



Mid Year 2005 Final Examination

University of South Australia

Student ID:		Student Name:	
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SCHOOL OF NATURAL & BUILT ENVIRONMENTS

**Master of Project Management
Graduate Diploma in Project Management
Graduate Certificate in Building & Planning**

Subject Area:	BUSS	Catalogue Number:	5163
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Time, Cost and Quality Management

Examination Day: Saturday	Examination Date: 2 July 2005
Examination Time: 9AM	Length of Exam: 3 Hours of Exam time preceded by 10 minutes of Reading time – a total of 3 hours 10 Minutes. For ENTEXT students there is 10 minutes of Reading time plus 3.5 Hours of Exam time – a total of 3 Hours 40 Minutes.

Examination Venue:	RAS/Ridley Centre
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Instructions to Candidates

**Answer any Five Questions.
All questions are of equal value**



Question One

A fire has destroyed a shopping centre that contains forty shops, all of which were managed by forty shop owners who had lease agreements with the shopping centre owner. The architect estimates that it will take twelve months for the shopping centre to be re-built and trading again. There are approximately 150 employees of the shops who are dependent for their employment on the shops being able to operate. The local Council is concerned that the shopping centre had been a major draw-card for people in their District. The Council is aware that members of the public will by-pass the shopping centre and shop in adjacent Districts.

As the Project Manager for the Insurance Company, who has admitted liability to the shopping centre owner for the risks to the shopping centre owner for the loss and consequential losses of destruction of the shopping centre by fire, set out your plans to address the interests of the following Stakeholders:

- The Insurance Company, who has employed you as the project manager
- The shopping centre owner
- The Owners of the individual shops and their employees
- The local Council.

Question Two

Describe the process of Value Engineering for the purpose of achieving cost savings and related benefits, and in your discussions, address the following issues:

- A definition of Value Engineering
- The Value Engineering Team
- The stages of the Value Engineering process.
- The analysis of the alternative proposals calculated on a "cost/worth" basis.
- Recommendation to the Client of the preferred option.

Question Three

3.1 Explain the process of calculating the "Earned Value" in a project, and described how this process can assist the Project Manager in the management of a Contractor carrying out work on the project by way of a :

- Review of whether the project is ahead or behind program
- Review whether the project is ahead or behind on the budget.

3.2 Describe a Cost Management Plan for a project that is relevant to your Industry that allows the Project Manager to monitor whether the costs incurred are progressively consistent with the Cost Plan.



Question Four

- 4.1 Describe the process of managing quality through the use of a "House of Quality", through the process of Quality Function Deployment
- 4.2 Describe the principles of Quality Assurance through the use of the AS/NZS – ISO 9001-2000.

Question Five

- 5.1 Your client has requested you to manage a Project valued at \$20,000,000, and extending for a period of eighteen months. Tenders submitted amount to \$20,500,000. The Client is reluctant to proceed with the project when the initial cost exceeds his budget. However, he calculates that, for every month that the project is completed earlier than the eighteen months, the facility is worth an extra \$500,000 per month to the Client in terms of his returns.

Describe the process, using a Critical Path network, how the project program could be reviewed to accelerate the project so that adjustments to the contract price could be compared with the savings available to the Client through an earlier completion date.

Question Six

- 6.1 Describe the processes of "Benchmarking" and "Total Quality Management" in the management of the quality procedures of an organization.
- 6.2 Describe the process of "Quality Control" of individual steps of the project, so that defects and failures are reduced or avoided.

Question Seven.

- 7.1 Describe the Conflict Resolution alternatives in terms of person to person conflict as described by Meredith and Mantel in their book, "Project Management – A Managerial Approach" as follows

- Withdrawal
- Smoothing
- Compromise
- Forcing
- Confrontation – problem solving
- Other (conflict still unresolved).

- 7.2 What strategies for resolving conflicts with Contractors and Suppliers are useful in your Industry?

****End****