UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 5 Examination in Engineering: July 2016

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

[Three hours]

[Answer all questions]

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

a) What do we call amounts of money borrowed from lenders?
   i. Assets
   ii. Liabilities
   iii. Expenses
   iv. Income

b) Which one of the following methods of investment appraisal uses annual profits (losses) rather than annual cash flows when evaluating investment opportunities?
   i. Net present value
   ii. Accounting rate of return
   iii. Payback period
   iv. Internal rate of return

c) Consider the following two statements concerning the differences between financial and management accounting:

   A – Management accounting reports are often prepared for a specific purpose whereas financial accounting reports usually serve a general purpose.

   B – Management accounting reports place less emphasis on objective, verifiable evidence than financial accounting reports.

   Which one of the following combinations (true/false) relating to the above statements is correct?

	Statement A	Statement B
i.	True	True
ii.	True	False
iii.	False	True
iv.	False	False

d) Which one of the following ratios may not be used to evaluate the profitability of the business?
   i. return on capital employed
   ii. net profit margin
   iii. current ratio
   iv. gross profit margin

e) The Profit Value (PV) chart is obtained by;

  i. plotting loss or profit against volume of activity
  ii. plotting contribution against volume of activity
  iii. plotting total cost against volume of activity
  iv. plotting variable cost against volume of activity

f) What is/are the use/uses of budgets?

  i. Budgets tend to promote forward thinking and the possible identification of short-term problems
  ii. Budgets can be used to help co-ordination between the various sections of the business
  iii. Budgets can motivate managers to better performance
  iv. All of the above

[6 Marks]

Q2. a) As you are a non-financial specialist, why do you need to know anything about accounting and finance?

[4Marks]

b) The Trial Balance of ABN Enterprises as at 31st December 2015 is given below. ABN Enterprises is a sole proprietorship owned by Rukman.

Description	Dr. (Rs. 000)	Cr. (Rs. 000)
Property, Plant and Equipment at cost:		
Land	4,000	
Building	6,000	
Motor vehicles	5,500	
Furniture and fittings	3,500	
Accumulated Depreciation as at 01st January 2015:		
Building		1,200
Motor vehicles		1,500
Furniture and fittings		750
Stock as at 01st January 2015	650	
Capital as at 01st January 2015		13,900
Drawings	150	
Trade Debtors	3,700	
Trade Creditors		2,215
Cash in hand	2,500	
Bank overdraft		110
Consultancy Fee - Marketing Consultant	280	
Bank loan		3,300
Damaged stocks	185	

Salaries and wages	1,410	
Sales commission	535	
Sales		30,000
Purchases	22,000	
Import duty	325	
Telephone Expenses	85	
Insurance of business property	115	
Carriage outwards	180	
Electricity and water	425	
Rates paid	300	
Advertising expenses	1,050	
Discount allowed	85	
Totals	52,975	52,975

The following additional information is also provided:

(1) Closing stock as at 31st December 2015 is Rs.1,120,000/-

(2) Rukman has transferred his personal three wheeler worth Rs.175,000/- to the ABN Enterprises on 31st December 2015, and this was not recorded in the books of accounts.

(3) Policy of the business is to depreciate its assets based on the straight-line basis using the following rates, at cost:
Buildings - 10%
Motor vehicles - 20%
Furniture and fittings - 25%

(4) During the year, Padman, a trade debtor informed that he is unable to pay the balance due of Rs.55,000/- and Rukman decided to write off this balance.

(5) Rukman wanted to expand the Market Share and hired a Marketing Consultant on contract basis. The contract commenced on 01st February 2015. Monthly consultancy fee is Rs.30,000/-.

(6) Prepayments and accrual as at 31st December 2015 were as follows;

Expense	Prepayment Rs.	Accruals Rs.
Water	10,000	
Telephone		15,000
Advertising		25,000

(7) An extra space building has been rented out for a monthly rental of Rs. 25,000/- from 01st July 2015. The respective rent has neither been received nor recorded in the books.

You are required to prepare;

i. Income Statement for the year ended 31st December 2015

ii. Statement of Financial Position as at 31st December 2015

[20 Marks]

Q3. a) Taking each of the categories of the cash flow statement in turn, in which direction would you normally expect the cash flow to be? Briefly explain your answer.

i. Cash flows from operating activities.
ii. Cash flows from investing activities.
iii. Cash flows from financing activities.

[3 Marks]

b) The relevant information from the financial statements of LDB Trading (Pvt) Limited for the year ended 31st December 2015 is as follows:

The following details have been extracted from income statement.

	Rs.	Rs.
Gross Profit		256,000
Less:		
Operating Expenses excluding depreciation	65,000	
Depreciation	34,000	
Interest Expenses	12,000	
		111,000
Net profit, after interest, before taxation		145,000
Less: Income Tax Expense		50,750
Net Profit for the period		94,250

The following are the current assets and current liabilities

Description	At the beginning of the Year Rs.	At the end of the Year Rs.
Inventories	16,000	25,000
Trade receivables	24,000	18,000
Trade payables	9,000	15,000

The following further information is available about payments during year;

Corporation tax paid Rs. 72,000
Interest paid Rs. 10,000

You are required to prepare net cash flow from operating activities for the year ended 31st December 2015 of the Company.

[7 Marks]

Q4. HML Manufactures (Pvt) Ltd makes Plastic Chairs. The fixed costs of operating the workshop for a month are Rs. 30,000. Each Chair requires materials that cost Rs. 75. Each Chair takes one hour to make, and the business pays the Chair makers Rs. 100 an hour. The Chair makers are all on contracts such that if they do not work for any reason, they are not paid. The Chairs are sold to a wholesaler for Rs. 400 each.

HML Manufactures (Pvt) Ltd expects to sell 500 Chairs a month. The business has the opportunity to rent a Chair -making machine. Doing so would increase the total fixed costs of operating the workshop for a month to Rs. 55,000. Using the machine would reduce the labour time to half an hour per Chair. The Chair makers would still be paid Rs. 100 an hour.

a) How much profit would the business make each month from selling Chairs
   i. assuming that the Chair -making machine is not rented, and
   ii. assuming that it is rented?

[3 Marks]

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

[2 marks]

c) What advice would you give HML Manufactures (Pvt) Ltd about renting the machine, on the basis of the values for margin of safety?

[1 Mark]

d) Damiro Suppliers (Pvt) Ltd undertakes a range of work, including making "washing machine casings" on a made-to-measure basis.

The business expects to incur the following costs during the next month:

Direct labour costs	Rs. 140,000	
Direct labour time	7,000 hours	
Indirect labour cost	Rs. 18,000	
Depreciation of machinery		Rs. 30,000
Heating, lighting and power		Rs. 12,000
Machine time		2,000 hours
Indirect materials		Rs. 5,000
Other miscellaneous indirect costs		Rs. 2,000
Direct materials cost		Rs. 20,000

The business has received an enquiry about a washing machine casing, and it is estimated that the washing machine casing will take 07 direct labour hours to make and will require 2 kg of raw materials, which costs Rs. 100 per kg. To produce a washing machine casing, it requires 2 machine hours.

The business normally uses a direct labour hour basis of charging overheads to individual jobs.

What is the full cost of making the washing machine casing?

[4 Marks]

Q5. a) When managers are making decisions involving capital investments, what should the decision seek to achieve?

[1 Mark]

b) "Research shows that there are basically four methods used in practice by businesses throughout the world to evaluate investment opportunities."

Name those four methods and explain decision criteria/rule under each method when there are more than one investment options to select.

[2 Marks]

c) Pearl Manufacturing (Pvt) Ltd is considering making an investment in a new project, which requires an initial investment of Rs. 4,650,000. The project will run over five years. The project manager has made following projections;

Year	Cash inflow Rs.	Profit/(loss) after charging Depreciation Rs.
1	2,200,000	(600,000)
2	3,950,000	800,000
3	4,600,000	2,100,000
4	4,900,000	2,450,000
5	2,600,000	1,400,000

At the end of the five year project period, the residuals of the machineries purchased for the project can be sold for Rs. 150,000/- as scrap.

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	0.892	0.797	0.711	0.635	0.567

You are required to

i. Calculate Accounting Rate of Return (ARR) of the project.
ii. Calculate Net Present Value (NPV) of the project.
iii. Explain what is your decision about this investment based on above evaluations? In addition, what are the other qualitative factors to be considered when you make your decision?

[7 Marks]