PESIT Department of Computer Science and Engineering

Course: Data Analysis
Semester: 2014 Spring (January – May)
Instructor: BNR (Dr. B. Narsing Rao)

Assignment: 09
Topic: Distribution of Sample Variance
Due by: Midnight on Tuesday, March 25, 2014
Method: Send zip archive (.zip, .rar, etc.) by email to bnrao@pes.edu
             The name of the zip archive should be: DA-A09-your USN-your name
             (USN must be upper case and your name should be in mixed case)
             The zip archive should contain the following (see below for details):
             1. PDF report (see below) along with your observations
             2. Source file containing R functions (named DA-A09-USN-Name.R) used

Perform an experiment using R to determine the sampling distribution of the sample variance using samples of different sizes from a population that is normally distributed with a mean of 0 and a variance of 1. In each case take 100 samples and show the pdf of the sampling distribution as shown below:

Sample Size	pdf (i.e. histogram) of distribution of sample variance
3	
5	
10	
30	
50	
100	

Write your observations on the pdf.