University of Colombo, Sri Lanka

Faculty of Graduate Studies

Master in Business Studies Examination (Repeat) -2018

MBS 6103 Accounting and Finance

Three (03) hours

Answer Four (04) questions choosing Two (02) questions from each part

Instructions

1. Use of calculator is permitted.
2. Some important financial formulas are provided at the end of the paper.
3. Time values of money tables are provided.

Part I

1. i. **Differentiate** between managerial accounting and financial accounting.

(05 marks)

ii. **Define** the following terms with examples for each.

a. Direct materials,
b. Indirect materials,
c. Direct labor,
d. Indirect labor

(10 marks)

iii. **Explain** what effect an *increase* in *volume* has on -

a. Unit fixed costs?
b. Unit variable costs?
c. Total fixed costs?
d. Total variable costs?

(10 marks)

(Total 25 marks)

2. PQR Company distributes a single product. The company's sales and expenses for a recent month is as follows:

	Total (Rs.)	Per Unit (Rs.)
Sales	600,000	40
Variable cost	420,000	28
Contribution margin	180,000	12
Fixed cost	150,000	
Net operating income	30,000	

Required:

i. **Calculate** the monthly break-even point in units sold and in rupees.

(05 marks)

ii. Without resorting to computations, **indicate** what is the total contribution margin at the break-even point.

(03 marks)

iii. **Estimate** how many units would have to be sold each month to earn a target profit of Rs. 20,000.

(04 marks)

iv. Refer to the original data. **Compute** the company's margin of safety in both rupee and percentage terms.

(05 marks)

v. **Estimate** the company's CM ratio? If monthly sales increase by Rs. 80,000 and there is no change in fixed expenses, by how much would you expect monthly net operating income to increase? **Compute.**

(07 marks)

(Total 25 marks)

3. Activity-based Costing (ABC) is gaining prominence in the management accounting landscape.

i. **Explain** in what fundamental ways activity-based costing differs from traditional costing methods such as job-order costing.

(10 marks)

ii. **Briefly explain** unit-level, batch-level, product-level, customer-level, and organization-sustaining activities in an organization with examples.

(10 marks)

iii. **Discuss** why the activity-based costing is unacceptable for external financial reports.

(05 marks)

(Total 25 marks)

4. i. **Distinguish** between horizontal and vertical analysis of financial statement data.

(05 marks)

ii. Comparative financial statements for PQR Co. for the fiscal year ending March 31 appear below. The company did not issue any new ordinary or preference shares during the year. A total of 600 thousand shares of ordinary shares were outstanding. The interest rate on the bond payable was 14%, the income tax rate was 40%, and the dividend per share of ordinary shares was Rs. 0.75. The market value of the company's ordinary share at the end of the year was Rs. 26. All of the company's sales are on credit basis.

PQR Co. s' Comparative Balance Sheet (rupees in thousands)

	This Year	Last Year
Assets		
Current assets:		
Cash	Rs. 1080	Rs. 1210
Accounts receivable, net	9,000	6,500
Inventory	12,000	10,600
Prepaid expenses	600	500
Total current assets	22,680	18,810
Property, plant and equipment:		
Land	9,000	9,000
Buildings and equipment, net	36,800	38,000
Total property and equipment	45,800	47,000
Total assets	**Rs. 68,480**	**Rs. 65,810**
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	Rs. 18,500	Rs. 17,400
Accrued payables	900	700
Notes payable, short term	—	100
Total current liabilities	19,400	18,200
Long-term liabilities:		
Bonds payable	8,000	8,000
Total liabilities	27,400	26,200
Stockholders' equity:		
Preference Shares	1,000	1,000
Ordinary Shares	2,000	2,000
Capital Reserves	4,000	4,000
	7,000	7,000
Retained earnings	34,080	32,610
Total stockholders' equity	41,080	39,610
Total liabilities and stockholders' equity	**Rs. 68,480**	**Rs. 65,810**

PQR Co. s' Comparative Income Statement and Reconciliation
(rupees in thousands)

	This Year	Last Year
Sales	Rs. 66,000	Rs. 64,000
Cost of goods sold	43,000	42,000
Gross margin	23,000	22,000
Selling and administrative expenses:		
Selling expenses	11,500	11,000
Administrative expenses	7,400	7,000
Total selling and administrative expenses	18,900	18,000

Net operating income	4,100	4,000
Interest expense	800	800
Net income before taxes	3,300	3,200
Income taxes	1,320	1,280
Net income	1,980	1,920
Dividends to preference shareholders	60	400
Net income remaining for Ordinary Shareholders	1,920	1,520
Dividends to Ordinary Shareholders	450	450
Net income added to retained earnings	1,470	1,070
Retained earnings, beginning of year	32,610	31,540
Retained earnings, end of year	Rs.34,080	Rs.32,610

Required:

Based on the information given above, **compute** the following financial ratios for this year and **comment** about PQR Co. based on the results of these ratios.

a. Gross margin percentage.
b. Earnings per share of ordinary shares.
c. Price-earnings ratio.
d. Dividend payout ratio.
e. Current ratio.
f. Acid-test ratio.
g. Average collection period.
h. Debt-to-equity ratio.

(20 marks)

(Total 25 marks)

Part II

5. i. What are the three major functions of the financial manager? Briefly explain.

(09 marks)

ii. Briefly explain what you understand by 'Agency Theory' in the context of a public listed company.

(06 marks)

iii. Critically evaluate the following statement:

'Engagement of activities pertaining to corporate social responsibility by profit-oriented corporate entities is meaningless in terms of its shareholders'.

(10 marks)

(Total 25 Marks)

6. i. Explain the concept 'time value of money'.

(05 Marks)

ii. Jane deposits Rs.800 in a savings account carrying 6% interest compounded annually. She wants to know how much money will be in the account at the end of 5 years.

(05 marks)

iii. Liverpool industry has outstanding a $1,000-par-value bond, with an annual coupon interest rate of 8%. The bond has 8 years remaining maturity date. Using the 10% required rate of return, find the bond's value if the interest is paid annually.

(05 Marks)

iv. The possible one-year return from investing in the common stock of Pearl Private Limited is as follows:

Probability of Occurrence	Possible Returns
0.1	-10%
0.2	5%
0.4	20%
0.2	35%
0.1	50%

Calculate the expected rate of return and the standard deviation of the stock of Pearl Private Limited.

(10 marks)

(Total 25 marks)

7. i. List out the steps in capital budgeting process and explain how it helps managers to achieve their goal.

(05 marks)

ii. Define the following concepts

a. Independent projects
b. Mutually exclusive projects

(05 marks)

iii. Gold PLC is evaluating a new project and has determined that the after-tax cash flows for the project will be Rs.2,000,000; Rs.2,400,000; Rs.3,000,000;

Rs.2,000,000; and Rs.1,400,000, respectively, for each of the Years 1 through 5. The initial cash outlay will be Rs.8,000,000. The company has determined that the appropriate discount rate for this project is 12%.

Estimate the:

a. Payback Period (PPB) of the project
b. Net Present Value (NPV) of the project
c. Indicate with reasons whether the new project needs to be accepted or rejected based on the estimations you had made under 'a.' and 'b.' above.

(Assume that the has set a maximum PBP of 3.5 years for projects of this type)

(15 marks)

(Total 25 marks)

Important Formulas

1. $E(R) = \sum_{i=1}^{n} P_i R_i$

2. $\sigma = \sqrt{\sum_{i=1}^{n} (R_i - E(R))^2 P_i}$