

**CONFIDENTIAL**



**UTHM**  
Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2017/2018**

COURSE NAME : CONSTRUCTION PROCUREMENT  
COURSE CODE : BPD 30703  
PROGRAMME CODE : BPC  
EXAMINATION DATE : DECEMBER 2017/JANUARY 2018  
DURATION : 3 HOURS  
INSTRUCTION : A) ANSWER ALL QUESTIONS  
B) ANSWER **THREE (3)**  
QUESTIONS ONLY

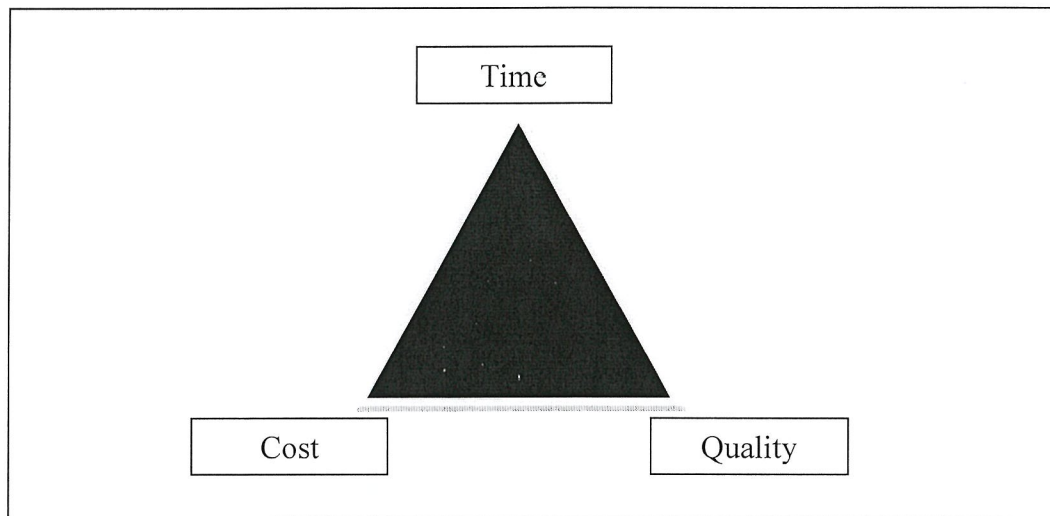
**TERBUKA**

THIS QUESTION PAPER CONSIST OF **FOUR (4)** PAGES

**CONFIDENTIAL**

## SECTION A

- Q1** Lian Bina Property is a developer (private client) for a sustainable mixed-development project which consists of residential, shops and recreation centre in Dungun, Terengganu. In construction, there are three important criteria namely cost, quality, and time need to be concerned. From client's perspective, it might be considered as being the highest quality, at the lowest cost, in the shortest time. Contrastingly, this is not always possible and a compromise has to be sought, based on the client's priorities. These criteria can be visualised as an iron triangle (as shown in **Figure Q1**).



**Figure Q1: Iron Triangle**

According to this scenario:

- (a) Explain **FIVE (5)** reasons the importance of iron triangle to the client. (10 marks)
- (b) Discuss **FIVE (5)** key roles of client in achieving project's objectives in terms of cost. (10 marks)
- (c) Propose the best procurement strategies to the client based on iron triangle. (20 marks)

**TERBUKA**

**SECTION B**

**Q2** Atur Teguh Sdn. Bhd. is a G7 contractor based in Johor Bahru. This company was chosen by Advance Holding Corporation (Developer) to undertake and complete two towers of condominium project in Permas Jaya by using design and build system. Mr. Naser from UAE is a new procurement manager of Atur Teguh Sdn. Bhd. who has no experience in this system, particularly to manage project in Malaysia. He needs for further explanation based on **Table Q2** as shown below.

**Table Q2: Work Programme of design and build**

Processes	Duration (Month)																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
• Employer's requirements	■	■																
• Tender Period/ Contractor's proposals			■	■	■	■	■											
• Select Contractor								■										
• Construction									■	■	■	■	■	■	■	■	■	■

- (a) Explain to Mr. Naser the processes of design and build system. (10 marks)
- (b) Outline **FIVE (5)** factors to achieve a higher satisfaction levels of developer through design and build system. (10 marks)

**Q3** Joint Venture is a management approach that focuses on promoting and creating positive working relationship among members of the organisations and it also encourages teamwork as well as avoiding dispute. This approach tries to improve current procurement system by changing the traditional adversarial relationship to a more co-operative, team-based work relationship, and getting project members thinking in a 'win-win' frame of mind. For all parties to win, it is necessary for projects to be completed based on stipulated time, within budget, in accordance with the document contract, and with few problems as possible.

- (a) Describe **FIVE (5)** situations of adopting Joint Venture. (10 marks)
- (b) Outline **FIVE (5)** risks in Joint Venture as one of the innovative procurement systems in Malaysia. (10 marks)

**TERBUKA**

**Q4** Management based procurement system is designed on the integration of management and both design and construction. Two methods namely management contracting and construction management are developed to speed up the process from commencement to completion.

(a) Discuss **FIVE (5)** differences in terms of advantages of these methods.  
(10 marks)

(b) Analyse with a diagram of the contractual and functional relationships exist in the construction management.  
(10 marks)

**Q5** The conventional procurement system is also known as design-bid-build (DBB) system. In this system, the employer accepts that design work generally separate from construction, consultants are appointed for design and cost control, and the contractor is responsible for undertaking the works. One of the unique characteristics of this system is it follows a strictly sequential path. As a client (government), you are required to advice your consultant as follows:

(a) Describe **FIVE (5)** roles of quantity surveyor (appointed by client) in conventional procurement system.  
(10 marks)

(b) Outline **FIVE (5)** critical success factors of project briefing in conventional procurement system.  
(10 marks)

**TERBUKA**

**-END OF QUESTION-**