UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 5 Examination in Engineering: August 2018

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. Which of the following account is affected from the **Drawings of cash** in sole-proprietorship business?
   A). Capital Account
   B). Shareholder account
   C). Liability account
   D). Expense account

ii. An asset is considered to be a **current asset** if:
   A). It has been bought recently and was bought new and not used
   B). It can be realized in cash or sold or consumed in the business within one year
   C). It is a piece of new machinery that is expected to last for at least ten years
   D). All of the given options

iii. A Financial statement that indicates the **success or failure of a business**, over a period of time is called:
   A). A cash flow statement
   B). A retained earnings statement
   C). An income statement
   D). A balance sheet

iv. Which of the following equations properly represents a derivation of the fundamental accounting equation?
   A). Assets + liabilities = owner's equity.
   B). Assets = owner's equity.
   C). Cash = assets.
   D). Assets – liabilities = owner's equity.

v. Using the marginal costing method, **contribution** is equal to **total sales revenue less**
   A). total costs
   B). direct labour costs
   C). fixed costs
   D). variable costs

vi. In management accounting, **an emphasis and focus** must be

A). future oriented

B). past oriented

C). communication oriented

D). bank oriented

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

Q2. a) "Accounting is often referred to as the language of business. Engineers need to learn about a firm's accounting practice so that they can communicate better with management".

Critically analyze the above statement concluding whether you agree with it or not.

[4 Marks]

b) Supreme Biz Com is a sole proprietorship which sells Computers and Accessories. The Trial Balance of Supreme Biz Com as at March 31, 2018 is as follows:

Description	Dr.	Cr.
Property, Plant and Equipment at Cost:		
Land	5,000	
Building	3,000	
Motor vehicles	6,500	
Office furniture	2,500	
Accumulated Depreciation as at April 1, 2017:		
Buildings		1,800
Motor Vehicles		2,500
Office furniture		750
Stock as at April 1, 2017	2,650	
Capital as at April 1, 2017		10,500
Drawings	950	
Trade Debtors	9,700	
Trade Creditors		9,265
Cash in hand	4,505	
Short term bank deposit at 12% interest rate per annum	1,600	
Bank overdraft		1,170
Fees for computer technician	500	
Long term bank loan		4,600
Showroom building rent	36	
Salaries and wages	2,410	
Sales expenses	640	
Sales		45,050
Purchases	30,864	
After sales expenses	305	
Telephone and internet expenses	185	
Payments for damage claims	175	
Travelling expenses of after sales service staff	280	
Electricity expenses	325	

Interest expenses on financial facilities	428	
Advertising and promotional expenses	3,114	
Interest income received on short term bank deposit		32
Totals	75,667	75,667

The following additional information is also provided:

1) Closing stock as at March 31, 2018 is Rs.3,108,000/-.
2) The business policy is to depreciate Property, Plant and Equipment on the straight-line basis using the following rates, at cost:
   Building - 5%
   Motor vehicles - 15%
   Office furniture - 20%
3) The Management decided to write off Rs. 25,000/- as bad debts from the Trade Debtors.
4) A Computer Technician was hired on contract basis with effect from October 1, 2017. Computer technician's contract fees per month is Rs. 100,000/-.
5) Short term bank deposit at 12% interest rate per annum was placed at Commercial Bank Plc on January 1, 2018.
6) An Office Table with a market value of Rs. 100,000/-, was at owners house, which had been brought to computer shop for office use on April 1, 2017. That has not been recorded in the books of the proprietorship.

You are required to prepare the followings;

i) Income Statement for the year ended March 31, 2018.
ii) Statement of Financial Position as at March 31, 2018.

[20 Marks]
[Total 24 Marks]

Q3. a) Last year's cash flow statement for Heylos Plc showed a negative cash flow from operating activities. What could be the possible reasons for this?

[2 Marks]

b) Details of Current Assets and Current Liabilities extracted from the Statement of Financial Position as at March 31, 2018 and its comparatives, and the Income Statement for the year then ended of G H Trading (Pvt) Limited are as follows:

Income Statement

	Rs.	Rs.
Sales		565,400
Less: Cost of Sales		234,600
Gross Profit		330,800
Less:		
Operating Expenses excluding depreciation	145,000	
Depreciation	62,000	
Interest Expenses	18,000	
		225,000
Net profit, after interest, before taxation		105,000
Less: Income Tax Expense		25,750
Net Profit after Taxation		79,250

Extracts from Financial Position Statements

As At	March 31, 2018	March 31, 2017
	Rs.	Rs.
Inventories	26,000	26,000
Trade Receivables	14,000	28,000
Prepayments	18,000	-
Trade Payables	29,000	16,000
Accrued Expenses	15,000	12,000

The following further information is available about payments during year;

Corporate tax paid Rs. 12,000

Interest paid Rs. 22,000

You are required to prepare net cash flow from operating activities of the Company.

[8 Marks]

[Total 10 Marks]

Q4. a) "Where operating gearing is relatively high, a small amount of increase or decrease in the volume causes a relatively large amount of increase or decrease in the profit. In other words, an increase in volume would cause a disproportionately greater increase in profit. The equivalent would also be true of a decrease in activity".

In general terms, what types of business activities tend to have the high operating gearing?

[3 Marks]

b) GH Plantations (Pvt) Ltd has two options to produce "PECO 300" in his Tea Factory. Details of two options are as follows;

Option	1	2
Variable cost of 1kg of "PECO 300"	**Rs.**	**Rs.**
4.65 kgs of Green Leaf at Rs. 100/- per kg.	465	465
Labour Cost	100	50
Total Variable Cost per 1kg of "PECO 300"	565	515
Selling Price of 1kg of "PECO 300"	900	900
Fixed Cost per Month	30,000	55,000

- Labourers are all on contracts such that if they do not work for any reason, they are not paid.
- GH Plantations (Pvt) Ltd expects to sell 500 kgs of "PECO 300" in each month.

i) How much profit would the business make per month if it sells expected number of Kgs of "PECO 300"under each option?

[3 Marks]

ii) What is the Break Even Point (BEP) under each option?

[2 Marks]

iii) After analyzing the details given by the finance manager, Mr. Susil Nishantha, managing director of GH Plantations (Pvt) Ltd, decided to select Option 2 in producing "PECO 300".
Briefly explain types of attitudes of Mr. Susil Nishantha in making new investments.

[2 Marks]
[Total 10 Marks]

Q5. a) "Research shows that generally there are four methods used by businesses throughout the world to evaluate investment opportunities. It is possible to find businesses that use variants of these four methods. It is also possible to find businesses, particularly smaller ones, that **do not use any formal appraisal method**, but rely more on the 'gut feeling' of their managers".

Briefly explain the risk involved with rely on the 'gut feeling' in making investments **highlighting the nature of Capital Investment Decisions.**

[2 Marks]

b) Mr. Paul Perera, who is mechanical engineer, retired from his employment. Now Mr. Paul wants to start his own business by investing the gratuity fund received at the retirement.
One of his friends gave information about two investment opportunities. Each option requires an initial investment of Rs. 2,500,000/- to purchase machineries. Both projects will run over five years. Each investment option has following net cash flow projections;

Year	Investment: Option 1 Rs.	Investment: Option 2 Rs.
0	(2,500,000)	(2,500,000)
1	1,900,000	(600,000)
2	1,200,000	1,800,000
3	600,000	2,100,000
4	900,000	2,450,000
5	600,000	3,400,000

At the end of the five year project period, the residuals of the machineries purchased for the option 1 and option 2 can be sold for Rs. 450,000/- and Rs. 950,000/- respectively.

The Company has estimated that the cost of capital of this project is 12%. Accordingly, the discounting factors at 12% for each year are;

Year	01	02	03	04	05
Discounting Factor @ 12%	0.892	0.797	0.711	0.635	0.567

You are required to;

i) Calculate Pay Back Period of each option. Based on the Pay Back Periods calculated, which option should be selected by Mr. Paul?

[2 Marks]

ii) Calculate Net Present Value (NPV) of each option. Based on NPV, which option should be selected by Mr. Paul?

[4 Marks]

iii) By taking facts from above case, explain that decisions based on Pay Back Periods, does not have a direct bearing on increasing the wealth of the shareholders, which is widely accepted objective of a business.

[2 Marks]

[Total 10 Marks]