UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc.

ES2224: Economics II

COURSE CODE	:	**ENVS2224**
UNIT VALUE	:	**0.50**
DATE	:	**23–MAY–05**
TIME	:	**10.00**
TIME ALLOWED	:	**3 Hours**

TURN OVER

ENVS 2224 ECONOMICS 2

Answer Five Questions. All Questions Carry Equal Marks.

Question 1

Please use David Pearce's model to illustrate the role of construction in the sustainable development.

(20 marks)

Question 2

(1) What are benefits and costs of vertical integration?

(10 marks)

(2) Use an example in the construction related industries to illustrate when these benefits and costs may happen.

(10 marks)

Question 3

Suppose you are a foreign contractor specialising in road work and you are considering making a move into the UK road construction market. Use Michael Porter's five-force model to describe the intensity of competition.

(20 marks)

Question 4

(1) Use Solow's model to explain why some countries cannot break out of poverty.

(10 marks)

(2) What are the weaknesses of Solow's model? In what sense can the Endogenous Growth Theory improve it?

(10 marks)

Question 5

(1) The size distribution of construction industry is heavily skewed towards small firms. What are the consequences of this phenomenon?

(10 marks)

(2) Critically comment on the following statement: (10)
"Partnering recommended in the Egan report can improve the skewed distribution of firm size in the construction industry and thus mitigate its adverse effects."

(10 marks)

TURN OVER

Question 6

(1) Explain what is the productivity gap problem in the UK. What are the UK government's strategies to raise productivity?

(10 marks)

(2) Explain how productivity can be measured? Compare strengths and weaknesses of different measures.

(5 marks)

(3) Is construction productivity declining? Comment.

(5 marks)

Question 7

(1) Before you go ahead with a project, what economic analysis should be done? Discuss your answer in the context of the Gateway review and illustrate your answer by examples.

(10 marks)

(2)An oil well now produces 100,000 barrels per year. The well will produce for 18 years more, but production will decline by 4 percent per year. Oil prices, however, will increase by 2 percent per year. The discount rate is 8 percent. What is the present value of the well's production if today's price is £14 per barrel?

(10 marks)

Question 8

(a) Game theory makes many unrealistic assumptions, but it still helpful for us to understand the real world. Comment.

(5 marks)

(b) Where do you think game theory is most appropriate to be applied in analyzing construction issues. Please identify at least three topics.

(5 marks)

(c) In the following game, two firms sell competing products and are deciding whether to undertake advertising campaigns. Firm A chooses rows and firm B chooses columns as illustrated in the following diagram.

		Firm B	
		Advertise	Don't advertise
Firm A	Advertise	(10,5)	(16,0)
	Don't advertise	(6,8)	(x,2)

(i) Assume that x=10. Find the dominant strategy of this game.

(2 marks)

(ii) Continue to assume that x=10. What is the Nash Equilibrium of this game?

(2 marks)

(iii) Repeat part (i) and (ii) with x=20

(2 marks)

(d) Find all the Nash equilibrium in the following game illustrated below:

		Firm B		
		Left	Middle	Right
Firm A	T	(1,0)	(0,1)	(5,0)
	B	(0,2)	(2,1)	(1,0)

(4 marks)

END OF PAPER