

M.Com. 3rd Semester Examination, 2018

COMMERCE

(Advance Management Accounting)

PAPER – COM-303

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks

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

UNIT – I

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

(a) Define Management Accounting. How does Management Accounting differ from Financial Accounting? 1 + 4

(b) What is capital rationing? What do you understand by hard and soft capital rationing?

(Turn Over)

Mention the factors that lead to hard and soft capital rationing to an organization. 1 + 2 + 2

(c) Suraj Co. is considering an investment project which requires an initial investment of Rs.10 lakh. The forecasted inflows from the project over the four year period are Rs.2,50,000, Rs.3,00,000, Rs.4,50,000 and Rs.4,00,000 at the end of year-1, year-2, year-3 and year-4 respectively. If the risk free rate (r) is 6% and the estimated risk premium ($a + u$) is 4%, then,

(i) estimate the certainty equivalent coefficients of the cash inflow for four years.

(ii) Prove that if the variables are correctly specified the NPV_{RADR} and NPV_{CE} are identical. 2 + 3

(d) What do you understand by the reinvestment rate in capital budgeting? Write down the assumptions above the reinvestment rate made by NPV and IRR method. 2 + 3

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

(a) The Chadra Oil Company owns a drilling right from the Government of India in a given area and has two possibilities : either to drill with the hope of finding oil, or to sell its drilling rights to another company.

Suppose that the company estimate the probability of finding oil (success) 0.55 and the probability of a dry hole (failure) 0.45. Assume that the drilling cost is Rs.14,00,000, so that in the case of failure, the company losses this sum, but in case of striking oil, the company will earn a net present value of (after deducting the drilling and other cost) of Rs.36,00,000.

The oil company initially is faced with a decision problem, whether or not to make a seismic test. Assume this test costs Rs.4,00,000 and there is an equal probability that the test will succeed or fail.

Denoting a successful test as 'Ts' and an

unsuccessful test ' T_f ', striking oil as 'S' and not striking oil as 'F', the probability of striking oil given that the test succeeds i.e. $P(S/T_s)$ is 90%. The probability of not finding oil even through the test succeeds $P(F/T_s)$ is 10%. The probability of a success in finding oil although the test is failure $P(S/T_f)$ is 20% and the probability of not finding oil when the test fails; $P(F/T_f)$ is 80%.

The company can sale the drilling rights, but the price realized depends on its timing :

- (i) If the company decides not to carry out the seismic test, it can sale the drilling right for Rs.12,00,000/-
- (ii) If the company decides to sale the drilling rights after it carries out the test and then the price will be Rs.24,00,000/- if the test results a success, but if the test fails, the firm can sale it on a concession for only Rs.6,00,000/-.

Required :

- (I) Draw a decision tree which depicts the sequence of decisions, which follows from the initial decision whether to make the seismic test or not.
- (II) What is the optimal decision using the maximum NPV criterion. 10
- (b) Sitrara Ltd is considering for replacement of one machine which was purchased five years back at Rs.7,25,000/- and is being depreciated on a straight line basis over its ten-year life to a salvage value of Rs.25,000. The old machine, if replaced now, can be exchanged with the new vendor at its book value.
- A replacement is available which would cost Rs. 6,50,000/- including installation costs, and would be depreciated on a straight line basis over its five-year life to a salvage value of Rs.50,000/-. If the new

machine is purchased the company has to borrow Rs.1,00,000/-@12% per annum. Only the interest payments would be required each and the principal would be paid at the end of the fifth year. It is estimated that the new machine would increase the earnings of the company before depreciation, interest and taxes by Rs.1,00,000/- per annum for five years. The replacement requires an immediate increase in the network capital of the business by Rs.50,000/-.

Assume that the corporate tax rate is 30% and the required rate of return for such investment is 12%.

You are required to evaluate whether the existing machine should be replaced? 10

UNIT – II

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

(a) What is industrial sickness ? Write down the core symptoms of sickness of a company. 2 + 3

(b) What do you understand by controllability principle of Responsibility Accounting ? Mention the major difficulties in introducing Responsibility Accounting in an organization. 2 + 3

(c) What is transfer pricing ? What are the different methods of transfer pricing ? A division of an organization has produced a new product at the very first time and its sister division wants to use such product as an input. For transferring such output to the sister division, what would be a suitable transfer price method, that will be not demotivate both the divisional managers ? Justify your answer. 1 + 1 + 3

(d) The sales manager of Bombay Textile is judged by total sales. Exceeding the sales target is considered as a good performance. The sales budget and the cost data for the current year are as follows :

Budget	Products			
	Sarees	Long-cloth	Bed sheets	Total
Sales budget(Rs.)	4,50,000	9,00,000	16,50,000	30,00,000
Variable cost(Rs.)	2,25,000	4,05,000	4,95,000	11,25,000
Marginal contribution(Rs.)	2,25,000	4,95,000	11,55,000	15,75,000
Actual sales(Rs.)	15,00,000	12,00,000	6,00,000	33,00,000

Given that the actual price is equal to the budgeted price and variable costs incurred as per the budgeted cost per unit.

Do you think that the sales manager has performed well ? Justify your answer with necessary calculations. 5

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

(a) XYZ Ltd pursues the policy of permitting each of its divisions to operate essentially as an independent unit. Divisional managers are free to determine their own sources of supply and to set their own prices.

The manufacturing division had redesigned many of its products. Consequently,

the division requires now 60,000 units of product X, which is produced by the component Division. The Component Division markets it at a price of Rs.30 per unit. Product X requires 2 hours of production time and has unit material cost of Rs.8. The Component Division has a capacity of 8,00,000 labour hours per year. It is operating at 80% capacity now. The conversion cost in the division amounts to Rs.6 per labour plus fixed cost Rs.1,60,000 per annum.

Required :

- (i) Find out the highest price the manufacturing Division can afford to pay for product X.
- (ii) Find out the lowest price at which the component Division can afford to sell product X.
- (iii) If the two divisions have negotiated a transfer price of Rs.27 for a unit and have entered into one year supply contact with each other, is this agreement advantageous to each division and in the overall interest of the company ?

(iv) If Manufacturing Division, instead of buying from Component Division, had negotiated with an outside supplier for Rs.27 per unit, will this agreement be advantageous to each division and in the overall interest of the company ?

1 + 3 + 3 + 3

(b) Following are the information of Fortunate Company for the year ended on 31st March, 2018.

Balance Sheet as at 31.3.2018

<i>Liabilities</i>	Amount (Rs.)	<i>Assets</i>	Amount (Rs.)
Equity share capital @Rs.100 each	5,00,000	Net fixed assets	12,00,000
Reserve and Surplus	3,00,000	Investments	5,00,000
12% debentures	6,00,000	Closing stocks	1,20,000
14% Bank Loan	4,00,000	Sundry debtors	80,000
Creditors	1,00,000	Bill receivables	60,000
Bills payable	50,000	Cash and bank balances	40,000
Outstanding Expenses	50,000		
	20,00,000		20,00,000

During the year the company earned a return on its total assets @10% against a turnover of Rs.30,00,000.

The company is taxed @30%.

The Price-Earnings ratio of the company at the end of the year was 3.75.

Calculate Altman's Z-Score of the company and interpret about the health of it

(All the calculations are the part of your answer).

10

[*Internal Assessment* : 10 Marks]
