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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2014/2015**

COURSE NAME : CONSTRUCTION EQUIPMENTS
COURSE CODE : BPD 21602
PROGRAMME : 2 BPC
EXAMINATION DATE : JUNE 2015 / JULY 2015
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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

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- Q1** Scraper is a big earthmoving plant and has three basic operating parts.
- (a) Explain **THREE (3)** scraper's basic operating parts. (9 marks)
 - (b) Compare the advantages of each four phases in scraper's operation. (16 marks)
- Q2** The construction of high-rise apartment or offices would not be possible without the extensive use of cranes.
- (a) Discuss **THREE (3)** types of utilization of the most popular cranes used in the construction industry. (15 marks)
 - (b) Describe the safety methods in the operation of cranes. (10 marks)
- Q3** A conveyor system is mechanical handling equipment that moves materials from one location to another. There are various type of conveyor used in the construction industry depends on the type of material handle and transfer.
- (a) Demonstrate with aid of sketches, **THREE (3)** types of conveyors. (15 marks)
 - (b) Screw and pneumatic conveyor are the types of conveyor that normally used in construction industry.

Discuss the operation of these conveyors. (10 marks)

Q4 Site clearing is the earliest phase involving the use of heavy equipment. Compactor is the main equipment used during this phase to reduce the size of waste material or soil.

(a) Differentiate three types of compactor. (9 marks)

(b) Dynamic compaction is a method that used to increase the density of the soil when certain sub-surface constraints can make other methods inappropriate.

(i) Explain **THREE (3)** applications of dynamic compaction. (6 marks)

(ii) Discuss **FIVE (5)** advantages of dynamic compaction. (10 marks)

- END OF QUESTIONS -