## Study Guide for Final EXAMINATION

## MATH 1401

The Final Examination will consist of 22 multiple-choice questions.

| Question <br> No. | Objective(s) |
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| 1 | Find the mean, median, and mode of a set of sample data. |
| 2 | Determine the sampling method used in collecting data. |
| 3 | Determine if data is quantitative or qualitative. <br> Determine if quantitative data is continuous or discrete, <br> Determine the level of measurement of data. |
| 4 | Apply the Range Rule of Thumb. |
| $5-6$ | Calculate basic probabilities. The P(A orB), P(A and B). <br> distribution. |
| 7 | Determine the probability of an event using the binomial <br> probability distribution. |
| 8 | Determine the probability of an event from a population that is <br> normally distributed. |
| 9 | Apply the Central Limit Theorem. |
| 10 | Find the critical value used in finding the margin of error. <br> Find the CI for $\mu$ and for P. |
| $10-13$ | Determine the sample size needed to estimate a population <br> parameter: Mean or Population Proportion. |
| $14-16$ | Identify a Type I and Type II error corresponding to a given <br> hypothesis. |
| $17-18$ |  |


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| $19-22$ | Perform a hypothesis test. |
| $23-24$ | Calculate the value of the linear correlation coefficient. <br> Determine if there is a significant linear correlation. <br> Make sure that you understand Method I for comparison with <br> rc (r critical from table A-5). <br> Also understand the use of P value from the Linear Regression <br> test on the TI. |
| 25 | Find the regression equation given a set of data. <br> Find the indicated predicted value whether you have linear <br> correlation or not. |

