

2006 Mid Year Examination

Student ID Number

Student ID Number

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| Family Name | |
| Given Names | |

Division of Information Technology, Engineering and the Environment

School of Natural and Built Environments

Course Name The Built Environment

Subject Area HUMS Catalogue Number 1029

Examination Day Wed Examination Date 28 June 2006

Examination Time 1400h Length of Exam 2 hours 30 mins

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| Examination Venue: | Royal Banquet Room |
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Instructions to Candidates

This is a closed book examination.

You may answer the questions in any sequence.

You must answer any TWO (2) questions from Section A (questions 1 to 3 inclusive); and any TWO (2) questions from Section B (questions 4 to 6 inclusive), i.e. a total of **FOUR (4) questions.**

Each question is worth 25 marks. Total 100 marks.

Conduct in examinations

- Students are responsible for finding out their examination times and locations and for travelling to the venue. Examination times and locations are published on the University web site and advertised on the student portal. It is recommended that students arrive at least 15 minutes prior to the advertised start time.
- Students who arrive up to 30 minutes after the published start time will be permitted to enter the examination room but will not be allowed any additional time to complete the examination.
- Students who arrive more than 30 minutes after the published start time will not be permitted to enter the examination room and will receive a zero mark for that assessment.
- All students must bring with them, and display on their desk:
 - their student identification card: or
 - an alternative form of photographic identification such as a passport or driver's license. If a student does not provide acceptable photographic identification the invigilator will compare the student's likeness with University records in order to verify the student's identity;
- Where applicable, students must also display on their desk:
 - an approved disability access plan; and/or
 - an ENTEXT Card (for students who are entitled to extra time but have not been issued with an indicator on their student identification card)
- Unless otherwise specified in the course information booklet or as an agreed provision under Section 3: Moderation and Variation, a student must not take into the examination room any item with the potential to provide them or another student with an advantage, including but not limited to:
 - text books or any other book including dictionaries
 - calculators
 - mobile telephones, personal digital assistants, messaging devices or any other electronic device
 - notes, or other written documents
 - devices or personal items
 - examination answer booklets, attendance slips or scrap paper
- Any items specified as being allowed in the course information booklet must not be enhanced or tampered with in any way that provides an additional advantage to the student or any other student.

Procedures during the examination

- Every student must complete the attendance slip provided.
- The examination starting time may include a designated reading time for students. During this reading time, students are not permitted to write in the examination booklets but may complete attendance slips, fill in details required on the front cover of examination booklets, and make notes on loose-leaf paper provided. An invigilator will announce when the reading time has elapsed, after which students may write in the examination booklet.
- No student will commence writing answers until authorised by an invigilator. All students must stop writing when instructed by an invigilator. At the end of the examination all students must remain seated until all examination booklets have been collected.
- During an examination students are not permitted to speak to or communicate with any other student, or give or receive any form of assistance, academic or otherwise.

Procedures for leaving the examination room

- Students are not permitted to leave the examination room in the first 30 minutes after the published starting time or during the last 10 minutes of any examination.
- After the first 30 minutes of the examination has lapsed, a student can request to leave the examination room for a short break. When approval is given by an invigilator, the student will be supervised during the period of absence.
- Students wishing to permanently leave the examination room must hand all examination booklets to the invigilator who will endorse the booklets as correctly identifying the student. Students cannot remove any examination answer booklets, scrap paper or attendance slips from the examination room.

Breaches of examination procedures

- A breach of the examination procedures may constitute academic misconduct. Procedures are deemed to be breached even if it cannot be demonstrated that the student gained an advantage from the breach. For example, if a student takes a mobile telephone or device into the examination room but does not switch it on or remove it from their pocket, it may still constitute academic misconduct although the intent is recognised in determining an appropriate outcome.
- Breaches of the examination procedures will be recorded under Section 9: Academic Integrity of this manual whether they constitute academic misconduct or not.

Procedures for breaches that cause disruption to an examination

- Any student disrupting the examination can be instantly dismissed from the examination room at the discretion of the chief invigilator. Where dismissal is the appropriate course of action, the chief invigilator will document the incident and provide a report to the Head of School or Director: Regional Engagement or nominee.
- The Head of School or Director: Regional Engagement or nominee will investigate the incident as either:
 - academic misconduct by following the procedures for formal inquiry set out in Section 9: Academic Integrity, or
 - misconduct under Statute 7: Student Misconduct.
- Where dismissal is not deemed appropriate by the chief invigilator, the student will be permitted to remain in the examination, and clause 6.6 will apply.

Procedures for breaches that do not cause disruption to an examination

- If a breach is detected that does not cause disruption to the examination, or is assessed by the chief invigilator as not warranting dismissal from the examination room, the invigilator will tell the student that the breach has been detected and will be reported.
- The invigilator will document the incident and will provide a copy of this report to the Academic Integrity Officer at the relevant school within 5 working days of the incident.
- If the Academic Integrity Officer considers that the breach constitutes academic misconduct, they will investigate the incident by following the procedures for managing alleged academic misconduct set out in Section 9: Academic Integrity.
- If the Academic Integrity Officer considers that the breach does not constitute academic misconduct, they will provide academic counselling to the student.

SECTION A

Answer any **TWO** questions from this section. Each question is worth 25 marks.

Q1.

The housing market is greatly influenced by changes in demand and supply. For each of the following demand or supply factors outline the impact of change on the price of land. Use labelled diagrams to support your answer.

- a) Release of broad acre land by the South Australian Land Management corporation (5 marks)
- b) Introduction of new building approval requirements reducing holding costs of housing projects (5 marks)
- c) Abolition of stamp duty as a tax on the purchase of land (5 marks)
- d) Raising the variable and fixed interest rates by 5% (5 marks)
- e) Increase in employment opportunities due to mining boom in Perth, Western Australia. (5 marks)

Q2.

William Alonso produced a model to explain urban land rent based on the principle of accessibility to the Central business district. A simplified version of the model uses the formula

$$\text{Land rent} = q(p-c) - (f*d*q)$$

- a) Identify the terms in the model (q, p, c, f and d) (5 marks)
- b) List the assumptions of the model (5 marks)
- c) Use a diagram to illustrate the application of the model to urban land use (5 marks)
- d) According to Alonso, what are the links between accessibility, land values and land use within a city centre? (5 marks)
- e) Discuss whether this holds true for Australian cities? (5 marks)

Q3.

Select **five (5)** of the following (5 marks each), define the term and explain their importance to the urban built environment. Include diagrams where appropriate.

- a) land use controls, especially zoning
- b) the long boom
- c) sales comparison approach
- d) externalities
- e) production possibility curve
- f) benefit cost analysis
- g) global trends in location of manufacturing industries

SECTION B

*Answer any **TWO** questions from this section. Each question is worth 25 marks.*

Q4.

- a) Explain the difference between a firm's fixed costs (or overheads) and variable costs. In relation to a construction firm, list three types of fixed cost and three types of variable cost. (7 marks)
- b) Describe how a building contractor may use a 'cost plus' pricing technique to arrive at a tender price for a building project. Explain how the contractor will decide the level of percentage additions for overheads and profit. (6 marks)
- c) Identify, and explain, four main differences between an oligopolistic market structure and a perfectly competitive market structure. (6 marks)
- d) Identify two situations where oligopolistic market structures may occur in the construction industry, and explain how the existence of an oligopolistic market may affect the pricing behaviour of companies in such a market. (6 marks)

Q5.

- a) *'It is common to find that most building work carried out on a construction site is performed by chains of subcontractors'.*

Explain what is meant by the statement above, and why subcontracting has become the preferred form of procurement of specialised building work for head contractors. (7 marks)

- b) Examine, and briefly explain, the likely effect on the level of National Income of each of the following:
 - (i) An increase in the marginal propensity to save;
 - (ii) A decrease in the level of imports purchased in the economy; and
 - (iii) An increase in the level of income tax.(6 marks)
- c) Explain how the multiplier effect and accelerator principles may affect the level of aggregate demand in an economy and, ultimately, in the Construction Industry. (6 marks)
- d) Briefly identify one type of taxation which directly impacts on the construction industry. For the type of taxation you have identified, briefly explain how a change in its level would affect levels of demand in the construction industry. (6 marks)

Q6.

- a) Briefly describe **two (2)** main forms of inflation observed in the economy. (6 marks)
- b) With the aid of diagrams, explain how the Government (via the Reserve Bank of Australia) may attempt to boost demand in the economy using an expansionary monetary policy. (6 marks)
- c) Identify, and briefly discuss, two indices available to track inflation in the construction industry. (6 marks)
- d) Explain the potential effects of a rise in interest rates in the economy on the Construction Industry. (7 marks)

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