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**University Examinations 2014/2015**

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR MASTERS OF BUSINESS ADMINISTRATION

**HCBA 3207/BFA 5231 – CORPORATE FINANCE**

**DATE: MARCH 2015 TIME:** $2 $**HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE**

1. Assume a project costs Sh. 30,000 and yields the following uncertain cashflows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year  | 1 | 2 | 3 | 4 |
| Cashflow  | 12,000 | 14,000 | 10,000 | 6,000 |

$∝\_{0}$ = 1.00

$∝\_{0}$ = 0.90

$∝\_{0}$ = 0.70

$∝\_{0}$ = 0.50

$∝\_{0}$ = 0.30

The risk-free discount rate is given as 10%

**Required** : Compute NPV of the project. (10 Marks)

1. Discuss five ways in which a company can prevent a hostile takeover against it.

(10 Marks)

1. Discuss any five theories that explain the optimal capital structure of a firm.(10 Marks)

**QUESTION TWO (15 MARKS**)

The Zeda Company Ltd is considering a substantial investment in a n new production process. From a variety of sources, the total cost of the project has been estimated at Sh. 20 million. However, if the investment were to be increased to Sh.30 million, the productive capacity of the plant could be substantially increased. Due to the nature of the process, it would be exorbitantly expensive to increase capacity once the equipment is installed.

One of the problems facing the company if that there is a considerable degree of uncertainty regarding demand for the product. After some research which has been conducted jointly by the marketing and finance departments, some data has been produced. These are shown below;

|  |
| --- |
|  Investment A (Sh. 20m) Investment B(Sh. 30m) |
| Year Demand Annual Net Probability Cash Flow | Demand Probability | Annual NetCash flow |
|  Sh(million)1. 1- 4 0.4 6

5-10 0.4 5 |  Sh(million)0.3 10 7 |
| 1. 1- 4 0.4 6

5- 10 2 | 0.5 8 4 |
| 1. 1-10 0.2 2
 | 0.2 1 |

Cost of capital for the firm is 10%.

**Required** :Prepare a statement which clearly indicates the financial implications of each of the two alternative investment scenarios. (20 Marks)

**QUESTION THREE (15 MARKS)**

Company A and B are in the same risk class and are identical in every aspect that Company a is geared while B is not. Company A has Sh 6 million in 5% bonds outstanding. Both companies earn 10% before interest and taxes on their Sh. 10 million total assets. Assume perfect capital markets, rational investors, a tax rate of 60% and a capitalization rate of 10% for an all equity company.

**Required:**

1. Compute the value of firms A and B using the net income (NI) approach and Net operating income (NOI) approach. (5 Marks)
2. Using the NOI approach , calculate the after tax weighted average cost of capital for firms A and B. Which of these firms has the optimal capital structure according to NOI approach?Why? (5 Marks)
3. According to the NOI approach, the values of firms A and B computed in (a) are not in equilibrium. Assuming that you own 10% of A’s shares, show the process which will give you the same amount of income but at less cost. At what point would this process stop?

(5 Marks)

**QUESTION FOUR (15 MARKS)**

1. Discuss five sources of acquiring business finance indicating the advantages and disadvantages of each of them. (10 Marks)
2. Discuss five factors that affect the value of a call option. (5 Marks)

**QUESTION FIVE**

XYZ Ltd is considered acquiring ABC Ltd. The following information relates to ABC Ltd for the next five years. The projected financial data are for the post-merger period. The corporate tax rate is 40% for both companies.

 **Amounts are in Shs ‘000’**

 **1994 1995 1996 1997 1998**

Net sales 1,050 1,260 1,510 1,740 1,910

Cost of sales 735 882 1,057 1,218 1,337

Selling & admn. Expenses 100 120 130 150 160

Interest expenses 40 50 70 90 110

**Other information:**

1. After the fifth year the cashflows available to XYZ from ABC is expected to grow by 10% per annum in perpetuity.
2. ABC will retain Shs. 40,000 for internal expansion every year.
3. The cost of capital can be assumed to be 18%

**Required:**

1. Estimate the annual cash flows. (7 Marks)
2. Determine the maximum amount XYZ would be willing to acquire ABC at (8 Marks)