



# COMSATS University Islamabad

## Sahiwal Campus

### (Department of Management Sciences)

Course Title:	Econometrics Theory and Applications				Course Code:	ECO 501		
Course	Dr. Irem Batool				Programme	SP18-BSBAF &FA18-BSBAF		
Semester:	1 & 2	Batch:		Section:		Date:	31-03-2021	
Time Allowed:	90 Minutes				Maximum Marks:		30	
Student's Name:					Reg. No.	CUI//SWL		
<b><u>Important Instructions / Guidelines:</u></b>								
<i>Read the question paper carefully and answer the questions according to their statements. Mobile phones are not allowed. Calculators must not have any data/equations etc. in their memory.</i>								

#### Part: III Subjective Paper

**Total Marks: 30**

Q.06 Describe the Cobb-Douglas production theory. Formulate an econometrically testable model for economic growth based on the theory of a Cobb-Douglas production function with two factor inputs, i.e. labor and capital. Explain the theoretical reasoning behind the expected sign and significance of each factor input in case of developing economy.

Using the enclosed Penworld tables data set, estimate an appropriate Cobb-Douglas type of growth function for a developing economy of your own choice, using the real GDP, real capital stock and population variables. Explain, discuss the estimated results and conclude the discussion.

Note: Also submit the estimated results in Eviews file, along with your results.