THIRD SEMESTER FYUGP EXAMINATION, NOVEMBER 2025

Discipline Specific Core (DSC) Courses - Major

AFA3CJ202 : FINANCIAL ECONOMETRICS

(Credits: 4)

Time: 2 Hours	Maximum Marks: 70

Section A

Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)

1.	Define Econometrics .	BL1	CO1
2.	What is meant by causation in statistics? How does it differ from correlation?	BL2	CO1
3.	Why is the formulation of a hypothesis an important step in econometric research methodology?	BL2	CO1
4.	Define dependent and independent variables.	BL1	CO2
5.	In the regression equation $Y=120+3.5X_1+2.1X_2+U$ interpret the **sign and magnitude** of the coefficients of X_1 and X_2.	BL1	CO2
6.	Define a multiple linear regression model.	BL1	CO2
7.	Mention one real-life application of multiple regression analysis.	BL1	CO2
8.	What is meant by functional form misspecification?	BL2	CO3
9.	How can the dummy variable trap be avoided?	BL2	CO4
10.	Why are dummy variables coded as 0 and 1?	BL2	CO4

Section B

Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)

11.	Differentiate between correlation and regression with suitable example.	BL1	CO1

(PTO)

		BL3	CO2
12.	A researcher fits the model using a sample of size n=20 and obtains the following estimates: • $\beta_1 = 1.5$ • $SE(\beta_1) = 0.3$ At the 5% significance level, test whether the slope coefficient β_1 is significantly different from zero.($t_{0.05,18} = 2.101$),State your conclusion with justification.		
13.	Discuss the problem of estimation in multiple regression analysis.	BL2	CO2
14.	Derive the OLS estimators for slope and intercept in a two-variable regression model.	BL2	CO2
15.	Discuss in detail the types of model specification errors with suitable examples.	BL2	CO3
16.	State and explain the assumptions of one-way ANOVA.	BL2	CO4
17.	Explain how dummy variables can be used to study gender-based wage differences.	BL1	CO4
18.	Explain the role of dummy variables in regression analysis.	BL2	CO4

Section C

Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)

19.	Discuss the role of econometrics in analyzing business and financial data	BL4	CO1
20.	Explain the impact of specification errors on hypothesis testing	BL2	CO3
	CO : Course Outcome		
	BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)		