MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST YEAR FIRST TERM FOR

CERTIFICATE IN BUILDING TECHNOLOGY

CONSTRUCTION PLANT AND EQUIPMENT

DATE: 10/6/2021 **TIME: 2:30 – 5:30 AM**

INSTRUCTIONS TO CANDIDATES

Attempt all the questions

1.	a)	State 5 reasons for using constructions plants.	(10 marks)
	b)	List 5 types of equipment used in a construction site.	(5 marks)
	c)	Sketch and label a bulldozer	(5 marks)
2.	Using sketches differentiate between a grader and a scraper.		(20 marks)
3.	a)	Discuss the operation of a scraper.	(10 marks)
	b)	With a well labelled diagram sketch a back actor	(10 marks)
4.	a)	Describe a tandem and state where it is used	(10 marks)
	b)	Differentiate between a roller and vibrators	(6 marks)
	c)	State factors that affect compaction	(4 marks)
5.	a)	Describe a trencher and state where it is used	(10 marks)
	b)	State 5 factors to consider when selecting an excavator	(10 marks)