

**UNIVERSITY OF SOUTH AUSTRALIA
SCHOOL OF GEOINFORMATICS, PLANNING & BUILDING**

PROGRAMS: **Master of Project Management
Graduate Diploma in Project Management**

COURSE: **PROJECT PROCUREMENT (12418)**

EXAMINATION: **Internal Exam, Semester 1, 2002**

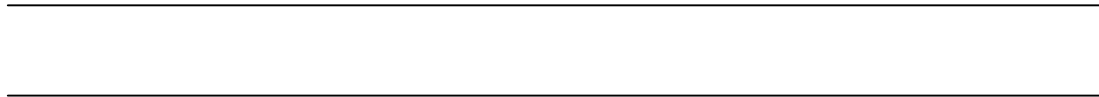
DURATION: **3 Hours of Exam time preceded by 10 minutes of Reading
time, a total of 3 Hrs 10 Mins.**

**For ENTEXT students 10 minutes of Reading time plus 3.5
Hours of Exam time, a total of 3 Hrs 40 Mins.**

EXAMINER: **Greg Kendall & Adam Hughes, Tel – 8272 9099**

INSTRUCTIONS TO CANDIDATES:

- This exam is worth 100% of the total marks
- You must answer **all** Multiple Choice Questions in Section A, and **any four (4)** questions from Section B. In Section B state any assumptions made.
- The value of each question is indicated in both Sections.
- No reference materials are allowed.



Section, Multiple Choice Questions

(You must answer all Questions) (2% each)

For each question, circle the one (1) most correct answer: (a), (b), (c), or (d).

1. In a devolved procurement system:
 - (a) Aspects of procurement are managed where they best fit, that is, centralised and decentralised.
 - (b) All aspects of procurement are the responsibility of a single business unit.
 - (c) Business units are responsible for and undertake their own procurement methods.
 - (d) The procurement function is outsourced.

2. Strategic procurement can be considered to be procurements that represent both:
 - (a) High value and low risk.
 - (b) High risk and low value.
 - (c) Low value and low risk.
 - (d) High risk and high value.

3. An organisation should ensure that its procurement system manages what class of procurements:
 - (a) Simple and complex.
 - (b) Complex and strategic.
 - (c) Strategic only.
 - (d) Simple, strategic and complex.

4. An organisation's procurement system should:
- (i) Ensure that value for money is realised; and have unambiguous procedures based on best practice.
 - (ii) Ensure that strategic procurements are appropriately managed; and provide quality outputs that are consistent and based on a foundation of competence in procurement.
 - (iii) Ensure that procurement risks are identified and managed; and that organisational policies are supported.
 - (iv) Focus the organisation on achieving the lowest price; and that procurement authorities, responsibilities and accountabilities are clearly defined.
- (a) (i) and (ii).
 - (b) (i) and (iii).
 - (c) (ii) and (iii).
 - (d) All the above.
5. In an acquisition plan what is not included:
- (a) The recommended supplier.
 - (b) The recommended market approach.
 - (c) Identified procurement risks.
 - (d) Performance targets and goals.
6. To the buyer, a lump sum (firm) contract represents what level of price flexibility and cost risk?
- (a) Low flexibility and high risk.
 - (b) High flexibility and high risk.
 - (c) Low flexibility and low risk.
 - (d) Medium flexibility and medium risk.
7. To the buyer, a BOOT procurement means that:
- (a) It is responsible for operating the plant.
 - (b) On the transfer date you will get brand new plant.
 - (c) Expenditure is operational, not capital.
 - (d) All of the above.

8. Cost management to the buyer organisation is often put forward as one of the reasons why a buyer may choose a 'Design and Construct' procurement method. What Indicator(s) may suggest that cost management may be realised:
- (a) The risk of a cost blow-out is high.
 - (b) The market is highly competitive.
 - (c) Cost variation is unacceptable.
 - (d) All of the above.
9. In a competitive tendering environment, which is the most appropriate negotiation strategy?
- (a) Negotiate with the preferred tenderer only.
 - (b) Conduct parallel negotiations with shortlisted parties.
 - (c) Negotiate post-contract award.
 - (d) Negotiate with all tenderers.
10. In a market where you have identified an oligopoly (there are 3 suppliers) what would be the most appropriate market approach:
- (a) Reverse marketing.
 - (b) Public tendering.
 - (c) Direct negotiation.
 - (d) Registration of Interest.
11. A contract price that is **firm** for the term of the contract means:
- (a) The contract price is not altered for the term of the contract.
 - (b) The contract price may change during the term of the contract at the supplier's discretion.
 - (c) The contract price may change during the term of the contract in accordance with a pre-agreed pricing formula.
 - (d) The contract price is reviewed at the end of each financial year.

12. A contract management plan is finalised:
- (a) At contract execution.
 - (b) During the evaluation of offers.
 - (c) Prior to approaching the market.
 - (d) During negotiation with the preferred supplier.
13. Life cycle costing:
- (a) Is a concept that is only applied to large capital intensive construction projects.
 - (b) Considers the price of a product together with the impact of any price variation formula agreed to as part of the contract.
 - (c) Considers the weighted average score of all non-cost benefits and divides these by the total cost of ownership of the product to produce a ratio of cost per unit of benefit.
 - (d) Places emphasis on the total cost of ownership by requiring the consideration of all ownership and operating costs which will be incurred during the product life.
14. In the design and construction of a bridge for a major project, the use of a weighted matrix evaluation methodology is the most appropriate for the purchase of:
- (a) The goods to build it e.g. concrete and steel.
 - (b) For the selection of the design consultant.
 - (c) Whether it should be a BOOT or BOT.
 - (d) For the selection of the firm to construct .
15. Partnering would be an effective contract management strategy in which case:
- (i) The firm spends a lot of money on the service and the business is very attractive to suppliers.
 - (ii) There are many suppliers in the market.
 - (iii) When the service is of high asset specificity to the firm.
 - (iv) The service is fundamental to the firm maintaining its competitive advantage.
- (a) (ii) and (iii).
 - (b) (i) and (iv).
 - (c) (iii) and (iv).
 - (d) (i) and (iii).

Section B, Written Answers

(Answer any four (4) of the following Questions) (each 17.5%)

1. Often a buyer (the *Principal*) will request tenders on a lump-sum firm basis.
 - (i) Discuss the reasons why the buyer may request such a pricing structure; and.
 - (ii) Discuss the potential risks to the supplier in offering such a pricing structure and how best it may manage those risks.

2. BOOT is a contemporary form of procurement strategy.
 - (i) Define what a BOOT procurement strategy is.
 - (ii) Discuss at least 3 reasons why a buyer (the *Principal*) may use such a procurement strategy.
 - (iii) Discuss at least 3 risks that the buyer (the *Principal*) must consider in using a BOOT procurement strategy for a major construction project.

3. An Acquisition Plan is a major part of Project Procurement.
 - (i) Define what an acquisition plan is.
 - (ii) Discuss the purpose of the acquisition plan.
 - (iii) Outline the elements of an acquisition plan.
 - (iv) Detail and discuss 3 of the elements of an acquisition plan.

4. You are the Procurement Manager in a large multi-national organisation that is extensively involved in large projects. In reviewing the expenditure profile of your organisation you have identified that legal services, whilst a very necessary input into individual projects, has a very high annual expenditure.

Your research identifies that your organisation currently uses 30 different legal firms and that the price paid is normally based on a their standard schedule of fees i.e. with no discount for your business. Further, you are regularly contacted by legal firms that are not used (i.e. not part of the current 30) that would like to do business for you.

Using the market model, discuss potential procurement strategies for legal services.

5. 'Design & Construct' can be a very effective procurement strategy when used properly.
- (i) Define 'Design & Construct'.
 - (ii) Detail the roles and responsibilities of the Principal and Contractor in a 'Design & Construct' contract.
 - (iii) Discuss when a 'Design & Construct' procurement strategy is appropriate and discuss 3 Key Result Areas (or Drivers) and indicators for each.
6. You are the recently appointed Project Procurement Manager. Your task is to develop a Procurement Policy-Procedure Manual.
- (i) List the contents of the manual against the Procurement Cycle.
 - (ii) In the area of contract administration, detail what you would address for:
 - dispute resolution,
 - performance monitoring, and
 - managing relationships.

7. You are the newly appointed Procurement Manager of a water authority. A request has come to you for the purchase of a reverse osmosis plant (RO Plant) for the desalination of sea water for use in the irrigation of crops. In basic terms, the RO Plant must desalinate up to 6 million litre of water per month and has an expected life of 7 years. The quality of the water produced by the RO Plant is extremely important and is phrased in terms of impurities not exceeding 'x' parts per billion. The RO Plant uses a combination of several chemicals to perform the water purification process as well as it comprising numerous parts that must be replaced on a regular basis (replacement being determined by use not age).

Not having previously undertaken a project of this nature you decide to investigate how other major plant purchases have been performed by the organisation. You discover the following:

- the lowest price is always recommended;
- only the purchase price is considered in a price assessment;
- the business has no policy on standardisation plant manufacturer;
- sellers promise great things in their marketing and sales pitches prior to making sale, but your business does not enter into formal contracts as 'they're just money for lawyers';
- market research is not undertaken prior to approaching the market;
- public tenders are always used as the method of market approach, not because of policy, but as a matter of history;
- when requesting offers your firm always uses a very technical specification;
- there has been union issues in other on-site projects regarding employment contracts of contractors labour; and
- in a number of projects spare parts availability has been an issue after the project has been completed.

Discuss 3 procurement issues with the business's current practice of project procurement of plant.

Suggest initiatives that you may introduce to address the 3 issues. Also, define the outcomes that you would expect the initiatives to have.

****End of Questions****