage of 08 marks as well.
- PAGE NAVIGATION IS NOT ALLOWED.
- The quiz will have an objective pattern and no negative marking will be there.

- **Lab Evaluation**

Syllabus

Arrays and Linked List (Lab Assignment 1, Lab Assignment 1_A, Lab Assignment 2, and Lab Assignment 3)

Instructions

- This activity is organized using [CodeChef](#). All of you thus required to create the required accounts and follow these guidelines.
- It is of 10 marks and has a weightage of 10 marks as well.
- It's completely online and CodeChef ID is mandatory to do the submissions.
- No other method of submission is allowed.
- One can use any programming language supported by CodeChef, though libraries (like STL in C++) are not allowed. Submissions with such libraries in any language will score the lowest marks as is decided by the associated faculty members.

- In case none of the testcases gets passed for any of the objectives, then those submissions will be checked manually.
- Earlier submissions carry more weightage. As the time passes, chances to score full marks reduces irrespective of successful submissions. The decrease in weightage of marks varies with the problem and is solely decided by the associated faculty members. The criteria followed will be disclosed to the students after freezing the marks of that respective evaluation.
- One may attempt the following questions to get familiar with the [CodeChef](https://www.codechef.com/) platform.
 - <https://www.codechef.com/MOPC2018/problems/LMAD>
 - <https://www.codechef.com/UCSD2020/problems/DSLA1>
 - <https://www.codechef.com/UCSD2020/problems/DSLA3>
 - <https://www.codechef.com/UCSD2020/problems/DSLA4>
- Following is the expected Code Of Conduct (borrowed partially from [CodeChef](https://www.codechef.com/)):
 - You should not have multiple accounts on CodeChef. If you have, then you should delete all except one.
 - You must take good care of your code. Protect it from getting leaked, getting shared, and getting copied by your foes, friends, or just a random peer. It is your responsibility to provide it the safety it deserves.
 - You should avoid sharing formulae, logic, or any other significant aspect of your code during evaluation. If plagiarism algorithm finds striking similarities between your code and someone else's, then both the students score low marks.
 - If you are taking your code from some other source and you get caught in plagiarism check, then also you score low marks.
 - Do not ask or discuss any aspect of evaluation problem by any means. Discussion of strategy should also be avoided during the evaluation and postponed till the end.
 - Stay honest. If you come across any wrongdoing, do report that to us. We will investigate the issue and take appropriate action to stop it.
 - You guys write beautiful codes. Why ruin it by obfuscating it? Keep the real beauty of the code intact. Do not obfuscate it.
 - Do not try any dishonest means to score more marks.
 - You are only responsible for timely submission. In case of missed deadlines, no favour will be given to anyone. It's thus advised to submit/re-submit your code after some interval of time (say 15 minutes).

Not adhering to the above set of guidelines may lead you to score low marks even ZERO.