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University Examinations 2013/2014

THIRD YEAR, SECOND SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL
ENGINEERING

ECV 0249: ENGINEERING QUANTITIES II

DATE: APRIL 2014

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – (30 MARKS)

Use the attached drawing to take off the following items in the substructures

- (a) Bush clearance and top soil excavations
- (b) Trench excavations
- (c) Foundation concrete
- (d) Foundation walling
- (e) Hardcore filling
- (f) Murram blinding
- (g) Concrete bed, DPM, BRC and Insecticide treatment
- (h) DPC

(30 Marks)

QUESTION TWO – (15 MARKS)

- (a) Outline FOUR aspects of a site that affect the cost of a building or civil engineering works. (8 Marks)
- (b) Briefly describe four contract documents that may be used in building and civil engineering projects. (7 Marks)

QUESTION THREE – (15 MARKS)

- (a) Describe the following types of contracts as applied in civil engineering: (8 Marks)
- (i) Package deal contract
 - (ii) Cost plus fixed fee contract
 - (iii) Cost plus fluctuating fee contract
 - (iv) Cost plus percentage fee contract
- (b) Why are sub structural items considered provisional? (1 Mark)
- (c) Outline the difference between elemental and trade by trade type of bill of quantity. (6 Marks)

QUESTION FOUR – (15 MARKS)

- (a) Outline four sources of cost information in pricing of a bill of quantity. (5 Marks)
- (b) Outline the purpose of bill of quantities in building and civil engineering projects. (5 Marks)
- (c) Explain the duties of the quantity surveyor on the contractor's side during the progress of works. (5 Marks)