Chapter 06: Section 1 and 2

Practice Question 137:

Lotus Construction Ltd., as a construction company managing multiple large-scale projects, recognises that effective implementation management is critical to profitability and reputation. The company's "Lotus Smart City" pilot represents a complex, multi-phase project valued at Rs. 2.5 billion that requires rigorous oversight. The central question facing the organisation is what implementation management framework should be employed to monitor this significant project and mitigate execution risks.

The Senior Project Manager responsible for the project faces immediate challenges as Phase I, focusing on apartments and retail development, is currently underway. The project confronts potential delays from two critical sources: supply-chain disruptions affecting imported steel (identified as risk W3) and a shortage of skilled MEP (Mechanical, Electrical, and Plumbing) subcontractors (identified as risk W4).

Given these risks, the board requires assurance that the project will remain on schedule and within the allocated Rs. 2.5 billion budget. **How will you assure the board that the project will remain on schedule?**

Practice Question 138:

As the Financial Planning & Analysis (FP&A) Manager at PalmNest Foods, you are reviewing a recent product launch. The "Lemongrass Chicken Curry Pouch" was launched 18 months ago as part of the company's new convenience foods line. The original business case projected first-year sales of Rs. 1.8 billion. However, actual sales reached only Rs. 1.5 billion according to the latest financials.

The CEO is concerned about this variance and its implications. She asks you: **How should PalmNest Foods conduct a post-implementation review of its 'Lemongrass Chicken Curry Pouch' product launch to assess its performance and improve future product development investments?**

Your challenge is to prepare a structured evaluation that explains the variance and determines whether the investment was successful despite the sales shortfall.

Practice Question 139:

ABC Logistics Ltd is considering purchasing a new delivery truck for Rs. 8,000,000. The truck is expected to generate net cash inflows of Rs. 2,500,000 per year for the next 4 years. The company's required rate of return (discount rate) is 12%. Calculate the Net Present Value (NPV) of this investment and advise whether the company should proceed.

Practice Question 140:

A manufacturing firm is considering a project with an initial investment of Rs. 100 million. It is expected to generate cash flows of Rs. 30 million per year for 5 years. The company's required rate of return (hurdle rate) is 12%. The calculated IRR for this project is 15.24%. Should the project be accepted?

Practice Question 141:

An investment of Rs. 60,000 has the following expected cash inflows:

- Year 1: Rs. 20,000
- Year 2: Rs. 25,000
- Year 3: Rs. 15,000
- Year 4: Rs. 10,000

Calculate the payback period.

Practice Question 142:

A construction project has been running for six months. The project manager needs to report on its performance. The following data is available:

- **Planned Value (PV):** The budgeted cost for the work scheduled to be completed by month six is Rs. 10,000,000.
- **Earned Value (EV):** The budgeted cost of the work actually completed by month six is Rs. 8,000,000.
- **Actual Cost (AC):** The actual amount of money spent to complete the work by month six is Rs. 9,000,000.

Calculate the Cost Variance (CV), Schedule Variance (SV), Cost Performance Index (CPI), and Schedule Performance Index (SPI). Interpret the results.

Practice Question 143:

A company invested in a new machine two years ago. A post-implementation audit is being conducted to compare the projected financial performance with the actual results. The company's discount rate is 10%.

Metric	Original Projection	Actual Result	Variance
Initial Investment	(Rs. 20.0 M)	(Rs. 22.0 M)	(Rs. 2.0 M)
Year 1 Cash Flow	Rs. 10.0 M	Rs. 8.0 M	(Rs. 2.0 M)
Year 2 Cash Flow	Rs. 12.0 M	Rs. 10.0 M	(Rs. 2.0 M)
Year 3 Cash Flow	Rs. 15.0 M	Rs. 14.0 M	(Rs. 1.0 M)

Calculate the projected and actual NPV and analyse the performance.

Practice Question 144:

BlueGem Textiles is considering replacing an old weaving machine with a new, more efficient model. The new machine has a purchase price of Rs. 8,000,000. The company will also incur Rs. 500,000 for shipping and Rs. 1,500,000 for installation and testing. The new machine requires an increase in inventory of raw materials of Rs. 1,200,000 and an increase in accounts receivable of Rs. 800,000. The project will also generate an increase in accounts payable of Rs. 600,000. The old machine, which has a book value of Rs. 1,000,000, can be sold today for Rs. 1,500,000. The corporate tax rate is 30%. Calculate the total initial investment outlay for the project.

Practice Question 145:

Zenith Logistics purchases a new delivery vehicle for Rs. 5,000,000 with an estimated useful life of 5 years and zero salvage value. The company uses straight-line depreciation. The corporate tax rate is 30%. Calculate the annual depreciation tax shield.

Practice Question 146:

Assume the same delivery vehicle (cost Rs. 5,000,000) is depreciated using the 40% reducing balance method. The tax rate is 30%. Calculate the depreciation tax shield for the first two years.

Practice Question 147:

BlueGem Textiles' automated dyeing system project with a 4-year life is ending. The equipment, which had an initial cost of Rs. 10,000,000, has been depreciated by Rs. 8,000,000 over its life. The equipment can be sold for a salvage value of Rs. 3,500,000. The project required an initial investment in Net Working Capital of Rs. 1,400,000, which will be fully recovered. The tax rate is 30%. Calculate the terminal cash flow.

Practice Question 148:

Palmnest Foods is considering launching a new line of organic ready-to-eat meals. Last year, it spent Rs. 5,000,000 on market research for this product. The project requires the use of a warehouse the company already owns. This warehouse could be rented out for Rs. 2,000,000 per year (after taxes). The project's initial equipment cost is Rs. 30,000,000 and it is expected to generate after-tax operating cash flows of Rs. 9,000,000 per year for 5 years. Identify the relevant incremental cash flows for the Year 0 investment decision.

Practice Question 149:

Oceanleaf Exports is entitled to receive Rs. 200,000 at the **end** of each year for the next 5 years from a long-term supply contract. The appropriate discount rate is 10% per annum. What is the present value of this cash flow stream?

Practice Question 150:

Zenith Logistics signs a warehouse lease agreement requiring a payment of Rs. 500,000 at the **beginning** of each year for 4 years. The company's borrowing rate is 12%. What is the present value of the lease payments?

Practice Question 151:

Mango Holdings holds preference shares in a subsidiary that pay a fixed dividend of Rs. 80 per share annually, forever. If the required rate of return for these shares is 16%, what is the value of one preference share?

Practice Question 152:

Palmnest Foods is launching a new line of organic fruit juices. The new line is expected to generate after-tax cash flows of Rs. 40 million per year.

- **Synergy:** The company expects that the new juice line will boost sales of its existing organic snack bars, increasing their after-tax cash flows by Rs. 5 million per year.
- **Cannibalization:** The company also predicts that the new juice line will reduce sales of its existing line of regular bottled drinks, decreasing their after-tax cash flows by Rs. 8 million per year.

Calculate the total annual incremental cash flow for the project.