On the basis of the methods which I gone through the 2nd week, I along with group members made the following method that we will incorporate in our peer review process. The whole process of peer evaluation has different components like:

a) Calibration
b) Worker Allocation[5]
c) Peer Marking[2]
d) Normalization
e) Incentive Mechanism[1][4]
f) Grades[1]
The basic task of mine was to come up with an effective method for the evaluation that could handle all cases of grade biasness, partiality, dishonesty in grading, normalizing the grades, finding an effective incentive mechanism for Quality Control in the assessment process. For this I went through Beta Reputation System [4] and also through the various well established crowd sourcing reputation system[3][5]. We proposed a lightweight incentive mechanism which compares the rating of a question with the arithmetic average of the existing ratings. The reward for the rating depends on the agreement with the average rating according to the Beta probability distribution, which is widely used in reputation systems [4]. If the user is the first to submit a rating, he gets a reward of .5[1].

References: