UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 5 Examination in Engineering: July 2017

Module Number: IS5303 **Module Name: Financial Management**

[Three hours]

[Answer all questions, 5 questions, 60 Marks]

Q1. Write down relevant number of most appropriate answer for each question in the answer booklet provided.

i. Calculate Mr. Perera's opening capital given the following assets and liabilities: Noncurrent Assets Rs. 60,000, Inventory Rs. 10,000, Bank Balance at Bank Rs.5,000, Loan from Father Rs.8,000 and Bank Loan for Non-current Assets Rs.20,000. Is it:

A). Rs.63,000
B). Rs.37,000
C). Rs.47,000
D). Rs.103,000

ii. Which of the following is not a liability?

A). Accrued Accountancy Fees
B). Long Term Bank Loan
C). Bank Overdraft
D). Depreciation on Motor Vehicle.

iii. Which of the following balance sheet equations is wrong?

A). Assets + Liabilities = Capital
B). Assets - Liabilities = Capital
C). Assets - Capital = Liabilities
D). Liabilities + Capital = Assets

iv. Total costs are comprised of

A). variable costs plus fixed costs
B). variable costs plus fixed costs plus semi-variable costs
C). fixed costs plus semi-variable costs
D). variable costs plus semi-variable costs

v. Using the marginal costing method, contribution is equal to total sales revenue less

A). variable costs
B). total costs
C). fixed costs
D). direct labour costs

vi. Selling price per Kg is Rs. 69.50, variable cost per Kg is Rs. 35.50 and fixed cost is Rs.1,802,000. Find out the BEP in units.

A). 49,000 Kgs.
B). 51,000 Kgs.
C). 53,000 Kgs.
D). 55,000 Kgs.

[01 Mark for each question]
[Total 06 Marks]

Q2. The Trial Balance of Nimal Traders as at 31st March 2017 is given below. Nimal Traders is a sole proprietorship owned by Nimal Rajakaruna.

Trial Balance as at 31st March 2017

Description	Dr. (Rs.'000)	Cr. (Rs.'000)
Property, Plant and Equipment at Cost:		
Land and Buildings (Land value - Rs.1,500,000/-)	12,000	
Motor Vehicles	7,500	
Furniture and Fittings	5,500	
Accumulated Depreciation as at 01st April 2016:		
Buildings		1,061
Motor Vehicles		3,280
Furniture and Fittings		2,200
Stock as at 01st April 2016	3,500	
Drawings	190	
Trade Receivables	4,333	
Trade Payables		2,662
Purchases	35,000	
Sales		54,500
Office Repair Expenses	360	
Electricity	600	
Financial Consultancy Charges	420	
Water Charges	445	
Salaries and Wages	1,947	
Sales Commission	930	
Carriage Inwards	450	

Discount Received		35
Interest on Bank Loan	40	
Discount Allowed	60	
Rates Paid	537	
Advertising Expenses	2,590	
Capital as at 01st April 2016		21,160
12% Long Term Bank loan		4,500
Cash in Hand	8,219	
Cash at Bank	5,157	
Bank Overdraft		380
	89,778	89,778

The following additional information is also provided:

1) Closing stock as at 31st March 2017 was valued at Rs.1,520,000/-.
2) The policy of the business is to provide depreciation on the straight line basis at cost as follows:
   Buildings - 05% per annum
   Motor vehicles - 20% per annum
   Furniture and Fittings - 25% per annum
3) A trade receivable balance of Rs.33,000/- as at 31st March 2017 from Nalinda (Credit Customer) was decided to be written off as a bad debt.
4) A sales commission of 2% on sales should be paid to salesmen.
5) Prepayment of expenses as at 31st March 2107 were as follows;
   Electricity Rs. 55,000/-
   Water Rs. 35,000/-
6) The 12% bank loan was obtained on 01st April 2016 and it should be settled in year 2018. The interest payable for the year 2016/17 on the loan was Rs. 540,000/-.
7) Nimal hired a financial consultant on contract basis. The contract was started on 01st August 2016. The agreed consultancy fee per month was Rs. 60,000/-
8) The Motor vehicle of the business has been rented out for a monthly rental of Rs. 30,000/- with effect from 01st January 2017. The respective rent has been received by Nimal and spent on his personal expenses. But it has not been recorded in the books of the business.

You are required to prepare

a) Income Statement for the year ended 31st March 2017.

[14 Marks]

b) Statement of Financial Position as at 31st March 2017.

[10 Marks]
[Total 24 Marks]

Q3. a) The following is a list of business/accounting events:

a. Repayment of a loan
b. Making a sale on credit
c. Buying a non-current asset for cash

d. Receiving cash from a trade receivable (debtor)
e. Depreciating a non-current asset
f. Buying some inventories for cash

State how each event effect (increase, decrease or not) on both cash and profit. Answer should be in the following format;

Business/Accounting Event	Effect on	
	Profit	Cash
a. Repayment of Loan		
b.		
c.		

[3 Marks]

b) Relevant information from Income Statement and Statement of Financial Position of the Hasara Trading (Pvt) Limited for the year ended 31st March 2017 is given below;

Extracted information from Income Statement;

	Rs.	Rs.
Gross Profit		656,000
Less: Expenses		
Salaries & Wages	196,700	
Stationary	12,600	
Depreciation on Building	67,800	
Depreciation on Motor Vehicles	24,540	
Selling & Distribution Expenses	25,890	
Other Expenses	87,650	
Interest Expenses	62,800	
Total Expenses		477,980
Profit after interest and before taxation		178,020
Less: Income Tax Expense		49,846
Net Profit After Taxation		128,174

Extracted information from the Financial Position Statement;

Description	As at 31.03.2017	As at 31.03.2016
	Rs.	Rs.
Inventories	72,000	56,000
Trade Receivables	65,000	98,000
Trade Payables	82,000	76,000

Additional information on payments during the year was as follows;
Interest Paid Rs. 76,200

Income Tax Paid Rs. 62,650

You are required to calculate the net cash flow from the operating activities of the Hasara Trading (Pvt) limited for the year ended 31st March 2017.

[7 Marks]
[Total 10 Marks]

Q4. a) Define the terms "fixed cost" and "variable cost". Explain how an understanding of the distinction between fixed costs and variable costs can be useful for managers to make decisions.

[2 Marks]

b) Pagadoma Toys (Pvt) Limited can produce three different types of toys ("Agee", "Shagee" and "Magee") using the same staff. Various estimates for next year have been made as follows:

Type of Toys	"Agee" Rs. /unit	"Shagee" Rs. /unit	"Magee" Rs. /unit
Selling price	300	390	200
Variable material cost	150	180	100
Other variable costs	60	100	50
Share of fixed costs	80	120	40
Staff time required (hours)	2 hrs.	3 hrs.	1 hr.

Fixed costs for next year are expected to total Rs. 400,000.

Required:

i). If the business were to produce only "Agee" next year, how many units of the toy "Agee" would it need to produce in order to break even? (Assume for this part of the question that there is no effective limit to market size and staffing level.)

[2 Marks]

ii). If the business has a maximum of 10,000 staff hours next year, in which order of reference would the three products come?

[4 Marks]

iii). If the business has a maximum of 10,000 staff hours next year and the maximum market for next year for the three products is as follows:
Agee 3,000 units
Shagee 2,000 units
Magee 5,000 units
what quantities of which product should the business produce next year?

[2 Marks]
[Total 10 Marks]

Q5. a) Why is the Net Present Value method of investment appraisal considered to be theoretically superior to other methods that are found in practice?

[2 Marks]

b) Wir Lanka (Pvt) Limited has a new investment opportunity. The new investment is a product that would be produced on a just-in-time basis. The new project is expected to have a life of five years. This investment requires an immediate cash outflow of Rs. 400,000 to purchase a machine to produce the new product. The expected residual value of the machine at the end of the project's life is Rs.50,000. A forecasted financial statement showing the values that are specific to this investment for the next five years is as follows:

Year	1	2	3	4	5
	(Rs. '000)	(Rs. '000)	(Rs. '000)	(Rs. '000)	(Rs. '000)
Sales	230	350	270	320	290
Production Cost;					
Materials	(54)	(84)	(65)	(87)	(70)
Labour	(60)	(92)	(71)	(84)	(75)
Depreciation	(70)	(70)	(70)	(70)	(70)
Profit	46	104	64	79	75

The company has estimated that the cost of capital of this project is 14%.

Following Discounting factors are given for your calculations;

Year	0	1	2	3	4	5
Discounting Factor at 14%	1.000	0.877	0.769	0.675	0.592	0.519
Discounting Factor at 16%	1.000	0.862	0.743	0.641	0.552	0.476
Discounting Factor at 20%	1.000	0.833	0.694	0.579	0.482	0.402

(Hint; use relevant information only)

You are required to;

i). Calculate Net Present Value (NPV) of the investment

[3 Marks]

ii). Calculate Internal Rate of Return (IRR) of the investment

[3 Marks]

iii). Do you recommend to accept this project? Justify your answer using the results of the above calculations.

[2 Marks]

[Total 10 Marks]