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Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

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

COURSE NAME : CONTRACT AND ESTIMATION  
COURSE CODE : BFC31602  
PROGRAMME CODE : BFF  
EXAMINATION DATE : JUNE/JULY 2018  
DURATION : 2 HOURS 30 MINUTES  
INSTRUCTION : ANSWER ALL QUESTIONS

**TERBUKA**

THIS QUESTION PAPER CONSISTS OF **SEVEN (7)** PAGES

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**Q1** (a) For the following multiple choice questions, choose the right answer (A, B, C or D only).

- (i) Which of the following statements are correct?
- I. Goods on display are generally an invitation to treat
  - II. An offer will lapse after a reasonable time period
  - III. A counter offer destroys the original offer
  - IV. An offer may be withdrawn after acceptance has taken place
  - V. An offeree is not allowed to withdraw their offer
  - VI. An offer requires an intention to be bound
  - VII. A newspaper advert is not capable of being an offer
  - VIII. An invitation to treat will lead to a binding contract when accepted

- A. I, II, V and VII
- B. I, II, III and VI
- C. V, VI, VII and VIII
- D. All of the above

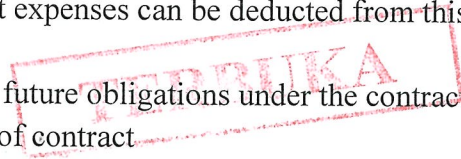
(2 marks)

- (ii) Which of the following is not correct in relation to withdrawing an offer?
- A. An offeror is free to withdraw at any time before acceptance takes place
  - B. The postal rule does not apply to letters of revocation
  - C. The offeror may withdraw the offer within a reasonable time after acceptance
  - D. An offeror can not withdraw an offer where a deposit has been paid

(2 marks)

(iii) Which of the following statements are correct in relation to a contract that has been frustrated?

- I. The injured party is entitled to damages
- II. A person can continue with a contract if it is possible to perform part
- III. Where a person has incurred expenses these can be fully recovered
- IV. Expenses may be deducted from sums payable prior to the frustrating event
- V. A person who has received a valuable benefit from the contract must pay for the benefit received
- VI. Any money due to be paid prior to the frustrating event ceases to be payable
- VII. Money paid can be recovered but expenses can be deducted from this figure.
- VIII. Each party is released from their future obligations under the contract
- IX. Neither party can sue for breach of contract



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- A. II, III, VI, VIII and IX
- B. IV, V, VI, VII, VIII and IX
- C. III, V, VII and IX
- D. All of the above

(2 marks)

(b) An employer (E) contracts on 1 March 2018 with a building contractor (C) to build for him a warehouse at a fixed price of RM10 million; the works to commence on 1 April 2018 and to be completed by 31 July 2018; the date E has to give possession to a third party (P) who has contracted to rent the warehouse from E, and this is officially informed to C. C takes possession of the site and starts work on 1 April 2018. However, after having undertaken the contract works for six months and in the process having achieved 75% of physical progress, C encounters financial and manpower problems and abandons further work on 1 May 2018. Despite repeated reminders and warnings from E, C does not perform any further work. E appoints other building contractor to complete the remaining further work and the warehouse is ready for occupation 2 months after the original completion date (1 October 2018).

(i) According to contract law, what kind of breach of contract has occurred between E and C in the above scenario? Give your justification.

(6 marks)

(ii) Suggest the compensation that E is entitled to claim from C in the above scenario according to contract law.

(6 marks)

(iii) Based on Clauses 51 (Events and Consequences of Default by the Contractor) in P.W.D. Form 203A, explain the rights of E in the above scenario.

(7 marks)

**Q2** (a) With reference to Clause 43 (Delay and Extension of Time, Equivalent Contractual Terms) of P.W.D. 203 contract form, list **THREE (3)** reasons for delay that allow contractor to obtain the 'Certificate of Delay and Extension of Time'.

(3 marks)

(b) Blue Sky Construction (BSC) was awarded a 65 weeks project of constructing 1 office block in Green Tree City as the main contractor. In the contract, BSC was required to furnish performance bond (5% of contract price), and an advanced payment at maximum percentage was given to the BSC. Some changes in design involving additional work (variation of work) happened during the project. Cost information of the project is as the following:

Provisional Sums	RM	1,362,000.00
Prime Cost Sums	RM	8,766,120.00
Preliminaries	RM	1,809,421.00



Contingencies	RM	855,000.00
Contract Sum	RM	25, 518,111.67
Value of Variation Work	RM	255,622.00

Based on the given cost information, calculate the following amounts:

- (i) Maximum advanced payment paid to BSC (4 marks)
- (ii) Final contract sum (2 marks)
- (iii) Performance bond (2 marks)
- (iv) Liquidated Ascertained Damages (LAD) with base lending rate (BLR) of 6.90% (4 marks)
- (c) There are three (3) common types of tendering: open; selective; and negotiated. Recommend the best types of tender for a project that requires a contractor who has both design and construction capabilities. Justify your answer. (4 marks)
- (d) Contractor may fail to complete works within the stipulated time of completion due to his own default or client's default. Illustrate a diagram to present your understanding on how these are related to Liquidated Ascertained Damages (LAD) and Extension of Time (EOT). (6 marks)

- Q3** (a) Briefly explain the following contract types:  
(i) Contract based on Bills of Quantities and  
(ii) Contract based on Drawings and Specifications. (5 marks)
- (b) There are two most frequently used project procurement methods namely "Traditional" and "Design and Build". Discuss **FOUR (4)** aspects of differences between these two project procurement methods. (12 marks)
- (c) Analyse "Management Contracting" or "Construction Management" in terms of contract responsibilities and risk allocations among the key contracting parties (i.e. client, consultants and contractors). Which one of these two procurement methods is the best option for a client who has the ability to directly control all contractors appointed for his project. (8 marks)

**TERBUKA** (8 marks)

**Q4** Based on **Figure Q4(a)** and **Figure Q4(b)**, perform taking off to determine the quantity of the following items:

- (a) Formwork for pad footing, column stump and ground beam. (7 marks)
- (b) Reinforcement bars in pad footing, column stump and ground beam. (12 marks)
- (c) Links in column stump and stirrups in ground beam. (6 marks)

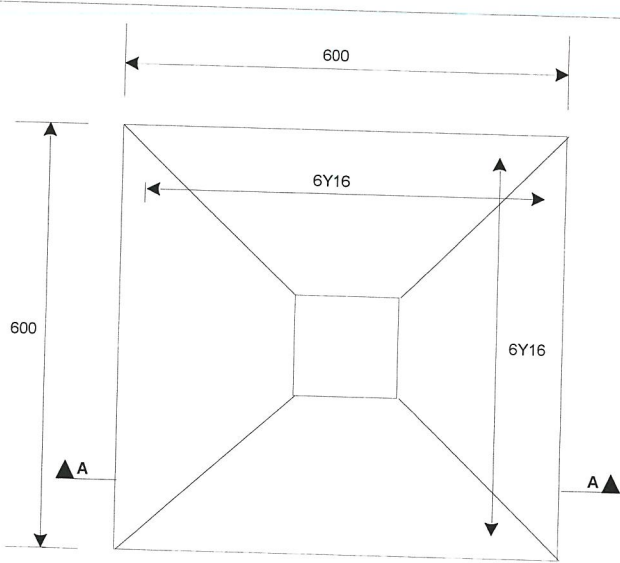
**-END OF QUESTIONS-**

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**FINAL EXAMINATION**

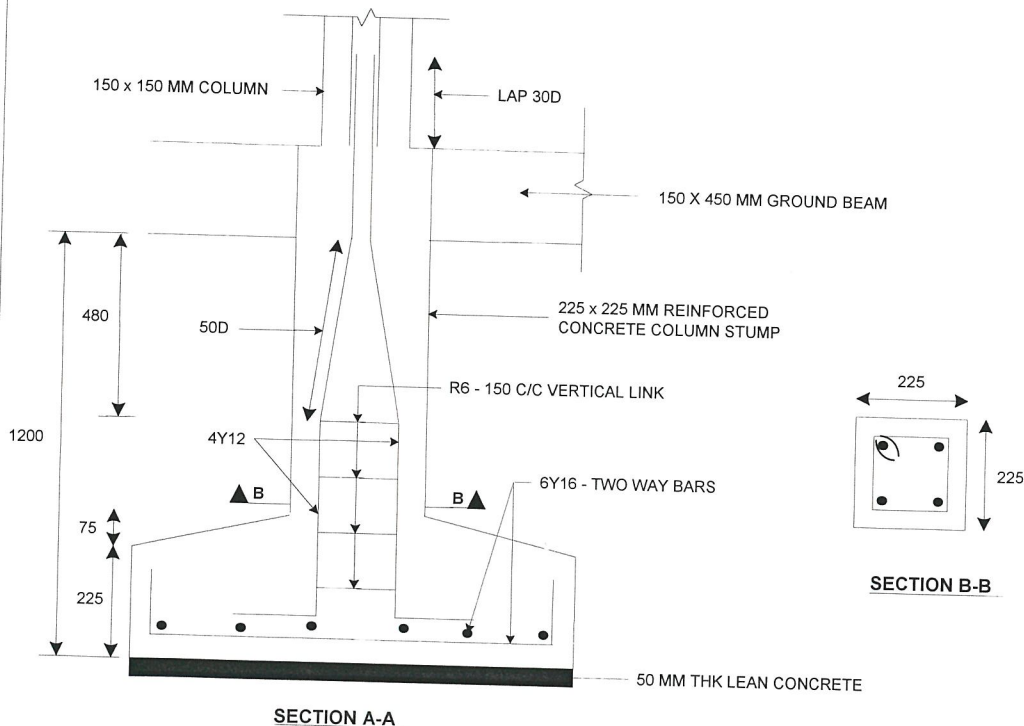
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- NOTES :
1. ALL DRAWINGS ARE NOT TO SCALE
  2. ALL DIMENSIONS ARE IN MILIMETRE (MM) UNLESS OTHERWISE NOTED.
  3. ALL CONCRETE COVERS SHALL BE 40 MM THICK.
  4. LEAN CONCRETE SHALL BE OF GRADE 7 CONCRETE
  5. PAD FOOTING AND COLUMN STUMP SHALL BE OF GRADE 25 CONCRETE

**600 x 600 x 300 MM REINFORCED CONCRETE PAD FOOTING PLAN**



**PAD FOOTING AND COLUMN STUMP DETAIL**

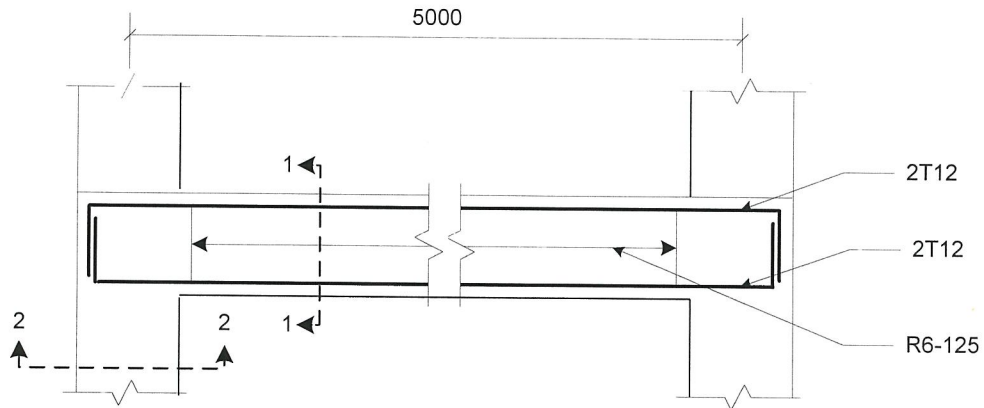
**FIGURE Q4(a)**

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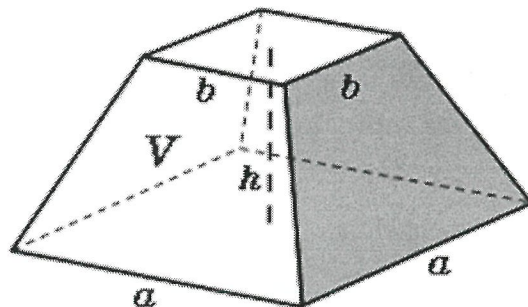
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TYPICAL GROUND BEAM CROSS SECTION (150 x 450)

CONVERSION TABLE FOR ROUND BAR

SIZE	MASS PER UNIT LENGTH (KG/M)
6	0.222
10	0.616
12	0.888
16	1.579



Volume of truncated square pyramid  $(V) = \frac{1}{3}(a^2 + ab + b^2)h$

FIGURE Q4(b)

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