1. True and False (7 Points) Circle (if .pdf) or Underline **T** or **F**

T F Current DOD policies encourage combining Testing and Training whenever possible.

T F Non-Developmental Items (NDI) and Commercial Off-the Shelf (COTS) items need not be tested since commercial testing is usually more than sufficient to meet military requirements

T F Contractors are normally not allowed to participate in the OPEVAL

T F Susceptibility is defined as P(Kill | Hit)*P(Hit)

T F Background Factors should not be measured because of the added instrumentation costs.

T F Live Fire Testing evaluates system survivability and weapon lethality

T F A Dendritic can be used as a tool for identifying systems functions and capabilities

2. With respect to **Factorial Designs** mark T or F (1 point each, total 6 points)

T F Significant interactions between factors could invalidate initial test conclusions.

T F If the variance within a factor (data scatter) is **increased**, the test becomes **more** sensitive and therefore it may be easier to determine the difference between factors.

T F A purpose of blocking is to decrease the experimental error ***within*** the primary factors.

T F In a Fractional Factorial test design, each trial run will contain at least one **ALIAS**

T F A Pareto chart may be used to rank the relative magnitude of factors when there are insufficient degrees of freedom to determine factor significance

T F The order of the trial runs should be randomized when possible

Multiple Choice (2 Points each) **Circle (if .pdf) or Underline BEST ANSWER**

3. The Fisher LSD family error rate for multiple comparisons is:
   a. The probability of correctly identifying a difference in pairs of factor means
   b. The probability of correctly finding no difference in pairs of factor means
   c. The probability of not finding a difference in factor means when there is one
   d. The probability of incorrectly identifying a difference between pairs of factor means when there is none