Math 1332 Contemporary Math **Fall 2018 Exam III**
Class time: **Name (Print):** _____

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1. (20 points) Find the mean, median,and mode for following data and also find outliers if exits:
   (a) 7, 3, 3, 11, 12, 3, 4, 14, 6, 4, 3, 53, 4,14, 6

   (b) 53, 52, 75, 62, 68, 58, 49, 49

2. (20 points) Find the five point summary, range and standard deviation of the following.

   (a) 98, 92, 95, 87, 96, 90, 65

   (b) 12, 7, 9, 10, 7, 8

3. (5 points) Find the probability distribution table for the sample space when tossing two coins.

4. (10 points) Use theoretical method to compute the probability when tossing two coins:
   (a) Exactly two head

   (b) Exactly one Tail

   (c) At least one head.

(d) No head

5. (10 points) When forming a committee of three members consisting boys and girls then find

(a) All girs

(b) Exactly two boys

(c) At least two boys

(d) No girls

6. (10 points) When rolling a die in one hand and tossing a coin in another hand then what is the probability of

(a) P(5 and H)

(b) P(Even numbers and T)

7. (10 points) There are 12 tennis balls in a balls of two different colors 6 red and 4 White balls. John wants to take out two balls from that bag then what the the following probability

   (a) P(Red and Red)=P(R and R)

   (b) P(White and Red)=P(W and R)

8. (15 points) There are 20 cards in a deck of card numbering from 1 through 20 that is $S = \{1, 2, 3, ..., 20\}$. And Events A=Even numbers, B=multiple of 5 and C=3,7, 13 then find the following probability

   (a) P(A or B)

(b) P(A or C)

(c) P(B or C)

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9. (5: points) (Bonus) Make a probability distribution table for the number boys in a family of three members.