 PG/IIIS/COM/303.1 & 303.2/22

M.Com. 3rd Semester Examination, 2022

COMMERCE

(Advanced 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

COM-303.1

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

(*a*) Define Management Accounting.

(*b*) What is present value profile (P.V.Profile) ?

(*c*) What techniques are used for capital budgeting under certainty conditions ?

(*d*) A project is assumed to earn net cash inflows in the first three years are Rs. 6,00,000, Rs. 8,00,000 and Rs. 12,00,000 respectively. The cash flows are uncertain and the certainty equivalent coefficients associated with them are 0.8, 0.7 and 0.6 respectively. If the risk free rate of discount is 8% and cost of capital of the firm is 12%, find the present value of the given cash flows applying certainty equivalent approach.

2. Answer any **two** of the following questions : 4×2

(*a*) Do you think that the NPV method of capital budgeting is a rational method for project selection ? Justify your answer.

(*b*) Friends CO. is considering two projects A and B. The initial investments associated with the two projects are Rs. 20,00,000 and Rs. 25,00,000

respectively. Both the projects have economic life of 4 years. The expected net cash inflows associated with the projects are estimated as-

Year	1	2	3	4
Project A(Rs.)	8,00,000	8,00,000	8,50,000	7,30,000
Project B(Rs.)	7,00,000	9,50,000	9,00,000	8,50,000

The Company thinks that the cash flows are very uncertain and it wants to apply risk adjusted discount rate approach for evaluating the projects.

Assume that the 10 year treasury Gold Bond Rate at that time is 8% and the risk premium associated with project A is 5% and with project B is 7%, evaluate the projects by calculating their NPV. Which project is better for Friends Co. ?

(*c*) Briefly explain the objectives of Management Accounting.

(*d*) What is IRR of a project ? Is there any conflict between IRR and NPV method in case of evaluating a single project in accept-reject situation ? Answer with the help of a suitable diagram.

3. Answer any **one** of the following question : 8×1

(*a*) Raju & Co is considering a replacement proposal of one of its old machines. The old machine was originally purchased three years back for Rs. 14,50,000. The machine has an effective life of 7 years with a scrap value of Rs. 50,000 at the end. It would be depreciated on straight line basis. If the old machine is replaced, the vendor of new machine is agreed to receive the old one at its written down value.

The new machine being considered would cost Rs. 28,00,000 to purchase and require Rs. 60,000 shipping costs and Rs. 20,000 installation

costs. The economic life of the machine is estimated as four years. Tax-allowable depreciation is Rs. 8,00,000 per year for the first two years and Rs. 6,00,000 per year remaining two years and the remaining of the cost of machine, if any, is to be considered as scrap value. If the new machine is acquired, the investments in accounts receivable is expected to increase by Rs. 1,00,000, the inventory by Rs. 1, 50,000 and accounts payable by Rs. 1,30,000. The before-tax net operating cash flow is estimated as Rs. 8,00,000 per year for the next four years with the old machine and Rs. 14,00,000 per year for the first two years and Rs. 17,00,000 per year for the next two years with the new machine. The corporate tax rate is 30%.

(*i*) Calculate the initial investment associated with the proposed replacement decision.

(*ii*) Compute the NPV of the replacement project assuming a discount rate of 12% and comment whether the replacement proposal is acceptable.

(*b*) (*i*) What is a Decision Tree ?

(*ii*) Karbonn Mobile Co. has invented a new set of mobile handset and considering the following alternative strategies :

(*A*) Manufacture the device by themselves

(*B*) Be paid on a royalty basis to other manufacturer

(*C*) Sell the right for their invention for a lump sum.

The expected profit (in Rs. lakh) in each of the cases and the associated probabilities for the different levels of sales are given below :

Event	Probability	Manufacture	Royalty	Selling Right
High Sale	0.3	90	45	20
Medium Sale	0.5	35	25	20
Law Sale	0.2	-15	15	20

Additional consideration :

(*i*) If they manufacture by themselves and the sales is medium or high, the company has an opportunity of developing a new version of the device.

(*ii*) Form the past experience it is estimated that there is a 60% chance of successful development.

(*iii*) The cost of development is Rs. 30 lakh and the returns (after deducting the development cost) are Rs. 50 lakhs for high sale and Rs. 18 lakh for the medium sale respectively.

Represent the company's problem in the form of a decision tree and suggest for the optimum decision. 2 + 6

COM-303.2

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

(*a*) Mention any two differences between Profit Centre and Investment Centre.

(*b*) Why is Residual income method preferred over the ROI method ?

(*c*) What is Cost plus a Mark-up Based Transfer Price ?

(*d*) Mention any two methods used for the valuation of a distressed firm.

5. Answer any **two** of the following questions : 4×2

(*a*) Describe the major causes of financial distress in a business.

(*b*) The following informaton relates to operations of Division A.

Particulars	₹
Sales (40,000 units @ ₹ 10)	4,00,000
Less : Variable cost @ ₹ 7.50	3,00,000
Contribution margin	1,00,000
Less : Fixed costs	75,000
Profit	25,000

Additional information :

(*i*) Divisional investment is ₹ 2,00,000 ;

(*ii*) Cost of capital is 15%.

Required :

(*i*) Divisional ROI

(*ii*) Divisional RI and

(*iii*) Comment on the result of (*i*) and (*ii*).

(*c*) Transferor Ltd. has two processes-Preparing and Finishing. The normal output per week is 8000 units at a capacity of 80%. Transferee Ltd. had

production problems in preparing and require 3000 units per week of prepared materials for their finishing process. The existing cost structure of one prepared unit of Transferor Ltd. at the existing capacity is as follows :

Material	:	₹4.00 (variable 100%)
Labour	:	₹4.00 (variable 50%)
Overheads	:	₹ 8.00 (variable 25%)

The sale price of a completed unit of Transferor Ltd. is ₹32 with a profit of ₹8 per unit. Contrast the effect on the profits of Transferor Ltd. for 6 months (25 weeks) of supplying units to Transferee Ltd. with following alternative transfer prices per unit. (*i*) Marginal Cost (*ii*) Marginal Cost + 25% (*iii*) Existing Cost (*iv*) At an agreed market price of ₹16.50. 1 + 1 + 1+ 1

(*d*) What are the sequential stages that culminate into financial distress ?

6. Answer any **one** of the following question : 8×1

(*a*) (*i*) State the parametersfor predicting the stages of sickness as prescribed by the NCAER study.

(*ii*) The following information is extracted from the Balance Sheet of X Co. Ltd. as on 31.03.2021.

Particulars	₹
Working Capital	20,00,000
Retained Earnings	9,50,000
EBIT	7,50,000
Market Value of Equity	18,00,000
Sales	15,00,000
Total Assets	12,00,000
Total Liabilities	12,00,000

You are required to calculate the Altman Z-score and Comment on the financial health of the business. $3 + 5$

(*b*) Write a descriptive role of BIFR in revival of sick units.

[*Internal Assessment* – 10 Marks]