



Machakos University College

(A Constituent College of Kenyatta University)

University Examinations 2013/2014

SCHOOL OF ENGINEERING

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

Certificate in Masonry and Plumbing

Year 1

Site and Workshop Management

Date: 24/3/2014

Time:3 Hours

Instructions to Candidates

- (i) Answer any five out of the eight questions on this question paper
- (ii) All questions carry equal marks.
- (iii) Maximum marks for each part of question are shown.

1.
 - (a) List three main reasons for introducing equipment and machines in a building site (4 marks)
 - (b) State five advantages of buying a plant and five advantages of hiring a plant . (10 marks)
 - (c) What factors are considered when deciding on the type of plant to acquire? Give three factors. (6 marks)
2. With aid of drawings show the following documents which are applicable in a building site.
 - (i) Order form
 - (ii) Advice note
 - (iii) Delivery note
 - (iv) Invoice (20 marks)
3.
 - (a)
 - (i) Define the term preliminary items (3 marks)
 - (ii) State and explain three preliminary items that have to be considered before carrying out the works. (9 marks)
 - (b) Name three reasons why electricity is required in a building site. (3 marks)
 - (c) Explain how water can be got in a building site. (5 marks)

4. (a) List three essential services of a workshop. (3 marks)
- (b) Briefly explain five factors to be considered when planning a building site for a factory (5 marks)
- (c) A young entrepreneur or contractor intends to build a house for a client. Draw a site plan and indicate the following positions:-
- (i) Sand dumps
 - (ii) Aggregate dumps
 - (iii) Building stones location
 - (iv) Workers pit latrines
 - (v) Site offices
 - (vi) Sentry box (12 marks)
5. (a) State and explain two advantages of identifying dumps (spoils) with sign boards prior to the arrival of materials. (8 marks)
- (b) Outline the three roles played by the following parties during construction of a project in a site and who hires them
- (i) Clerk of works
 - (ii) Contractor
 - (iii) General foreman
 - (iv) Estimator (12 marks)
6. State any four contract documents and explain how they are used in a building site. (20 marks)
7. (a) What is tendering? Explain. (4 marks)
- (b) Name and explain two types of tenders. (10 marks)
- (c) List down two advantages and two disadvantages of selective tenders. (6 marks)
8. (a) Name three forms of a contract that are commonly practiced by contractors and their clients. (8 marks)
- (b) List down five types of contracts. (5 marks)
- (c) Explain the following:-
- (i) Direct labour contract
 - (ii) Package deal contract. (12 marks)