**Capital Budgeting**

**MBA Program**

**Creative Questions**

**Q1. - Describe the "monitoring decisions and conducting a post-audit" step of the capital budgeting process?**

**Answer 1 - follow up on all capital budgeting decisions, compare actual results to expected results (because capital budgeting process is only as good as the estimates of the inputs into the model used to forecast cash flows)**

**Q2. What are the four main administrative steps to the capital budgeting process?**

**A2. 1. idea generation**

**2. analyzing project proposals**

**3. create the firm-wide capital budget
4. monitoring decisions and conducting a post-audit**

**Q3. Describe the "idea generation" step of the capital budgeting process?**

**A 3. Must generate good ideas, ideas can come from a number of sources including senior management, functional divisions, employees, or sources outside the company**

**Q4. Describe the "monitoring decisions and conducting a post-audit" step of the capital budgeting process?**

**A4. Follow up on all capital budgeting decisions, compare actual results to expected results (because capital budgeting process is only as good as the estimates of the inputs into the model used to forecast cash flows)**

**Q5. Describe "new product or market development" when talking about different types of capital budgeting projects.**

**A5. Complex decision-making process that will require lots of detailed analysis because of all of the uncertainty**

**Q6. Methods to Consider Risk in Capital Budgeting Analysis:**

* **Risk-Adjusted Discount Rate
•Certainty Equivalent Cash Flows
•Sensitivity Analysis
•Scenario Analysis
•Monte Carlo Simulation
•Decision Trees
•Real Options Analysis**

**Q7. What is Sensitivity Analysis Process?**

**Determines values for key variables and determine NPV at base case. Determines which one we need to be very careful with. You change any one % either up or down, all other things held constant Steeper slopes equal more sensitivity and risk**

**Q8. What is Scenario Analysis Process?**

**Expanded analysis to see changes in NPV if all variables change from base to best and worst case. Compute expected NPV (weighted average based), SD, coefficient of variation (CV=SD/expected NPV) Used to compute multiple projects, Higher CV = more riskQ9. Should an abandonment option affect a projects WACC?**

**Yes, an abandonment option could reduce risk therefore reduce the cost of capital applied to the project.**

**Q10. What is the Flexibility Option?**

**A11. Option permitting changes to inputs and/or outputs depending on changing conditions during the project. Requires upfront capital injection to maintain the future flexibility. Can reduce downside risk and increase expected NPV**

**Q12. What is the Optimal Budget?**

**A12. The optimal budget is annual capital investment that maximizes shareholder value and whose size is at the point where IRR on the marginal project is equal to marginal cost of capital.**

**Q13. Does the discounted payback method overcome the problems associated with the traditional payback method?**

**The discounted payback method is slightly better than the traditional method as it takes into consideration the time value of money.
However, it does not overcome all the shortcomings of the traditional payback method as it still gives no consideration to cash flows that occur after the cut-off date and uses an arbitrary maximum acceptable
discounted payback period.**

**14 Q When does a firm make capital budgeting decisions?**

**A14. Any time a long term investment is considered. This includes when a firm starts up, expands its facilities or operations, or replaces an asset.**

**Q15. What principles suggest that discounted-cash-flow criteria are the most appropriate to use for capital budgeting?**

**A15. Discounted Cash-Flow (DCF) criteria are consistent with the principles of measuring a project’s benefits and costs in cash flows in the present to consider the time value of money.

DCF is consistent with the goal of the financial manager, to maximise shareholder wealth.**

**Selecting projects by DCF methods is generally consistent with the goal of maximising shareholder wealth, particularly in the case of the NPV criterion (wherein NPV is an estimate of the addition to wealth that will occur if the project is selected).

DCF methods also may be adapted to incorporate an allowance for risk, either by adjusting the cash flows or by using a higher discount rate (required rate of return) when evaluating riskier projects.**