UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

B.Sc.

ES1120: Economics

COURSE CODE	:	**ENVS1120**
UNIT VALUE	:	**0.50**
DATE	:	**09-MAY-02**
TIME	:	**14.30**
TIME ALLOWED	:	**3 hours**

Answer 4 questions in all. Answer at least one question from each section.

Questions

Section 1

1. Discuss the fragmented nature of the construction industry.

2. What contribution does the construction industry make to the rest of the economy?

3. Show how price elasticity of demand is calculated and explain whether or not demand for construction is elastic or inelastic.

4. Discuss the role of money and finance in the construction industry.

5. Can there ever be an end to the business cycle? Explain why changes occur in the level of construction activity using the multiplier and the accelerator.

6. Discuss the fixed and variable costs of a typical construction firm and the fixed and variable costs of a project. Discuss the differences and the implications of these differences between costing the firm and the project.

Section 2

7. Answer all parts of this question.

   (A) Using the all new construction index, convert the quarterly all new work output series at current prices into constant 1995 prices. *(5 marks)*

   (B) Draw a time series of the quarterly data of all new work for 1995 to 1997. *(5 marks)*

   (C) Calculate the quarterly moving average of all new work for the period and add the moving average series to your graph. *(10 marks)*

   (D) Noting any limitations of the methods used, comment on your results in terms of seasonality and state what other uses might be made of the data given. *(5 marks)*

All new construction index 1995 -1997, 1995 = 100

	1995	1996	1997
All new construction index	100	103	105

All new work at current prices

Year	Quarter	All new work £m
1995	1	6,289
	2	6,766
	3	6,853
	4	6,762
1996	1	6,508
	2	7,024
	3	7,246
	4	7,145
1997	1	6,976
	2	7,527
	3	7,690
	4	7,733

Source: Housing and Construction Statistics, DETR.

8. Answer all parts of this question.

   (A) Taking the 'All new work at current prices' data, calculate the mean quarterly output figure. *(5 marks)*

   (B) Calculate the standard error of the quarterly data between 1995 and 1997. *(10 marks)*

   (C) How many standard errors away from the mean are (i) the first quarter in 1995 and (ii) the final quarter of 1997? *(5 marks)*

   (D) Explain the significance of the standard error figures you have calculated in (C). *(5 marks)*

END OF PAPER

Economics

For:
ENVS 1120
ENVS 2224

Lecturer: Stephen Gruneberg

$\sigma^2 = [\Sigma\ (x - barx)^2]/n$

$\sigma_{xy}^2 = [\Sigma\ (x - barx)(y - bary)]/n$

$z = (x - barx)/\sigma$

$m = [\Sigma(x - barx)\ (y - bary)]/\Sigma(x - barx)^2$

$c = bary - m.barx$

$SE = \sqrt{[\Sigma(y - predicted\ y)^2]/(n - 2)}$

$SSY = \Sigma(y - bary)^2$

$PV(1+r)^i = FV$

02 - CO421a - 3 - 50