INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
End Semester Examinations - June/July 2019
M. Tech. (Marine Engineering and Management)
Semester-II
Financial Management and Cost Accounting
(PG13T1204)

Date:27-06-2019 **Maximum Marks: 60**
Time: 3hrs **Pass Marks: 30**

Answer any five questions.
All questions carry equal marks.
(5 x 12 Marks = 60 Marks)

1. (a) What are the limitations of profit maximisation concept?
(b) What are the importances of financial management?
(C) From the following data compute payback period?

Year	1	2	3	4	5
Cash Flow(Rs.)	20,000	25,000	30,000	15,000	30,000

Investment Rs.80,000.
(d) Mr. Bhattacharya wants to buy a bungalow in Rajarhat after 5 years from now for Rs. 10,00,000. What would be his investment in the bank every year so that he can purchase the house after the said period? Bank allows interest @8% p.a on investment. Assuming investment to be made at the end of each year. ($FVA_{8\%,5YRS}$=5.87]

(3+3+3+3 =12)

2. A Company has to select one of the two alternative projects are given below:

	Initial	Net Cash Flow (Rs.)				
	Outlay (Rs.)	Y_1	Y_2	Y_3	Y_4	Y_5
Project I	625,000	Nil	120,500	500,000	350,000	150,000
Project II	10,00,000	250,000	350,000	400,000	420,500	200,000

The company can arrange the fund at 16%.
You are required to evaluate the proposal under the following criterion and Rank the projects.
(i) Net present Value
(ii) Discounted Payback Period
(iii) profitability Index
(iv) Internal Rate of return

(3+3+3+3=12)

3. (a) From the following data, calculate the value of an Equity Share of each of the following three companies according to Gordon Model when dividend pay out ratio is — (a) 10%, (b) 50% and (c) 80%

Companies	X.Ltd.	Y.Ltd.	Z.Ltd.
Internal rate of return (r)	14%	10%	12%
Cost of capital (K)	12%	10%	14%
Earnings per share (E)	Rs. 20	Rs.20	Rs.20

What are the optimum payout ratio for the 3 companies

(b) ABC Ltd. has the following Capital Structure:

	Rs.
Equity share Capital (Rs.10 each))	400,000
13% Preference share Capital (Rs.100 each)	600,000
Reserve	800,000
15% Debentures (Rs. 100 each)	10,00,000
10%Term Loan	200,000
	30,00,000

Other information

i) The Market price per equity share is Rs. 65. The next expected dividend per share is Rs. 8 and is expected to grow at 6%.

ii)The preference shares are redeemable after 5 years at par and are currently quoted at Rs. 105 per preference shares.

iii)The debentures are redeemed at 10% premium after 4 years and current market is Rs. 95 per debenture.

The tax rate to the firm is 40%.

You are required to compute cost of capital using

(a) Market Value (b) Book Value as weights.

(6+3+3=12)

4. (a)What are the determinants of capital structure?

(b)What are the assumptions of Net operating Income approach and describe the significance of the theory of capital structure.

(c) Calculate different types of Leverages and EPS of XYZ Ltd. from the following information:

Equity share capital(Rs. 10 each) – Rs. 400,000, 10% Debentures – Rs. 600,000, Sales – Rs. 12,00,000, Fixed operating Cost – Rs. 1,00,000, Variable operating Cost ratio – 40% Income Tax Rate – 40%.

(3+3+6=12)

5. (a) Given:

Current Assets Rs. 1,50,000
Current Liabilities Rs. 1,29,000
Fixed Assets / Net worth 0.7
No debt Capital.
Calculate Value of Fixed Assets.

(b) From the following financial data, prepare Balance Sheet as on 31.03.2018 of XZ Ltd.

Proprietary ratio (Fixed Assets to Proprietor's Equity)	0.75
Current ratio	2.5
Liquid ratio	1.5
Reserve & Surplus to Equity Capital	0.20
Working Capital	Rs. 90,000

There is no long term loan or fictitious assets.

(c) From the following figures of the Balance Sheet of X & Co., prepare a Common size Balance Sheet.

	Particulars	1.1.17 (Rs.)	1.1.18 (Rs.)
I.	EQUITY AND LIABILITIES		
(1)	Shareholders' funds		
	(a) Share capital		
	Equity Share Capital	4,00,000	5,00,000
	Preference Share Capital	2,00,000	1,00,000
	(b) Reserves and surplus	40,000	70,000
(2)	Non-current liabilities		
	(a) Long-term borrowings		
	10% Debentures	1,50,000	1,00,000
	Long term loans	2,00,000	3,00,000
(3)	Current liabilities	80,000	1,20,000
	Total	**10,70,000**	**11,90,000**
II.	ASSETS		
(1)	Non-current assets		
	(a) Fixed assets	5,70,000	6,30,000
	(b) Non-current investments		
	Investment	2,20,000	2,50,000
(2)	Current assets	2,80,000	3,10,000
	Total	**10,70,000**	**11,90,000**

(3+6+3=12)

6. Write short notes (3x4 =12)

(a) Cash flow statement

(b) Time value of money

(c) Users of Financial statements

(d) Ratio analysis

7. (a) The following data are available in the books of cost records of ABC manufacturing firm for the year 2018-19

Production	20,000 units
Material	Rs. 8 per unit
Wages	Rs. 4 per unit
Manufacturing overhead. -Variable @3 per unit -fixed Rs, 40,000	
Selling overhead -Variable @Rs. 2 per unit	
Sales @ Rs. 30 per unit	8,000 unit

Calculate the profit under

a. Absorption costing system

b. Marginal costing system

(b) Following information are available for the year 2017 and 2018 of PIX Limited:

Year	2017	2018
Sales	Rs 200,000	Rs 300,000
Profit/(Loss)	(Rs.40,000)	Rs 20,000

Calculate – (a) P/V ratio, (b) Total fixed cost, and (c) Sales required to earn a Profit of Rs 2,00,000. (6+6=12)

8. (a) What is cost centre and cost object.

(b) Classify the cost on the basis of its nature

Cost elements	At 2000 units	At 4000 units	At 7000 units
X	Rs. 200,000	Rs. 400,000	?
Y	Rs. 360,000	Rs. 360,000	?
Z	Rs. 300,000	Rs. 500,000	?

(c)ABC Limited has prepared its budget for 10,000 units in its factory for the year 2018 as detailed below:

	(Rs per unit)
Direct materials	20
Direct labour	08
Variable overhead	10
Direct expenses	06
Selling Expenses (40% fixed)	20
Factory expenses (100% fixed)	10
Administration expenses (100% fixed)	10
Sales	**90**

Prepare an profit budget for the production of 15,000 units and 18,000 units.

(3+3+6=12)

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