

Department of Information Technology

Course Name: Modeling and Simulation IA1
Sem : VI (2023-24)

Max Marks: 20
Submission date: Mar 18,2024: 8.30 PM

Exploring MS Excel Data Analysis Tool pack

1. To generate the results of the simulation:
 - a. Open a new Excel spreadsheet.
 - b. Enter a heading at the top of a column, if desired.
 - c. Under “Tools” click on “Data Analysis.”
 - d. Find “Random Number Generation,” and double-click on it or highlight it and click OK.
2. Implement ANY TWO following simulations:
 - a. To simulate rolling a six-sided die 100 times.
 - b. To simulate 500 at-bats for a baseball player with a 0.320 batting average.
A result of 1 means a hit, 0 means an out.
 - c. To simulate a basketball player with a 70% free-throw average shooting ten free throws, 1000 times.
The result in each row is the number of made free throws (0 – 10) out of 10 attempts.
 - d. To simulate rolling two six-sided dice and recording the sum 250 times.
3. To tally the results in a table and create a histogram from the table:
 - a. Under tools click on “Data Analysis.”
 - b. Find “Histogram,” and double-click or highlight and click OK.
 - c. Leave the table created by “Histogram” highlighted and click on the Chart Wizard icon. You may simply click “Next” all the way through the wizard, unless you want to change or add something.
4. Prepare and submit a document showing all the screenshots of the problem solved using excel.
5. Name your Document as *IA1-Student Roll no-date of submission*