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University Examinations 2013/2014

FOURTH YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF COMMERCE

HBC 2219: FINANCIAL MODELLING AND FORECASTING

DATE: DECEMBER 2013

TIME: 2 HOURS

INSTRUCTIONS: Answer question *One* and any other *Two*.

QUESTION ONE (30 MARKS)

- a) Explain the following terms used in Financial Modelling and Forecasting:
- i) Financial modelling (2 marks)
 - ii) Financial forecasting. (2 marks)
 - iii) Exponential smoothing. (2 marks)
 - iv) Co-efficient of coorelation (2 marks)
- b) Explain the steps involved in financial forecasting. (8 marks)
- c) Briefly describe a common size statement and a comparative statement. (4 marks)
- d) Given below is a balance sheet for Sir Henry Industries:

	2010 (Shs.)	2011 (Shs.)
Current Liabilities	1,123,000	1,555,000
Long term liabilities	360,000	400,000
Capital	<u>255,000</u>	<u>255,000</u>
Total	<u>1,738,000</u>	<u>2,210,000</u>
Current Assets	1,404,000	1,910,000
Net fixed assets	100,000	98,000
Other Assets	234,000	202,000
Total	<u>1,738,000</u>	<u>2,210,000</u>

Required: Prepare a comparative balance sheet for Sir Henry Industries. (10 marks)

QUESTION TWO (20 MARKS)

Jeyfey presented the following income statement for its period ending December 2011.

	Shs.
Sales	1,250,000
Variable cost	750,000
Fixed cost	150,000
Depreciation	75,000
EBIT	275,000
Interest	35,000
PBT	240,000
Tax	84,000
PAT	156,000
Dividend	124,000
Retained earnings	31,200

Additional information:

1. The sales are expected to grow at 15%.
2. Variable costs are always 60% of the sales.
3. Fixed costs are expected to grow at 10%.
4. Depreciation is charged at 3% on the book value.
5. Current assets are based on 70% of gross assets.
6. Interest is charged at 10% non-reducing.
7. Debt repayment will be suspended to finance growth and additional capital injected.
8. Tax rate is 35%.
9. Dividend payout ratio is 80%.
10. Current ratio is 2:1.
11. Total assets turnover ratio is expected to improve for 35%.

Required:

- i) Prepare a proforma income statement and balance sheet for 2012. (20 marks)

QUESTION THREE (20 MARKS)

The following table shows the ages(X) and blood pressure (Y) of 8 persons:

X	52	63	45	36	72	65	47	25
Y	62	53	51	25	79	43	60	33

- a) Calculate regression equations. (4 marks)
- b) Calculate: (16 marks)
- i) Regression co-efficient

- ii) Correlation co-efficient
- iii) Standard error of estimations

QUESTION FOUR (20 MARKS)

- a) Explain FOUR components of time series analysis. (4 marks)
- b) Assume a four yearly cycle and calculate the trend by the method of moving averages from the following data relating to the production of tea in Kericho. (16marks)

Year	Production (tonnes)
1994	464
1995	515
1996	518
1997	467
1998	502
1999	540
2000	557
2001	571
2002	586
2003	612

- a) Tax design and structure in Kenya. (3 marks)
- b) In-depth examination (4 marks)