

UNIVERSITY OF SOUTH AUSTRALIA
SCHOOL OF GEOINFORMATICS, PLANNING & BUILDING

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

COURSE: Construction & Fire Engineering 1N (Construction part of CIVE 4009)
Building Construction & Materials 6 (BUIL 5010) (Formerly 05475)

EXAMINATION: Semester 1, 2003

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

NOTES FROM EXAMINER: Nil

Question 1 (COMPULSORY) (40 Marks)

Discuss what you understand by the term Constructability as applied to major construction projects and how the concept can be implemented.

Question 2 (20 Marks)

Discuss the differences between Curtain Walling and Precast Concrete Cladding and which of these you would recommend, and why, for a 10 storey office building located at the new Australian settlement in Antarctica. (The land mass around the South Pole)

Question 3 (20 Marks)

Discuss the roofing and ceiling system that you would recommend for a building to house Canberra's new indoor Olympic standard swimming pool.

Question 4 (20 Marks)

Discuss the construction, materials and stormwater systems that you would recommend for the new roof that is proposed to enclose the new international Soccer Stadium proposed for Sydney.

Question 5 (20 Marks)

Intelligent Building Technologies are being applied more and more to various types of Buildings. Discuss what you understand by the concept of Intelligent Buildings and what benefits they can provide for a twenty-storey office building located in the Central Business District in your capital City.

END OF QUESTIONS

(TOTAL MARKS AVAILABLE IS 100)