Stat 130, fall 2020

Final - Part B

Write your name at the top right corner on the first page

of your answer.

Due on December 18 (NOON) . Total Points = 10.

Please e-mail your answer in the PDF format to

subir.ghosh@ucr.edu

Please type up your answers.

Please Copy and Paste the R codes and the output with the anwsers.

Rules of the Midterm:

1. **Open books and notes.**

2. **Do not consult with anyone, not even your classmates.**

3. **Please do not ask the instructor or TA about the answers**.

4. **Please answer independently.**

Points = 10 = 1 + 3 + 3 + 3

From 38 students of fall 2020 Stat 130 students, draw a probability sample of 10 students

using the R program.

1. Christian, 2. Zachary, 3. Wesley, 4. Laura, 5. Morgan, 6. Quyen, 7. Lin, 8. Shalom, 9. Daniel,

10. Huijun, 11. Yihao, 12. Chi, 13. Julia, 14. Robert, 15. Thymi, 16. Camilla, 17. Sarah, 18. Tiffan, N.,

19. Antoinette, 20. Jade, 21. Alan, 22. Osvaldo, 23. Gemma, 24. Alexander, 25. Kamille, 26. Goldie,

27. Tiffany, T., 28. Baron, 29. Brian, 30. Michael, 31. Alice, 32. Yanlin, 33. Yiqing, 34. Xunyang, 35. Jiaying, 36. Sawanee, 37. Alexandra, 38. Bailey.

Answer the questions below.

1. Draw a simple random sample without replacement. Present the names of 10 students.

2. Draw a stratified random sample with proportional allocation, where the strata are:

   Stratum 1: Students 1- 19, Stratum 2: Students 20 - 38.

   Present the names of 10 students by strata.

3. Draw a stratified random sample with proportional allocation, where the strata are:

   Stratum 1: Students 1 -16, Stratum 2: Students 17 - 28, Stratum 3: students 29 - 34,

   Stratum 4: Students 35 - 38.

   Present the names of 10 students by strata.

4. Draw a probability sample of 3 clusters from the 13 clusters given below.

   Cluster 1: Students 1-3, Cluster 2: Students 4-6, Cluster 3: Students 7-9,

   Cluster 4: Students 10-14, Cluster 5: Students 15-19, Cluster 6: Students 20-24,

   Cluster 7: Students 25-26, Cluster 8: Students 27- 28, Cluster 9: Students 29-30,

   Cluster 10: Students 31-32, Cluster 11: Students 33-34, Cluster 12: Students 35-36,

   Cluster 13: Students 37-38.

   How would one draw the 3 clusters in the sample from the 13 in the population to have in the total of 10 students?

   Present the names of 10 students in the total from 3 clusters.