

SEMESTER EXAMINATION-2021
CLASS - MBE SUBJECT ECONOMETRICS
PAPER CODE: MBE C303 PAPER TITLE: ECONOMETRICS

Time: 3 hour

Max. Marks: 70

Min. Pass: 40%

Note: Question Paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. (5 X 6 = 30 Marks)

Question-1: Explain the concept of Econometrics in Business management.

Question-2: What are main tools used in Econometrics?

Question-3: Discuss the concept of time series analysis.

Question-4: Explain a) Multiple regression b) Karl Pearson Correlation

Question-5: Explain Multicollinearity. How it is important to assess the outcome?

Question-6: Explain :a) Correlation b) Regression Analysis with examples.

Question-7: Define A) Nominal Data B) Ordinal Data with examples.

Question-8: Discuss the concept of Moments and give formula for first, second and third moment.

Question-9: Discuss Independent and Dependent Variables give examples.

Question-10: What is ANOVA? Discuss the standard error approximation and p-value concept.

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any FOUR questions in detail. Each question carries 10 marks. (4 X 10 = 40 Marks)

Question-11: Discuss the GARCH Model.

Question-12: Explain Autocorrelation. Discuss its application.

Question-13: Explain the application R and Eviews in data modelling.

Question-14: Fit a Linear Trend using Ordinary least squares regression method:

Year: 1990 1992 1994 1996 1998

Production: 18 21 23 27 16

Question-15: Calculate Karl Pearson's coefficient of correlation from the following data, using 20 as the working mean for price and 70 as the working mean for demand:

Price : 14 16 17 18 19 20 21 22 23

Demand : 84 78 70 75 66 67 62 58 60

Question-16: Explain the following:

A) Cross-sectional data

B) Time series data

C) Pooled cross-section

D) Panel data (longitudinal data)

Question-17: Discuss the Scope and Aim of Econometrics.

Question-18: Why do we need Econometrics? Discuss.

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