

2025

M.Com. 3rd Semester Examination
COMMERCE

PAPER : COM-305 AF

(Advanced Management Accounting)

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

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(Marks : 20)

1. Answer any *two* questions :

5×2=10

- (a) Define Management Accounting. State three points of difference between Management Accounting and Financial Accounting. 2+3
- (b) Do you consider the net present value method (NPV) as a rational method for project selection? Provide reasons to support your answer. How does profitability index (PI) criterion supersede net present value criterion? 3+2
- (c) What do you understand by capital budgeting under risk and uncertainty? Briefly explain Markowitz's

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Mean-Variance Rule for capital budgeting under
condition of risk and uncertainty. 2+3

2. Answer any *one* question : 10×1=10

- (a) Jupiter Company is considering a replacement proposal of one of its old machines. The old machine was purchased two years back at Rs. 6,50,000. Tax-allowable depreciation was Rs. 1,30,000 per year for five years. The current market value of this machine is Rs. 3,30,000. Any loss incurred on sale of old machine can be amortized in the year of sale only.

The new machine being considered would price Rs. 14,00,000 to purchase, and require Rs. 40,000 for shipping and Rs. 20,000 for installation. The estimated economic life of the new machine is three years. Tax-allowable depreciation is Rs. 6,00,000 per year for the first two years and remaining in the third year, with no salvage value. If the new machine is purchased, the investment in accounts receivable, inventory and accounts payable are expected to increase by Rs. 90,000, Rs. 1,30,000, and Rs. 1,50,000 respectively. The before-tax net operating cash inflow is estimated as Rs. 12,00,000 per year for the next three years with the old machine and Rs. 14,30,000 per year for the next three years with the new machine. The corporate tax rate is 25%.

- (i) Calculate the initial investment associated with the proposed replacement decision.
 - (ii) Compute the NPV of the replacement project assuming a discount rate of 10% and comment whether the replacement proposal is acceptable. 2+8
- (b) Satish 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 estimates 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 loses this sum, but in case of striking oil, the company will earn a net present value of Rs. 36,00,000. (after deducting the drilling and other cost)

The oil company initially is faced with a decision problem, whether or not to make a seismic test. Assume that 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 ' T_s ' and an unsuccessful test ' T_f ', striking oil as ' S ' and not striking oil as ' F ', the probability of striking oil

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given that the test succeeds i.e. $P(S/T_s)$ is 90%. The probability of not finding oil even though 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 sell the drilling rights, but the price realized depends on its timing :

- (A) If the company decides not to carry out the seismic test, it can sell the drilling right for Rs. 12,00,000/-
- (B) If the company decides to sell the drilling rights after it carries out the test, the price will be Rs. 24,00,000/- if the test result is a success, but if the test fails, the firm can sell it on a concession for only Rs. 6,00,000/-.

(Note that if the firm carries out the seismic test any price would be decreased by the cost of the test, which is Rs. 4,00,000/-)

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?

(5)

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(Marks : 20)

3. Answer any *two* questions : 5×2=10

(a) What is Responsibility Accounting? State its assumptions. 2+3

(b) Briefly discuss any two transfer pricing methods.

(c) Discuss, in brief, the direct and indirect costs of bankruptcy.

4. Answer any *one* question : 10×1

(a) Zenith Ltd. has a system of assessment of divisional performance on the basis of residual income and it has two divisions - Zen and Zeal. Zen has annual capacity to manufacture 15,00,000 numbers of a special component that it sells to outside customers, but has idle capacity. The budgeted residual income of Zeal is Rs. 1,20,00,000 while that of Zen is Rs. 1,00,00,000.

Other relevant details extracted from the budget of Zen for the current year are as follows.

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Particulars	Units / Rs.
Sales (outside customers)	12,00,000 units @ Rs.180 per unit
Variable cost per unit	Rs. 160
Divisional fixed cost	Rs. 80,00,000
Capital employed	Rs. 7,50,00,000

Cost of capital : 12%

Zeal has just received a special order for which it requires components similar to the ones made by Zen. Fully aware of the idle capacity of Zen, Zeal has asked Zen to quote for manufacture and supply of 3,00,000 numbers of the components with a slight modification during the final processing. Zen and Zeal agree that this will involve an extra variable cost of Rs. 5 per unit. Calculate the transfer price which Zen should quote to Zeal to achieve its budgeted residual income.

(b) Write short notes on :

$2\frac{1}{2} \times 4 = 10$

- (i) Residual Income Method
- (ii) Responsibility Centres
- (iii) Arm's Length Pricing
- (iv) Reasons for corporate sickness.

Internal Assessment : 10 marks
