

# **Categorized Practice Questions for Probability & Random Process (IT- V Sem.)**

Compiled from Practice Questions 3&4 and Practice Que 3  
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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)  
**Subject: Probability and Random Process (IT-2160511)**

## **1. Hypothesis Testing (Statistical Tests)**

This category focuses on questions related to hypothesis formulation, types of errors, different statistical tests (t-test, Chi-square), and finding confidence limits.

Q1. Explain hypothesis with examples and types of errors.

Q2. What is statistical test with brief introduction of all type statistical test.

Q3. Find the Students' test for following variable values in a sample of eight: -4, -2, -2, 0, 2, 2, 3, 3 taking the mean of the universe to be zero.

Q4. In 120 throws of a single die, the following distribution of faces was obtained:

Faces	1	2	3	4	5	6	Total
Frequency	30	25	18	10	22	15	120

... (Content continues for other sections in the full document) ...