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**XIM UNIVERSITY**

M.SC ECONOMICS

2022-24 BATCH

**NAME OF THE COURSE: Time Series Econometrics**

**Subject: Assignment-1**

**Final Submission Deadline: 21/10/2023**

**Marks: 20**

**Problem 1:** Please write a report using time series variables either on volatility models (ARCH and GARCH) or VAR models. Make sure that you following the following steps:

1. *Write your name, roll number and title of the project in page 1*
2. *Plot your data sets and provide some summary statistics (mean, median) to illustrate the variables used. Also describe the variables.*
3. *Keep a separate section on stationarity. Check stationary using Dicky Fuller and Elliot Rothenberg and Stock(DFGLS) tests statistics.*
4. *If you are running VAR models present the impulse response functions and your observations.*
5. *If you are running ARCH / GARCH models make sure you discuss in details on the model selection process.*
6. *Please note that you can use combination of VAR and ARCH/GARCH models also. For example, relationship between inflation uncertainty and unemployment. Such projects will attain higher marks*

Best of Luck

Dr. Sandip Sarkar