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DEPT: PHYSIOLOGY

MATRIC NO: 17/MHS05/018

COURSE CODE: STA 312

ASSIGNMENT TITLE: HYPOTHESIS TESTING

1. Hypothesis testing:

Hypothesis can be defined simply as an educated guess or assumption based on observation of a particular process about one or more population that is testable and set up for the purpose of being approved or disproved.

Statistical Hypothesis testing which includes certain steps as a line of reasoning is a method whereby an analyst tests an assumption regarding a population parameter which may or may not be true. It calculates some quantity under a given assumption and the result of the test allows for the interpretation of whether the assumption is approved or credited or not. The particular hypothesis testing methodology used by the analyst depends on the nature of the data used and the reason for the analysis. The purpose of hypothesis testing is to aid in wise decisions making. The steps in the testing process.

2.

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| P- VALUE | CRITICAL VALUE |
| Only one value is required or needs to be computed to do the test | The test statistic needs to be computed and the critical value corresponding to the given confidence or significance level |
| It is the probability of obtaining a test statistic as extreme as the one for the current sample under the assumption that the null hypothesis is true  | It is the standard score such that the area in the tail on the opposite side of the critical values from zero equals the corresponding significance level |

3. a. it is important in assessment of the plausibility of a hypothesis by using sample data

B. It is also important for ex[erimental drug testing for viruses or diseases