



MACHAKOS UNIVERSITY

University Examinations for 2020/2021

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING
SECOND YEAR SECOND TERM EXAMINATION FOR
DIPLOMA IN BUILDING TECHNOLOGY
TECHNICAL DRAWING

DATE: 4/6/2021

TIME: 2:30 – 5:30 PM

INSTRUCTIONS: ANSWER ALL THE FIVE QUESTIONS.

1. a) State one use of each of the following drawing instruments; (10 marks)
 - i) Tee square
 - ii) Set square
 - iii) Protractor
 - iv) Pair of compass
 - v) Ruler
- b) Draw the following types of lines; (10 marks)
 - i. outline
 - ii. construction line
 - iii. break line
 - iv. boundary line
 - v. centre line
2. a) Construct a line 100mm long and bisect it. (10 marks)
- b) By use of set squares only, construct an angle of 135 degrees. (10 marks)
3. a) Construct a line 115 mm long and divide it into twelve equal parts. (10 marks)
- b) Construct a line 120mm long and divide it into a ratio of 2:3:4. (10 marks)

4. a) Construct an angle of 60 degrees by use of a pair of compasses. (10 marks)
- b) Construct an angle of 15 degrees by use of a pair of compasses and show the all construction details. (10 marks)
5. Print the following paragraphs in lower case (small letters)

“Good lettering and neat line work are very pleasing to look at on a drawing. Constant practice aims at producing plain and clear figures and attainment of a good standard’

Always print between two construction lines. In the early stages it is an advantage to pencil in the letters lightly with the aid of a ruler and then line by hand. (20 marks)

marks) .