# JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA PGDM / PGDM (M) / PGDM (SM) IV ${ }^{\text {©TRIMESTER (Batch 2017-19) 2016-18 }}$ MID TERM EXAMINATIONS 

| Course Name | Financial management-II | Course Code | FIN 404 |
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| Max. Time | $\mathbf{1}$ hour | Max. Marks | 20 |

INSTRUCTIONS: Attempt all Qs.

1. Child Entertainment Ltd. (CEL) are in the business of developing fancy toys that last normally no more than 2-3 years. They have come out with another fancy toy that is expected to last for two years. The capital investment is Rs. 275 lacs. During the first year CEL expects the post-tax cash flows of Rs. 150 lacs with probability of $60 \%$ or Rs. 180 lacs with probability of $40 \%$ depending upon the demand for the new toy.
During the second year the probabilities of demand being low, medium and high are $40 \%, 40 \%$ and $20 \%$ respectively. If initial demand during first year is high then the second year cash flows are expected to be Rs. 200 lacs, Rs. 240 lacs and Rs. 290 lacs respectively.
However, if initial demand during first year is low then the second year cash flows are expected to be Rs. 160 lacs, Rs. 200 lacs and Rs. 250 lacs respectively.
For the kind of business CEL is into the appropriate discount rate for investment is $15 \%$. Advise whether CEL should go ahead with the investment? (6 marks)
2. Chip's Home Brew Whiskey forecasts that if it sells each bottle of Snake-Bite for $\$ 20$, then the demand for the product will be 15,000 bottles per year. If Chip sells Snake-Bite for a 10 percent higher price, then it believes that it will sell 90 percent of the amount of its pre-hike-priced product. Chip's variable cost per bottle is $\$ 10$, and the total fixed cash cost for the year is $\$ 100,000$. Depreciation and amortization charges are $\$ 20,000$, and the firm is in the 30 percent marginal tax rate. If the firm anticipates an increased working capital need of $\$ 3,000$ for the year, then what will be the effect of a price increase on the firm's FCF for the year? (6 marks)
3. Sprigg Lane needs to purchase a new central air-conditioning system for a plant. There are two choices. The first system costs $\$ 50,000$ and is expected to last 10 years, and the second system costs $\$ 72,000$ and is expected to last 15 years. Assume that the opportunity cost of capital is 10 percent. Which air-conditioning system should you purchase? (5 marks)
4. You are considering investing in a business that has monthly fixed costs of $\$ 5,500$ and that sells a single product that costs $\$ 35$ per unit make. This product sells for $\$ 90$ per unit. What is the annual pretax operating cash flow break-even point for this business? (3 marks)
