Spring 2016 Name:

Quiz 2: Corporate Finance

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

1. ShopFree Inc. is a US-based retail company that is considering entering the retail business in India.
    a. ShopFree currently does all its business in the US and has a levered beta of 1.20; the risk free rate in US $ is 2%, the equity risk premium for the US is 5% and the expected inflation rate in US $ is 1.5%.
    b. ShopFree has a market capitalization (equity) of $2 billion, no interest-bearing debt and $200 million in lease commitments each year for the next 5 years. The company has a BBB rating and the default spread for that rating is 2.5%.
    c. The equity risk premium in India is 9% and inflation rate in Indian Rupees is 6%. You can assume that the marginal tax rate is 40%.

    Estimate the Indian rupee cost of capital that ShopFree should use for its Indian retail expansion, if it plans to fund that business entirely with equity. (3 points)

2. You are the owner of Parisian Bistro, a well-regarded but run-down restaurant, and have ten years left on your lease. You are considering a major renovation that will cost $4 million, depreciable straight line over the next ten years to a salvage value of zero, which will perk up your revenues for the next ten years, while also improving your profitability. The table below gives you the expected annual values (for the next 10 years) for key items with and without the renovation for the entire café.

	Without Renovation	With Renovation
Revenues (in millions)	$3.0	$5.0
EBITDA Margin (EBITDA as % of Sales)	15%	25%
Non-cash Working capital as % of Sales	4%	5%

The tax rate for the company is 40% and the cost of capital is 12%.

a. Estimate the annual after-tax cash flows for the investment for the next 10 years. (2 points)

b. Estimate the NPV on the investment, with a 10-year life. (1 point)

c. Now assume that you will be expense the entire renovation expense immediately instead of capitalizing and depreciating it. How much will your NPV change as a consequence? (1.5 points)

3. You are a food scientist who has come up with a new breakfast cereal and have an offer from Kellogg for exclusive rights to the product. Kellogg has offered you $5 million a year in guaranteed fees for the next five years and 20% of the after-tax operating profits each year on the product in perpetuity; the total after-tax operating income on the product is expected to be $40 million next year, growing 2% a year forever thereafter. Kellogg's cost of debt is 4%, its cost of capital is 7% and its cost of equity is 10%.
    a. What is the value of the guaranteed payments for the next five years? (1 point)

    b. What is the value of profit-sharing part of the agreement? (1.5 points)