Grading Scheme Quiz 2

1
   a) 1 Mark for formula, 3 for calculation and answer.
   b) 2 marks for finding the valid range for 2nd point, 2 marks for finding PDF s.t. three points form a triangle and 3 marks for calculation

2
   a) Correct 1 incorrect 0
   b) Correct 2, 1 marks deducted for calculation mistake or for not replacing the value of lambda. 0 mark for the wrong concept

3
   a) Correct 1 incorrect 0
   b) Correct with explanation 2, explanation missing but steps correct 1 otherwise 0

4 2 marks for each equation. If calculation mistake 1 mark deducted

5
   a) 2 marks for correct answer with explanation, 1 marks for the only answer with correct steps 0 otherwise
   b) 1 Mark for $E[x_i^2]$, 2 marks for $E[x_i x_j]$ if both are correct then 1 mark for var

6
   a) 1 mark for stating and 2 marks for proof.
   b) 2 marks for male expected value, 3 marks for female. Female 3 marks further dividing as 1 marks for expression and 2 marks for calculating the sum.

7
   a) 4 Marks if algo is correct, 1 mark will be deducted if some small error and 0 marks will be alloted for conceptual error.
   b) 1 For stating Hypothesis, 1 for the base case and 3 for induction steps.
   c) 1 Mark for finding how many calls and 2 marks for the number of random bits.