



UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 5 Examination in Engineering: August 2015

Module Number: IS 5303 Module Name: Financial Management

[Three hours]

[Answer all questions]

Question 01

- a. Briefly discuss the difference between financial accounting and management accounting with suitable examples.

(04 Marks)

- b. Mr. Kalhara has started a sole proprietorship business of selling pharmaceutical items. Following trial balance has been extracted from his books as at 31<sup>st</sup> March 2015.

Description	Debit	Credit
Capital as at 01 <sup>st</sup> April 2014		1,750,000
Bank Loan (10%) Taken on 01 <sup>st</sup> April 2013		500,000
Property, Plant and Equipment at Cost		
Building	750,000	
Machineries	150,000	
Motor Vehicle	1,200,000	
Furniture and Equipments	240,000	
Accumulated Depreciation - As at 01 <sup>st</sup> April 2014		
Building		75,000

Machineries		60,000
Motor Vehicle		480,000
Furniture and Equipments		48,000
Inventories as at 01 <sup>st</sup> April 2014	360,000	
Trade Debtors	240,000	
Trade Creditors		320,000
Cash in Bank	288,000	
Cash in Hand	178,000	
Discounts Allowed	6,500	
Discounts Received		8,400
Rent Income		250,000
Salaries	240,000	
Bank Loan Interest	45,000	
Carriage Inwards	3,500	
Electricity Charges	12,000	
Insurance	28,000	
Purchase	650,000	
Sales		960,000
Water Charges	3,400	
Telephone Expenses	4,500	
Advertising Expenses	18,000	
Selling and Distribution Expenses	8,500	
Cash Drawings by Mrs. Kalhara	26,000	
	<b>4,451,400</b>	<b>4,451,400</b>

The following information is also available for your consideration.

- I. The value of inventories as at 31<sup>st</sup> March 2015 was Rs. 280,000.

- II. Stocks valued Rs. 21,000 was damaged due to wrong storage made by an employee. No entries have been made in the books of accounts in respect of this event.
- III. Rs. 12,000 due from a customer became irrecoverable as at 31<sup>st</sup> March 2015, and is to be written off as bad debts.
- IV. Property, Plant and Equipment should be depreciated on straight-line method using following rates on their costs.

Building	5%
Machinery	20%
Motor Vehicle	20%
Furniture and Equipments	10%

- V. Prepayment and accruals as at 31<sup>st</sup> March 2015 were as follows,

	Prepayments (Rs.)	Accruals (Rs.)
Electricity	-	6,500
Water	1,200	-
Advertising	6,000	-

- VI. Extra space of the building was rented out for a monthly rent of Rs. 25,000 from 01<sup>st</sup> January 2014.

**Required**

Prepare the following financial statements,

Income Statement for the year ended 31<sup>st</sup> March 2015.

Statement of Financial Position as at 31<sup>st</sup> March 2015.

(20 Marks)  
(Total Marks 24)

## Question 02

a. Describe the following fundamental concepts using suitable examples.

- Entity Concept
- Going Concern
- Unit of Measure
- Periodic Reporting

(04 Marks)

b. The Trial Balance of Alpha Traders extracted on 31<sup>st</sup> December 2014 did not balance. Subsequent investigation revealed the followings with respect to the year ended December 2014.

- I. A debit note valued at Rs. 18,000 received from a customer had been entered to the purchase journal.
- II. Rent payment of Rs. 30,000 was not posted to the relevant expense account.
- III. A Rs. 24,000 credit sale was completely omitted in the books of accounts.
- IV. Electricity expense of Rs. 12,000 was posted to the relevant ledger account as Rs. 21,000.
- V. Office equipments purchased for Rs. 25,000, were debited to the purchase account.
- VI. Discounts allowed amounting Rs. 2,500 was not recorded in the respective personal account.

### Required

Prepare the relevant journal entries to correct above errors.

(06 Marks)

(Total Marks 10)

## Question 03

a. How do you classify the costs based on the behavior?

(03 Marks)

- b. Dedunu Text is a medium scale company, which manufacture garment products. The following details are related to the gent's trousers manufactured to the local market by Division A of Dedunu Text.

Current Selling Price	Rs. 750
Variable costs	Rs. 450

At present, Division A produces and sells 6,000 units of gent's trousers during the month, which is 60% of the manufacturing capacity of the production facility. The fixed cost for the division A is Rs. 1,200,000 per month.

Due to the high competition in the market, the management decided to reduce the selling price by Rs. 50 per unit from the next month onwards and seek alternatives that can save costs and improve productivity. Two options are being considered at present.

#### Option 1

Introduce a new machine to the manufacturing process of Division A, which reduces the unit variable cost by Rs. 30 through reducing direct labour costs. Due to introduction of the new machine, fixed costs of the division increase by Rs. 186,000 per month.

#### Option 2

Increase the advertising cost by Rs. 450,000 per month to increase the sales quantity of gent's trousers by 2,000 units per month.

Assume you are the management accountant of the company.

#### **Required**

- Calculate the brake-even point in units.
- Calculate the monthly operational profit at present level of operation (before the price reduction).
- What would be the quantity that should be sold to achieve a target profit of Rs. 720,000 (before the price reduction)?
- Calculate the expected profit from option 1 and 2 separately.

- e. Calculate the quantity that should be sold to maintain the same profit level as in answer for part (a) above after price reduction and implementing both options, i.e., 1 and 2.

b

(10 Marks)

(Total Marks 13)

#### Question 04

- a. Briefly discuss the concept of 'time value of money' with suitable examples.

(03 Marks)

- b. ABC (Pvt) Ltd is considering accepting a new project, which has initial investment of Rs. 6,000,000. The project has expected life of five years. The information related to the future cash flows of the project are as follows.

Year	1	2	3	4	5
Seles volume (Units)	12,000	13,000	11,000	12,000	10,000
Selling price (Rs.)	450	475	500	575	625
Variable cost (Rs.)	260	280	295	320	345
Fixed Cost (Rs.)	750,000	750,000	750,000	800,000	800,000

At the end of five years, the machineries of the project will be sold for Rs. 500,000.

Company's cost of capital is 12%.

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

#### Required

Advise the management using Net Present Value (NPV) method regarding the acceptance of new project.

(07 Marks)

- c. Explain advantages of using NPV as a criterion in project evaluation compared to payback period method.

(03 Marks)

(Total Marks 13)

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