PAN AFRICA CHRISTIAN UNIVERSITY

END OF SEMESTER EXAMINATION FOR THE DEGREE OF

SEPTEMBER-NOVEMBER 2022

CAMPUS: ROYSAMBU

DEPARTMENT: BUSINESS

COURSE CODE: CFN 401

COURSE TITLE: FINANCIAL MODELLING AND FORECASTING

EXAM DATE:

TIME:

INSTRUCTIONS

- This examination script consists of **Six (6)** questions.
- Answer question **ONE** and ANY other **three** Questions.
- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.

Question One (Compulsory) **(10 marks)**

a) Differentiate between a simple linear regression model and a multiple linear regression model. Use suitable examples.
(4 marks)

b) Discuss using suitable examples the place of computer programs in financial modeling
(6 marks)

Question Two (10 marks)

Discuss the various steps in the forecasting process (10 marks)

Question Three (10 marks)

a) State **five** advantages of forecasting cash flows. (5 marks)

b) Explain the process of forecasting cash flows using the Markov approach. (5 marks)

Question Four (10 marks)

i. Using trend analysis, find the expected sales for years 20X1 and 20X2 using the data below for Nyuki Ltd:

Nyuki Ltd historical sales follows.

Year	Sales (in millions)
19X6	kshs. 10
19X7	12
19X8	13
19X9	16
20X0	17

Question Five (10 marks)

a. The following data relates to Zee Co. Ltd in relations to sales and cost of advertisement for the year ended 31^{st} May 2018

Sales (y) Shs. 000	170	240	260	300	220	250
Cost (x) Sh. 000	20	40	50	60	30	40

Required:

a) Compute the relationship between sales and cost of advertisement. (8 Marks)
b) Forecast r sales if sh. 60,000 is spent on advertisement (2 Marks)

Question Six (10 marks)

Global ltd has approached their local bankers for a line of cash budget for the first six months and have furnished you with the following information.

	Dec	Jan	Feb	Mar	Apr	May	June	July
Sales Sh'000'	200	180	120	140	140	160	180	220

Additional Information:

1. Sales are made 40% can and the balance collected the following month
2. Purchases average 70% of the monthly sales. They are paid 60% cash and the balance is 30days
3. Payroll is 20% of the following month's sales
4. Operating expenses are 15% of the monthly sales
5. Anew equipment costing sh.24, 000 will be purchased for cash in April. Annual depreciation on this equipment will be 25% of cost.
6. Tax payments for sh.40, 000 are due in January and March.
7. The beginning cash balance in 2012 is expected to be Sh.50,000
8. A minimum cash balance of Shs.25, 000 is required at all times.

Required:

Prepare Global Monthly cash budget for the first six months of 2022. (10marks)