



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

BCECD305: RESEARCH METHODOLOGY AND PROJECT I

Date: 5/8/2016

Time: 8:30 – 10:30 AM

Instructions:

- This paper comprises five questions
- Question **one** is **compulsory** and carries 30 marks
- All other questions carry 20 marks each
- Answer question **one** and any other **two** questions

QUESTION ONE (30 MARKS)

- a) What is the meaning of research (2 marks)
- b) State and explain FIVE functions of research (10 marks)
- c) State and explain FOUR sources of a research topic. (6 marks)
- d) Give FOUR main features of a hypothesis. (2 marks)
- e) Give FIVE structures of a research proposal (10 marks)

QUESTION TWO (20 MARKS)

- a) Give TEN characteristics of a good research proposal (10 marks)
- b) Give TWO purposes of a hypothesis (2 marks)
- c) Provide FOUR characteristics of a good problem statement (8 marks)

QUESTION THREE (20 MARKS)

- a) State and explain TEN principles of a good report (10 marks)
- b) State and explain FIVE types of variables in a research topic (10 marks)

QUESTION FOUR (20 MARKS)

- a) Provide and explain FIVE characteristics of a good research topic (10 marks)
- b) Give with explanation FIVE relevance of report writing. (10 marks)

QUESTION FIVE (20 MARKS)

- a) What is sampling (2 marks)
- b) Explain the stages involved in sampling (8 marks)
- c) Give TEN characteristics of a good sample (10 marks)