THE UNIVERSITY OF BAMENDA; HTTTC BAMBILI

COMMON ENTRACNE EXAMINATION, JULY 2009 SESSION

CYCLE: SECOND DEPARTMENT; ADMINISTRATIVE TECHNIQUES

PAPER: BUSINESS MATHEMATICS.

DURATION 3HRS. COEFFICIENT 5

QUESITON 1:

Canial produces and sales daily products as follows;

	Price per kg			Quantity (000kg)		
Products	2000	2001	2002	2000	2001	2002
Milk	100	195	207	9675	9750	10500
Butter	3075	3000	3385	118	115	110
Cheeses	1740	1770	1645	78	75	83

Calculate the simple quantity aggregate and price aggregate indices using:

a) 2000 as base year

b) 2001 as base year

QUESTION 2:

Three bills with face value 1,000,000 FCFA, 500,000FCFA, 1,500,000fcfa and their respective due dates as follows: 2, 4, 5 years are equivalent to a bill of 3,100,000 fcfa. What is the due date of the unique bill if interest is compounded at 8 percent per annum? Assume the future value of the unique bill is equivalent to that of other bills.

QUESTION 3:

A large company sales manager has tabulated the price against entire capacity (c.c.) for 10 models of cars available for men as follows;

Price (000)	4900	5200	6160	7980	7930	3190	3190	5160	4050	7150
Capacity (c.c)	1000	1270	1750	2230	1990	600	650	1500	1450	1650

Worked required:

Obtain the regression line by method of semi coverage.

QUESTION 4:

A and B are partnership. A capital is 2500fcfa and B capital is 4500fcfa respectively. It was agreed that A should receive 30 percent of net profit for managing the business, and the rest divided into proportions of capital contributions. The net profit was 2800fcfa. How much should there each receive?

QUESTION 5:

A firm has produce the following budget for 2 activity levels:

Wages	Budget for 5000 units	Budget for 6000 units
Maierias	16000	17200
Salaries	25000	30000
Depreciation	22500	23000
Others	18500	21000

Prepares budget for an activity level of 6500 units which shold show clearly the contribution which should be expected. Profit is equal to 20 percent of selling price.

QUESTION 6:

Suppose the highest of 1/5 shares double in price overnight show in the table below.

Today	142	181	540	180	95	188	288
Yesterday	142	181	270	180	95	164	174

Calculate the geometric mean, arithmetic meand and the harmonic mean for today and yesterday respectively.

Question 7:

a) Calculate the percentage change of a ball pen given that a pen costing 100fcfa in 1006 was sold at 75fcfa in 2005.

b) The following table gives details of prices and quantity sold of two particular items in a department store over two years

Item	No sold	1984 price	1985 price	No sold
V.C.D Player	37	43800	46200	18
14 Inch T.V.	26	32200	38400	15

Work Required:

Calculate the price and quantity relative, using 1984 as the base year.

Determine the percentage increase in price and quantity using 1984 as the base year.

Question 8:

The population of a certain town had 15000 in 1970. It increases by 13.6 per 1000 in 1972. What was the population in 1973?