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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2015/2016**

COURSE NAME : CONTRACT AND ESTIMATION
COURSE CODE : BFC 31602
PROGRAMME CODE : BFF
EXAMINATION DATE : JUNE/ JULY 2016
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS IN
ANSWER BOOKLET.

THIS PAPER CONSISTS OF NINE (9) PAGES

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Q1 (a) For the following questions, please choose only **one (1)** right answer.

1. 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 An offer may be withdrawn after acceptance has taken place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. Which of the following statements 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
3. 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
- 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
4. Which of the following insurances is to be acquired by contractor to cover work-related illnesses and provide death benefits to workers' spouses and dependents?
- A. Third party liability insurance
 - B. Workers compensation insurance
 - C. Contractor all risks insurance
 - D. Professional indemnity insurance
5. All the following reasons are acceptable for contractor to be granted extension of time **except**:
- A. Delay in giving possession of the site not due to the delay/failure of the contractor providing insurance and performance bond
 - B. "Force majeure"
 - C. Delay on the part of artisans, craftsmen or other persons appointed by the contractor
 - D. Suspension of work
6. When performance bond must be submitted for the very first time by the contractor to the client?
- A. Tender document submission
 - B. First interim payment
 - C. Before commencement of construction work
 - D. Signing of contract document
7. Evaluation of contractor's work must be conducted from time to time to determine the amount of progress payment to be paid to the contractor. The evaluation covers the following **except**:
- A. Builders works
 - B. Specialist works
 - C. Nominated Sub-Contractors (NSC) works
 - D. Goods or materials not installed

8. Which of the following statements correctly describe the Cost Reimbursement contract:

- i. Contractor receives all his cost together with his fees.
- ii. Contractor is paid for the prime cost of the works reasonably incurred plus a fixed lump sum profit, supervision cost and overheads.
- iii. Contractor is paid for the prime cost of the works reasonably incurred plus a fee which is a percentage of the prime cost.
- iv. Contractor is paid for the prime cost of the work plus a fixed fee and plus a bonus.

- A. i, ii, and iii
- B. i, ii, and iv
- C. iii and iv
- D. All of the above

9. Which of the following statements correctly describe the Construction Management contract:

- i. Contractor is responsible for the design, planning, organization and control of the construction in line with the client requirement.
- ii. Construction work itself normally carried out by a number of contractors, each of whom is responsible for a defined work packages and enters into a direct contract with the client.
- iii. Construction work is divided into work packages which are sub-let to sub-contractor.
- iv. Contractor's practical knowledge and management expertise are available to assist design team.
- v. Construction works is more closely integrated into management of the project.
- vi. Client has one more consultant and a number of contractors with whom to deal instead of only one main contractor.

- A. i, ii, v, and vi
- B. ii, v and vi
- C. i, iii and iv
- D. iii, iv, v and vi

(18 marks)

- (b) Sri Perdana Quay project is an integrated leisure, retail, residential and commercial project which will take 10 years to complete and will include six construction phases covering more than 240 acres of land at Pantai Kaki-Teluk Buri on the north-west of Langkasuka island. Phases one and two will include ecological and nature-oriented attractions. Buri Langkasuka resort, part of the first phase resort will feature 245 rooms, 60 luxury villas and 26 “ultra-luxury” villas and is scheduled to be completed by the end of 2020. Phase three will include retail outlets, hotel and convention facilities. Later phases will include a marina, waterfront, foothills and lakeside-serviced residences as well as a spa and wellness centre.

Based on the above project description, apart from the developer, financier, consultants and contractors, list out other **three (3)** stakeholders that their views and inputs on the project should be considered. Give your justification.
(7 marks)

- Q2** (a) An employer (E) contracts on 1 March 2016 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 2016 and to be completed by 31 July 2016; 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 2016. 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 2016. Despite repeated reminders and warnings from E, C does not perform any further work.

Based on Clauses 51 in P.W.D. Form 203A, explain the rights of E in the above scenario.

(6 marks)

- (b) Describe the purpose of the Table Tender Document and its importance to the Tenderer (Contractor).
(4 marks)
- (c) Explain **two (2)** differences between Contract Based on Bills of Quantities and Contract Based on Drawings and Specifications.
(5 marks)
- (d) There are two most frequently used project procurement methods namely Traditional and Design and Build. Discuss the differences between these two project procurement methods.
(10 marks)

(10 marks)

Q3 Based on pad footing detailing as shown in **Figure Q3(a)** and **Q3(b)** and information in **Table Q3**, calculate the price rate for 1 metre cubic excavation work that is carried out manually (using hand).

(25 marks)

Q4 Based on **Figure Q3(a)** and **Figure Q3(b)**, take-off quantities of the following items:

(a) Formworks for pad foundation, column stump and ground beam.

(5 markah)

(b) Reinforcement bars in pad footing, column stump and ground beam.

(12 marks)

(c) Links in column stump and stirrups in ground beam.

(8 marks)

- END OF QUESTIONS -

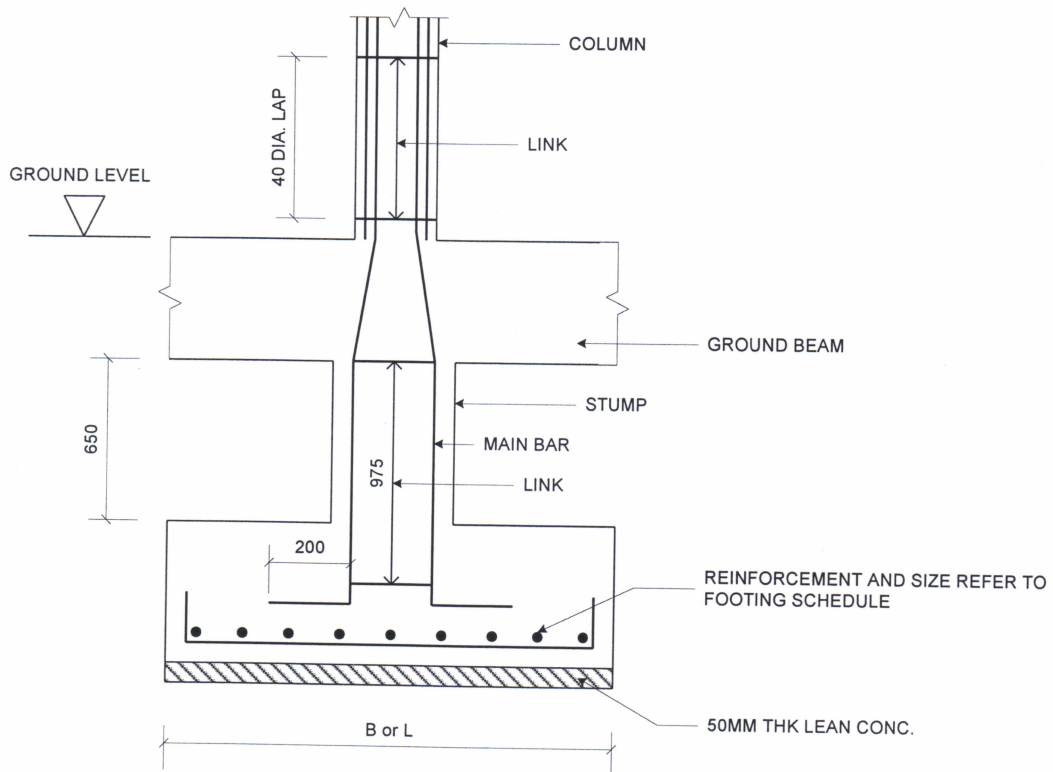
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FOOTING SCHEDULE

TYPE	B x D x H	MAIN REINF.
F3	3000 x 3000 x 650	18Y16-Ø175 (B/W)



TYPICAL FOOTING DETAIL

CONVERSION TABLE FOR ROUND BAR

SIZE (MM)	MASS PER UNIT LENGTH (KG/M)
06	0.222
10	0.616
12	0.888
16	1.579

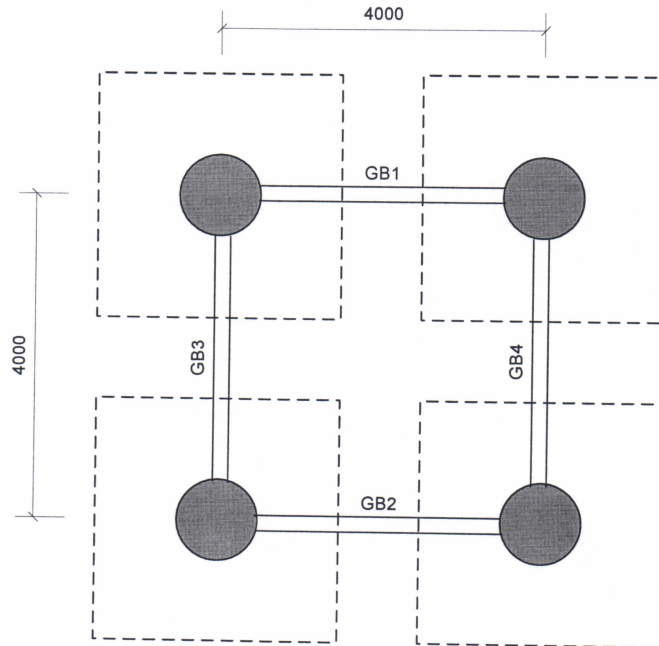
Notes:
 All pad foundation,
 stump & ground beam
 - similar concrete

Figure Q3(a)

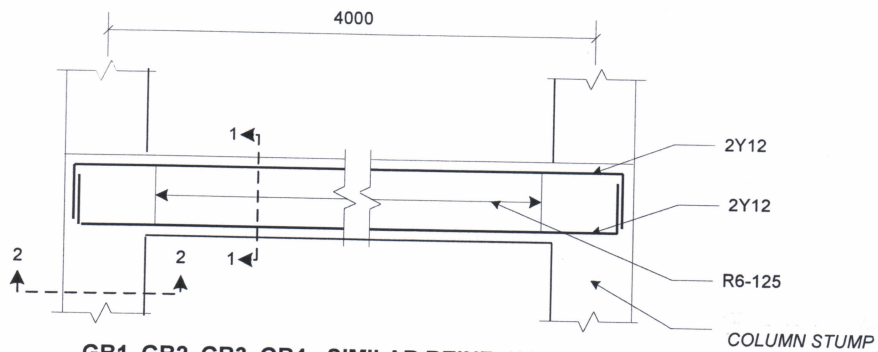
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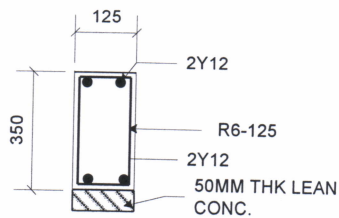
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GROUND FLOOR PLAN



GB1, GB2, GB3, GB4 - SIMILAR REINF. (125 x 350)



1-1



2-2

Figure Q3(b)

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Table Q3

Item	Rate
Worker salary (8 hours working/day)	RM 30.00/day
Soil excavation not exceeding 1.50 m depth	1.60 hour/m ³
Soil excavation exceeding 1.50 but not exceeding 3.00 m depth	1.70 hour/m ³
Spreading up soil in making up level (surface to receive pad foundation)	0.12 hour/m ²
Filling in and ramming soil	0.60 hour/m ³
Carting away remainder load	120 hour/m ³
Typical soil expansion	25%
Profit	20%