## Discrete Structures for CS Exam 3A

Name: $\qquad$

- This is a closed book exam; only 1 sheet (both sides) of handwritten notes is permitted.
- No calculators. No cell phones.
- You will have 135 minutes for this exam.
- It will consist of two sections
- (60pts) 12 multiple choice questions worth 5 points each
- (120pts) 12 medium-length questions/problems worth 10 points each


## Instruction

Read each question carefully, and work as many as possible. You may skip some problems, since you need to collect only 150 points out of 180 . I suggest you try to answer all questions, since you may receive only partial credit on some of them. For the multiple choice problems, write the letter corresponding to the correct answer on the answer-line next to the question. You will not receive any partial credit for work done on multiple choice problems. For the mediumlength problems, be concise and given well-written explanations and answers. Rambling or poorly written/organized explanations, which are difficult to follow, will receive less credit.

| Mult. Ch. | Problem 1 | Problem 2 | Problem 3 | Problem 4 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Problem 5 | Problem 6 | Problem 7 | Problem 8 | Problem 9 |
|  |  |  |  |  |
| Problem 10 | Problem 11 | Problem 12 | Total |  |
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