



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN BUILDING AND CIVIL ENGINEERING

EBC 2306: CIVIL ENGINEERING CONSTRUCTION PLANT

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

Instruction to candidates

You should have the following for this examination

- Answer booklet

This paper consist of five question.

All question carry equal marks

Maximum marks for each part of a question are as shown

Use neat, large and well labelled diagrams where required

This paper consist of TWO printed pages



SGS ISO 9001:2008 Certified

QUESTION ONE

- a) i) Describe what a crane is (4marks)
- ii) Name five types of mobile crane (5marks)
- iii) Name five types of fixed crane (5marks)

- b) Give a brief description of an overhead crane (6marks)

QUESTION TWO

- a) i) Name five types of concreting plant (5marks)
- ii) What is a concrete plant (4marks)
- b) what is the difference between control mix plant and ready mix plant (2marks)

- c) What does a mobile batch plant consist of (6marks)
- d) Outline operation mechanism of a ready mix concrete plant (3marks)

QUESTION THREE

- a) Briefly describe the following road work equipment
 - i) Vibrating steel drum compactor (4marks)
 - ii) Pneumatic tired roller compactor (4marks)
 - iii) Combination compactor (4marks)

- b) i) Outline 3 advantages of pneumatic compactor over steel wheel roller (3marks)
- ii) Outline the phases consisted in road and high way construction (5marks)

QUESTION FOUR

- a) i) What does an asphalt plant consist of (6marks)
- ii) How does the finished roads tone kept heated in roadworks (4marks)

- b) i) Explain what an asphalt distributor is (2marks)
- ii) What is a road re-claimer (3marks)

- c) Name five types of excavating plant (5marks)

QUESTION FIVE

- a) i) What is an asphalt plant (4marks)
- ii) Give a brief description of an asphalt plant composition (6marks)

- b) i) What is the difference between batch heater and continuous plant (4marks)

- c) Give a brief explanation of a batch heater plant functional operation (6marks)

