

UNIVERSITY OF SOUTH AUSTRALIA
SCHOOL OF GEOINFORMATICS, PLANNING & BUILDING

PROGRAM: Bachelor of Construction Management & Economics (Hons)
Graduate Certificate in Building & Planning

COURSE: Construction & Fire Engineering 1N (**Construction part of CIVE 4009**)
Building Construction & Materials 6 (**BUIL 4010**) (Formerly 05475)

EXAMINATION: Internal Exam, Semester 1, 2002

DURATION: **2 Hours** of Exam time preceded by 10 minutes of Reading time, a total of **2Hrs 10 Mins**.
For **ENTEXT** students 10 minutes of Reading time plus 2Hrs & 20Mins of Exam Time ie a total of **2Hrs 30Mins**

EXAMINER: Assoc Prof George Zillante (Tel 22379)

INSTRUCTIONS TO CANDIDATES:

- This exam is worth 50% of the total course marks
 - You **MUST** answer **question 1** and any three of the remaining 4 questions so that a total of 4 questions is answered.
 - The value of each question is noted adjacent to the question
 - Open Book Examination ie all references permitted
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NOTES FROM EXAMINER: Nil

Question 1 (COMPULSORY) (40 Marks)

It has been claimed that the adoption of a Constructability approach to major Construction projects will lead to cost savings and more useable buildings. Discuss these benefits and how they can be achieved.

Question 2 (20 Marks)

Discuss what you consider to be the main construction issues when using precast concrete cladding in multi storey buildings.

Question 3 (20 Marks)

Discuss the Cladding system and material that you would recommend for a ten-storey office building located on the seafront at Glenelg.

Question 4 (20 Marks)

Discuss the roofing and stormwater drainage system that you would recommend for a new indoor soccer sports stadium to be located near the waterfront at Port Adelaide.

Question 5 (20 Marks)

The development of Intelligent Buildings is rapidly changing as we begin to accept more new Technology. Discuss what you understand by the term Intelligent Buildings and how they are likely to affect the Construction requirements for buildings of the future.

END OF QUESTIONS

(TOTAL MARKS AVAILABLE IS 100)