

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

B.Sc.

ES2224: Economics II

COURSE CODE : **ENVS2224**

UNIT VALUE : **0.50**

DATE : **01-MAY-02**

TIME : **10.00**

TIME ALLOWED : **3 hours**

02-C0430-3-40

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TURN OVER

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

Section 1

1. Using the theory of transaction costs explain whether or not construction markets operate efficiently.
2. Analyse the role of subcontracting from the point of view of firms in the construction industry.
3. Account for the problems of recruitment and training in the construction industry.
4. Describe the logic of the profit and loss account showing how profits or losses are generated and how gross profits are distributed between their various uses. You should illustrate your answer with a simple hypothetical example. Explain the uses of the annual profit and loss account.
5. Explain the theory of marginal productivity and show how prefabrication, standardisation and mechanisation may have affected labour productivity in the construction industry.
6. Account for the variation in the annual profitability of construction firms over the business cycle, tracing the likely movement of costs and prices in each phase of the cycle.

Section 2

7. (A) Based on the information given in the table below, draw a time series of average house prices from 1983 to 2001. (5 marks)
(B) Find the linear trend line of the time series of average house prices between 1983 and 2001 and superimpose the trend line on your graph. (10 marks)
(C) State the trend value in 2001 and comment on the difference between the actual value and the trend value and what this difference implies for average house prices in the future. (10 marks)

Average house prices 1983 to 2001

Year	House prices	Year	House prices
1983	£30,898	1993	£62,455
1984	£33,117	1994	£62,750
1985	£36,145	1995	£61,666
1986	£40,126	1996	£64,441
1987	£46,315	1997	£68,504
1988	£57,087	1998	£72,196
1989	£68,946	1999	£77,405
1990	£68,950	2000	£85,005
1991	£68,130	2001	£92,256
1992	£64,309		

Source: Halifax House Price Index, UK, All Houses, All Buyers, standardised average prices

8. A subcontractor set up business on Monday 4th March 2002 with £8,000 cash he had saved. The next day he purchased a ladder for £140, and other equipment for £800. On the 7th March he deposited £6,000 in a bank account. On the 8th he purchased materials for £180 on credit from a builders merchant for his first job, for M Contractors Ltd., for which he received ,850 on the 14th. On the 15th March he paid his labourers £200. He purchased a further £740 worth of materials on the 18th March for a second job, paying by cheque and when the job was completed on the 26th he posted an invoice to his customer, D and B Contractors Ltd. For £2,080. On the 28th March he bought a second-hand vehicle for £4,600, paid his labourers £750 and settled the builders merchant's invoice by sending a cheque for £180.

Write up the ledger accounts of the subcontractor using double entry book-keeping. You are not required to produce a profit and loss account for the month or a balance sheet as at the month's end. Ensure that the credit and debit sides balance by summing both sides. The ledger accounts should include: capital, cash, equipment, bank, wages, materials, builders merchant, vehicle, sales, and customers' accounts. (20 marks)

Comment on the first month's activities of the firm in terms of its total sales and expenditures and any other observations you can make from the data given. (5 marks)

END OF PAPER

Economics

For:

ENVS 1120

ENVS 2224

Lecturer: Stephen Gruneberg

$$\sigma^2 = [\Sigma (x - \bar{x})^2] / n$$

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

$$z = (x - \bar{x}) / \sigma$$

$$m = [\Sigma(x - \bar{x})(y - \bar{y})] / \Sigma(x - \bar{x})^2$$

$$c = \bar{y} - m \cdot \bar{x}$$

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

$$SSY = \Sigma(y - \bar{y})^2$$

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

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