2015

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) Explain the significant role of Management Accounting System in an organisation. 5

   (b) Define Capital Rationing. State the factors that lead to Capital Rationing. 4+1

   (c) Determine the risk-adjusted net present value of the following projects and select the best one :

	Project-A	*Project-B*	*Project-C*
	Rs.	*Rs.*	*Rs.*
Initial investment	10,00,000	12,00,000	21,00,000
Project life	5yrs.	5yrs	5yrs.
Net anuual Cash inflows	3,00,000	4,20,000	7,00,000
Coefficient of Variation	0·4	0·8	1·2

The company selects the risk-adjusted rate of discount on the basis of coefficient of variation.

Coeff. of Variation :	0·0	0·4	0·8	1·2	1·6	2·0 or more
Risk-adj. dist. rate :	10%	12%	14%	16%	18%	22%

(d) What do you mean, by 'Profitability Index' and 'Payback Period' of a project ? Which one is preferable in project evaluation and why ? 3+2

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

(a) A toy manufacturing company is considering for replacement of an existing machine with one of the two more sophisticated machines.The old machine was purchased five years back at a cost of Rs.10,00,000. The old machine had a projected life of 10 years and was to be depreciated on straight line basis to zero salvage value. The two new machines being considered are Machine-X and Machine-Y.

Machine-X would cost Rs. 15,00,000 to purchase. Due to expansion of operation, the management estimates an additional working capital requirement of Rs.1,00,000 at the beginning and a further of Rs. 50,0000 at the end of 3rd year for Machine-X. Machine-X has 5 years life with no salvage value. It will be depreciated on straight line.

Machine-Y would cost Rs. 20,00,000 to purchase. It has also 5 years life with no salvage value at the end and also to be depreciated on straight line. Machine-Y would require additional net working capital of Rs.1,50,000 at the beginning and a further Rs.1,00,000 at the end of 3rd year.

The old machine, if replaced, can be sold at Rs. 3,00,000 on one year credit. Assume that the cost of capital of the company is 12%, corporate taxrate is 30% and any book loss one sale of old machine can be amortized in 5 equal annual instalments.

The projected profit before depreciation and taxes of different machines are as follows :

Year	*Present Machine*	*Machine-X*	*Machine-Y*
	Rs.	*Rs.*	*Rs.*
1–3	2,50,000	6,00,000	8,00,000
4–5	2,50,000	8,00,000	10,00,000

Which machine, if either, should the company acquire ? 10

(b) Hcl Infosystem Ltd. is considering the submission of a bid for a government contract to provide 10,000 specialized mini-computers. There is only one other potencial bidder for this contract, CMC Ltd. and the low bidder will receive the contract. Hcl Infosystem Ltd's bidding decision is complicated by the fact that the company is currently working on a new process to manufacture the mini-computers. If this process works as hoped, then its may substantially lower the cost of making the computers. Unfortunately, Hcl Infosystem Ltd is unable to determine the cost of the computer without actually manufacture the computers. With the proposed new manufacturing process, there is a 0·25 probability that the manufacturing cost will be Rs.5,000/- per computer, a 0·50 probability that the cost will be Rs.7,500/- per computer and a 0·25 probability that the cost will be Rs. 8,500/- per computer.

If Hcl Infosystem Ltd. decides to bid, its bid price may be Rs. 9,500/-, Rs. 8,500/- or Rs. 7,500/- per computer. The chance that the bid price of Rs. 9,500/- will win the bid is 1/3, the bid price of Rs. 8,500/- will win the bid is 2/3 and a bid price of Rs.7,500/- will win the bid is 1. If Hcl Infosystem Ltd. decides to bid, then it will cost Rs. 10,00,000/- to prepare the bid. This Rs. 10,00,000/- will be

totally lost regardless of whether Hcl Infosystem Ltd. wins or loses the bidding competition.

Draw a decision tree through initiating the alternative bid prices and suggest Hcl Infosystem Ltd. about its optimum bid price. 10

Unit—II

[Marks : 20]

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

(a) What is responsibility accounting? What are the pre-requisites for efficient implemenation of responsibility accounting in an organization? 2+3

(b) What are the different methods being used for fixing inter-divisonal transfer price? Briefly explain market price method for fixing transfer price. 2+3

(c) Point out the various internal and external causes of industrial sickness. 5

(d) Midnapore Municipality wants a special type of spray gun for spraying insecticides to control mosquitoes in its municipality area. The municipality has procured 8 of such spray guns from a vendor, who produced the guns for the first time as per the specification

of the Midnapore Municipality.The vendor has charged Rs. 23,000/- per spray gun as per his break up costs indicated below :

Material Rs. 12,000/-, Labour Rs. 5,000/- Overhead Charges Rs. 3,000/-, and profit Rs. 3,000/- (15% on cost).

Midnapore Municipality wants to order 8 more of such special spray guns for the same purpose. What would be the reasonable price per gun, in your opinion, if it is estimated that an 80% learning curve applied for the job. The vendor believes in a slab system of overhead charges i.e., a constant rate per unit from 1 to 10 units and a 20% increase for the next slab of 11 to 20 units. 5

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

(a) Division-A is a profit centre, which produces three products X, Y, and Z. Each product has an external market :

	Product-X	*Product-Y*	*Product-Z*
External market price per unit	Rs. 48·00	Rs 46·00	Rs. 40·00
Variable cost per unit in Division–A	Rs. 33·00	Rs. 24·00	Rs. 28·00

	Product-X	*Product-Y*	*Product-Z*
Labour hour required per unit	3 hours	4 hours	2 hours
Maximum external demands	800 units	500 units	300 units

The other profit centre of the company, namely, Division B has placed and order to Division-A to transfer 300 units of Y. Division–B for this purpose has offered a transfer price of Rs. 45.00 per unit to Division-A as the division is able to purchase similar product from the market at that price.

Determine the minimum transfer price that Division-A can offer to Division - B for each unit of Y, for 300 units, if the total labour hours available in the Division-A are–

(i) 3,800 hours (ii) 5,600 hours.

(b) (i) L. C. Gupta's Study (1979) has found five accounting ratios that are very much important for predicting corporate sickness. Point out such five accounting ratios.

(ii) Following are the information of Weak Co. for year ended 31st March 2015 :

Liabilities	*Rs.*	*Assets*	*Rs.*
Equity Share Capital @ Rs. 100 each	5,00,000	Net Fixed Assets	12,00,000
Reserve and Surplus	3,00,000	Investment	5,00,000
10% debentures	6,00,000	Stocks	1,20,000
12% Bank Loan	4,00,000	Sundry Debtors	80,000
Sundry Creditors	1,00,000	Bills Receivables	60,000
Bills Payable	50,000	Cash at Bank	40,000
Outstanding Expenses	50,000		
	20,00,000		20,00,000

During the year the company has earned a return on its total assets @ 8% against a turnover of Rs. 30,00,000. The company is taxed @ 30%.

The price-earning ratio of the company at the end of the year has been 3·5.

Estimate Altman's Z-Score of Weak Co. and interpret about the financial health of the company.

2+8

[Internal Assessment : 10 Marks]