The Co-operative University of Kenya
END OF SEMESTRE EXAMINATION DECEMBER-2019
EXAMINATION FOR THE CERTIFICATE IN BUSINESS MANAGEMENT / PURCHASING & SUPPLIES MANAGEMENT (YR I SEM I)

UNIT CODE: CBM / CPS 0104

UNIT TITLE: BUSINESS CALCULATIONS

DATE: 3RD DECEMBER, 2019   **TIME: 2:00 PM – 4:00 PM**

INSTRUCTIONS:
- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE
- (a) Define the term foreign exchange   (2 marks)
- (b) In a hotel, the total daily wage bill of 3 waiters and 2 cleaners is Ksh.1, 300. The difference in daily earnings of 5 waiters and 3 cleaners are Ksh.900. Calculate the amount that each waiter and each cleaner earns per day   (4 marks)
- (c) State TWO types of discounts that may be offered to a retailer business transaction   (4 marks)
- (d) Mrs Kiragu went shopping, she spent ½ of the money she had on sugar, ¼ of the remainder on meat and $\frac{2}{3}$ of the remainder on maize flour. When she completed her shopping she had a balance of sh.300. Calculate:-
    - i.   How much money she spent on each item she bought   (3 marks)
    - ii.   The amount of money she had before she started her shopping   (3 marks)
- (e) The cash price of a computer in a shop is ksh.36, 000. The teller charges 30% more on hire purchase terms. A customer bought the computer on hire purchase terms and paid a deposit of Ksh.15, 000. The balance was to be paid in 10 equal monthly instalments. Calculate the amount of monthly instalment   (4 marks)
- (f) A man deposited sh.20, 000 in savings account for 3 years at simple interest rate of 12.5% per annum. How much money would he have lost if he had deposited the same account for 2 years in fixed account where the money was compounded at 16% per annum   (5 marks)

QUESTION TWO
- (a) The number of vehicles in a firm is added 8 times itself and the result is 60. Determine the number of vehicles   (4 marks)
- (b) John, Kip and Haron contributed ksh.600, 000, 300,000 and 400,000 respectively towards a business venture. They agreed to distribute the net profit as follows:
    - 65% to be shared equally
    - 25% to be shared in the ratio of their contributions
    - 10% to be retained for running of the business

The total net profit for the year ended 31st December 2010 was Ksh.420, 000
Required:
Calculate the amount received by each partner   (10 marks)
- (c) Cate is to retire in ten years' time. On retirement, she will receive a total pension of Ksh.1, 500,000. The discount rate is 10% per annum. Determine the present value of her pension   (6 marks)

QUESTION THREE

(a) A sales person receives commission on sales as follows

1.5% on the first ksh.20, 000 worth of sales

2% on the next ksh.60, 000

5% on the other extra sales

In one month he received total earnings of ksh.8, 000

   i. How much sales did he make (4 marks)

   ii. How many items did he sell if each costs ksh.6, 500 (6 marks)

(b) If 10 men working 8hrs a day take 15 days to complete a job, how long would it take 20 men working 6 hours to complete the same job (6 marks)

(c) Distinguish between the terms mark up and margin as used in business transactions (4 marks)

QUESTION FOUR

(a) The cost of 3 sheep and 2 goats is ksh.7, 200 and the cost of 4 sheep and a goat is ksh.7, 600. Calculate the cost of 3 goats and a sheep (8 marks)

(b) A house was bought for ksh.3, 500, 000 five years ago. It appreciated by 10% in the first year, 30% in the next two years and 20% for the remaining years. Determine the present value of the house (8 marks)

(c) Solve the following linear equation (4 marks)

$$4(x + 5) - 6(2x + 3) = 3(x + 14) - 2(5 - x) + 9$$