



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER 1
SESSION 2016/2017**

COURSE NAME : BUILDING AND STRUCTURE
DEMOLITION

COURSE CODE : BNC 40803

PROGRAMME : 4 BNC

DATE : DECEMBER 2016/JANUARY 2017

DURATION : 2 HOURS 30 MINUTES

INSTRUCTION : ANSWER ALL QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

- Q1** (a) Analyze the risk management analysis (identify, asses and control the risk) in demolition work of building to get special precautions for safe work. (6 marks)
- (b) There is a need of demolition work during construction of extension/enlargement of building. Name **THREE (3)** specific examples. (6 marks)
- (c) With the aid of sketch, Set-up the temporary structures to protect parts of structures during demolition work of basement. (5 marks)
- (d) Discuss the difference between Fire hazards and Fire preventions during demolition work. (8 marks)

Q2 In a demolition work,

- (a) Evaluate the **FOUR (4)** factors usually considered in selection demolition method. (2 marks)
- (b) Evaluate the method of demolition between diamond saw cut and human operatives method to demolish rc beam. (5 marks)
- (c) Fill in the blank by a short and concise statement of evaluation to demolition method shown in the table.

Machinery	Superiority	Weakness
1. Breaker machine
2. Saw cutting
3. Wrecking ball

- (9 marks)
- (d) Evaluate and select one of the most effective of using the above **THREE (3)** machinery to demolish 9 stories building in congested area. (6 marks)
- (e) With the aid of sketch, describe the main process of demolition by implosion. (3 marks)

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- Q3 (a) Evaluate the potential of recycle building material to produce concrete panel. (5 marks)
- (b) Point out and what to do with demolition waste after building demolished. (6 marks)
- (c) Before demolition work starts, explain the **FOUR (4)** reasons to take out the hazardous material (6 marks)
- (d) Fill in the blank in the table :

Hazardous material	Hazard type to human	What to do
1. Chemically treated wood
2. Asbestos
3. Mercury content lamp
4. Toxic material

(8 marks)

- Q4 (a) Explain **FOUR (4)** positive impacts of good management of Construction and Demolition waste material. (6 marks)
- (b) With the aid of sketch, describe the sequence to demolish sheet pile as temporary structure. (6 marks)
- (c) Evaluate the use of breaker machine to demolish oil tank which is made from aluminium alloy. (6 marks)
- (d) Set up the step to demolish rc basement of high rise building. (7 marks)

- END OF QUESTIONS -

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