



# MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING, BANKING AND FINANCE

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

1903/106 CERIFICATE IN SUPPLY CHAIN MANAGEMENT

BUSINESS CALCULATION AND STATISTICS

DATE: 22/11/2019

TIME: 11.30-2.30 PM

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## INSTRUCTIONS:

Answer all the questions

1. Differentiate between equalities and inequalities (10 marks)
2. graph and find the values of x,y &z (10 marks)  
 $12x+15y+6z=35$   
 $14x+12y+7z=24$   
 $6x+6y+z=15$
3. Solve the following simultaneous equation using elimination method (10 marks)  
 $5x + 6y = 80$   
 $7x + 10y = 570$
4. solve the following equation using substitution method  
 $2x - 3y + 4z = -4$   
 $x + 5y - 2z = 15$
5. in a class there are 500 students. If 150 of the students are girls find the ration of girls to boys. (10 marks)
6. if the price of unga increased by shs 20 from shs 125, what was the percentage change in price (10 marks)
7. 2 pen costs and 3 rulers cost shs 200. In another market 3 ruler and 1 pen costs shs 100 .what is the price of a ruler and that of apen (10 marks)