COMMON ENTRACNE EXAMINATION, JULY 2010 SESSION

CYCLE: SECOND CAMPUS: BAMBILI

SERIES: ACCOUNTANCY

PAPER: BUSINESS MATHEMATICS.

DURATION 3HRS. COEFFICIENT 3

Question 1:

As an exercise, a company ask its sotre supervisor and purchase manager to independently rank its 8 main supplies (A,B,C,D,E,F,G and H) In order to value o the company, taking into account such factors as reliability, volume, special discount and product quality. The two managers ranked the suppliers in order of preferences as follows;

Store supervisor	E	C	G	H		D	A	F
Purchase manager	E	G	B	D	C	A	H	F

Use the spearman rank correlation to determine the amount of agreement between the two. Can any conclusion be drawn about the supplies/

Question 2:

FOKOBO ENTERPRISE has just increase its capital and the official value of its shares, and the subscription rights are as follows at the DOUALA stock exchange for 10 consecutive days (in 000's fcfa).

Value of share X_1	98	94	97	98	100	102	102	104	104	1.1
Value of subscription right Y_1	6.5	5.4	6.1	6.4	6.9	8.00	7.5	7.5	7.4	7.3

a. Evaluate the linear correlation coefficient between the variable x1 and yi.

b. Determine the equation of the regression function x and y which will enable to estimate yi

c. Represent the cloud of points and also the regression function on an appropriate graph.

Question 3.

In order to acquire good will, Mr. Zoufu is given the possibility to chose one of the following hypothesis:

- 10 minutes of 10000fcfa each, payable on every 31st December the 1st being paid after two years

- Or, 12 equal interest are evaluated at 4 percent per annum.

Determine the value of the semi annual payment.

Question 4:

SIMPLIICTY HOTEL decides to depreciate equipment whose vale is 531000fcfa within 6 years why depreciations which are in an increasing arithmetic progression with a common difference of 15000fcfa. After the 3rd depreciation, the manager decides to depreciate the equipment with depreciation which are in decreasing geometric progression. Knowing that the 6th depreciation which is consequently the last in the 2nd system of depreciation is equal to the 3rd depreciation;

4.1 Determine the value of each of the first 3 depreciation

4.2 determine the common ration of the geometric progression

4.3 Determine the values of the 4th and 5th depreciation.

Question 5:

A capital invested at a rate 1 during 8 years. The ratio of the interest yielded during the first 5 years and the interest yielded during the last 3 years is 0.802451

5.1 Determine the rate of investment

Question 6:

The bill of exchange are in geometric progression: their product is 8*1015. Their common ration is 2;

a. Calculation the value of the first bill.

b. Calculate the value of the second and the third bills.