

**CS 201: DISCRETE STRUCTURES**  
**SECTION G**

December 13, 2018.

Quiz 6 solution

CIRCLE ALL CORRECT ANSWERS. THERE MAY BE MORE THAN ONE CORRECT ANSWER

1. In how many ways can you arrange a group of 3 people for a photo from 3 different men and 4 different women?

- a.  $C(7,3)$
- b.  $P(7,3)$**
- c.  $C(3,3)C(4,3)$
- d.  $P(3,3)P(4,3)$

2. How many societies of 3 students can be formed from 15 math and 20 CS students?

- a.  $C(35,3)$**
- b.  $P(35,3)$
- c.  $C(15,3)+C(15,2)+C(15,1)+C(15,0)$
- d.  $C(15,3)+C(15,2)C(20,1)+C(15,1)C(20,2)+C(20,3)$**

3. In how many ways can we make a string from 5 beads of different colors

- a.  $C(5,5)$
- b.  $P(5,5)$**
- c.  $P(5,0)$
- d.  $C(5,0)$

4. How many total words of length 5 can we make from the letters {A,C, E, L, B, D}

- a.  $P(6,5)$
- b.  $6^5$**
- c.  $5^6$
- d.  $C(6,5)$

5. In how many ways can we put 3 balls in a bag from an unlimited source of yellow, orange, red, green and blue balls?

- a.  $P(8,3)$
- b.  $C(8,3)$
- c.  $7^3$
- d.  $C(7,3)$**