Lab Assignment - 3

Instructor: Dr. Arabin Kumar Dey

1 Due date:

- 1/2/2013.

2 Notes:

- Make a proper documentation preferably in latex or using some other software and submit the printout of the report in .pdf form.
- Each student needs to write his/ her own solutions, even though discussions of the assignments between students are encouraged.
- Use best LCG for your C/C++ code.

3 Assignments:

1. Simulate 5000 sample of exponential with mean 5. Draw the histogram and the calculate the mean, maximum and minimum. (Use R and C/C++)
2. Generate 5000 sample from Gamma with parameter $n = 5$ and $\lambda = 5$. Draw the histogram and the calculate the mean, maximum and minimum. (Use R and C/C++)

3. Use the rejection method to generate from

$$f(x) = 20x(1-x)^3, \qquad 0 < x < 1.$$

(Use R)