2013

M. COM.

3rd Semester Examination

ADVANCED MANAGEMENT ACCOUNTING

PAPER — COM-305 (AF)

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Unit—I

[Marks : 20]

1. Answer any *two* of the following : 5×2

(a) Define 'Management Accounting'. Give a diagram showing evaluation of Accounting since 1775.

(b) Compare and contrast Certainty-equivalent approach and Risk-adjusted discount rate approach of capital budgeting under condition of risk and uncertainty.

(c) What is capital rationing? Write down the factors leading to capital retioning.

(d) (i) What is payback period?

(ii) Calculate the pay-back period of the following two projects and select the better one :

Project	X	Y
Cost of the Project	Rs. 6,00,000	Rs. 10,00,000
Life	8 years	10 years
Estimated Scrap	Rs. 40,000	Rs. 60,000
Annual profit before tax	Rs. 1,10,000	Rs. 1,80,000
Tax rate 30%		

2. Answer any *one* question of the following : 10×1

(a) Ayaan Co wants to purchase a sophisticated machine for its production. The machine is produced by two companies, namely Tata Co. Ltd. and Birla Co. Ltd. Price of the machine charged by :

Tata Machine —	Rs. 12,00,000
Birla Machine —	Rs. 10,00,000

The effective life of both the machines is 5 years with no salvage value.

Operating Cost :

Tata–Machine	Rs. 1,20,000 p.a.
Birla Machine	Rs. 1,50,000 p.a.

Quantity and quality of production by both the machine remain the same.

Repairs and Maintenance expenses :

Year	1	2	3	4	5
Tata-Machine (Rs.)	—	10,000	20,000	20,000	25,000
Birla-Machine (Rs.)	20,000	20,000	25,000	25,000	30,000

Tata Co. Ltd. gives 2 years warranty where as Birla Co. Ltd. gives 1 year Warranty for free repairs and maintenance.

Ayaan Co has a common practice to charge depreciation on straight-line basis.

Assume marginal tax rate as 30% and cost of capital of the company is 12%. Suggest where from Ayaan & Co. should purchase the machine.

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5
P.V. of Re. 1 at 12%	0.893	0.797	0.712	0.636	0.567

10

(b) An old drilling company is considering to purchase mineral rights on a property of Rs. 100 lekhs. The price includes tests to indicate whether the property has Type–A geological formation or Type–B geological formation. The company will be unable to tell the type of geological formation until the purchase is made. It is known however, that 40% of the land in this area has Type–A formation and 60% Type–B formation. If the company decides to drill on the land, it will cost Rs. 200 lakhs. If the company does drill, it may hit an oil well, a gas well or a dry hole. Drilling experience indicates that the probability of striking an oil well is 0.4 on Type–A and 0.1 on Type–B formation. Probability of hitting gas well is 0.2 on Type–A and 0.3

on Type–B formation. The estimated discounted cash value from an oil well is Rs. 1,000 lakh and from a gas well is Rs. 500 lakh. This includes every thing except cost of mineral rights and cost of drilling.

Construct a decision tree and recommend whether the company should purchase the mineral rights.

10

Unit—II

[Marks : 20]

3. Answer any *two* of the following questions : 5×2

(a) What do you understand by Responsibility Accounting? What are its prerequisites? 2+3

(b) "Most of the sickness studies are confined to financial ratios"— In this context, indicate the financial ratios, that are found significant in L.C. Gupta's Study (1979) and W. H. Beaver's study (1967)

$2\frac{1}{2}\times2$

(c) What do you mean by inter-divisional transfer pricing and multinational transfer pricing?

Write down the principle to be followed to fix minimum inter divisional transfer price. 3+2

(d) Using Altmen's function, calculate Z score of Sachine & Co. Whose accounting ratios are as under :

Sales to Total Assets = 140%

Working Capital to Total Assets = 1 : 5

Retained Earnings to Total Assets = 30%

Market value of Equity to Book Value of Total debt = 130%

Return on Investment (TA) = 14%

Interest to Total Assets = 2%

Tax rate = 30%

Interpret the value of Z. 4+1

4. Answer any *one* question of the following : 10×1

(a) Jishen Division produces three products, Ji, Ju and Shan with 70 identical machines. The division works for an average 25 days in a month and 8 hours per day. Each product has an external market demand and the quarterly demand of the products one — Ji — 2000 units; Ju — 1800 units and Shan — 1,500 units.

Other relevant information :-

	Ji	*Ju*	*Shan*
External Market Price per unit	Rs. 100	Rs. 85	Rs. 82
Variable cost per unit	Rs. 40	Rs. 45	Rs. 54
Machine hours required per unit	10	8	4

Rihan Division, demands 400 units of Ji from its sister Jishan Division for the quarter ended June, 2013.

(I) Calculate the minimum transfer price that could be charged by Jishan division for transferring 400 units of Ji for April — June quarter to Rihan Division.

(II) On 1st July, 10 machines of Jishan division had broken down. The division was unable to repair the machines nor it was able to purchase new machines due to financial crunch.

Calculate the minimum transfer price for transferring 400 units of Ji for July–September quarter. 10

(b) Sourav Co. Produces a range of products with an average contribution ratio of 40% on current price. Fixed cost of the company are Rs. 4,00,000 per annum, and an estimate is being prepared for the next budget period for which the following forecasts have been made—

Sales (at Current Price)	*Probability*
Rs. 8,00,000	0.3
Rs. 10,00,000	0.5
Rs. 12,00,000	0.2

Expected rate of inflation for the next budged period	*Probability*
6%	0.2
8%	0.4
10%	0.4

The inflation is expected to affect all variable costs and 70% of the fixed costs.

The company expects that it will be able to raise the selling price in the line of inflation and will not loss and sell. The probabilities shown are independent.

Required :

(I) Prepare a table of all possible results (Profit/ Loss) and find the probability that the company will achieve, at least, bread even in the next period.

(II) Calculate the probability of earning a profit of at least Rs. 90,000 in the next period.

8+2

[Internal Assessment : 10 Marks]
