UNIVERSITY OF KELANIYA – SRI LANKA  
Centre for Distance and Continuing Education  
Faculty of Commerce & Management Studies  
Bachelor of Business Management (General) Degree Third Examination (External) – 2011  
December 2013

BMGT E 3065 – Business Finance

Instructions

(i) This paper consists of Part A and Part B.  
(ii) No of Questions:

\[ \text{Part A – 10 questions} \]
\[ \text{Part B – 05 questions} \]

(iii) You should answer all the questions in Part A and Part B.  
(iv) You are strictly advised NOT to take Part A of the question paper out of the examination hall.

Part A

Write the number of the correct answer (i.e.: i, ii, iii, iv, v) in the given space.

1). "Shareholder wealth" in a firm is represented by:
   i. The book value of the firm's assets less the book value of its liabilities.  
   ii. The number of people employed in the firm.  
   iii. The amount of salary paid to its employees.  
   iv. The market price per share of the firm's common stock.  
   v. None of the above

   Answer: (.................)

2). Assuming the same positive discount rate and the same number of years over which they will be received, which of the following has the highest present value?
   i. A Rs.2,000 annuity with annual payments.  
   ii. A Rs.1,000 annuity with semi-annual payments.  
   iii. Both have the same present value.  
   iv. There is no enough information to answer this question.

   Answer: (.................)
3). What is the monthly installment on a Rs.1.5 million, 25-year loan at 7.75 percent interest?
   i. Rs. 11,329.93
   ii. Rs. 11,460.80
   iii. Rs. 9,687.50
   iv. Rs. 12,314.23
   v. None of the above

Answer: (....................)

4). Blue Ocean Company's dividend is expected to remain constant at Rs. 2.00 per share for the next five years. After that, the dividend is expected to grow at a constant rate. If Blue Ocean's current stock price is Rs. 52 per share and the required rate of return on this stock is 12 percent, what will be the dividend growth rate after five years?
   i. 8.47%
   ii. 9.237%
   iii. 12.00%
   iv. 3.85%
   v. None of the above

Answer: (....................)

5). Which of the following is NOT a potential problem with the Internal Rate of Return (IRR)?
   i. The IRR may not be unique if the cash flows change more than once.
   ii. The IRR assumes that project cash flows are reinvested at the IRR rather than the discount rate.
   iii. The IRR does not take into account the size of the initial investment when comparing mutually exclusive projects.
   iv. All of the above are potential problems with the IRR.
   v. None of the above are potential problems with the IRR.

Answer: (....................)

6). You are considering two mutually exclusive projects. Project A requires an initial investment of Rs. 5 million and has an IRR of 12 percent. Project B requires an initial investment of Rs. 50,000, and has an IRR of 25 percent. Based on this information, which of the following is the most correct?
   i. You should choose Project A because it has the larger initial investment.
   ii. You should choose Project B because it has the higher IRR.
   iii. Both projects are equally desirable.
   iv. Neither project is acceptable; reject both.
   v. There is no enough information to decide which project should be chosen

Answer: (....................)
7). What type of risk is avoidable through proper diversification?
   i. Portfolio risk
   ii. Systematic risk
   iii. Unsystematic risk
   iv. Total risk
   v. None of the above

   Answer: 

8). In 3 years time you are expected to receive Rs. 5,000/= If the interest rate is suddenly increased, the present value of future earnings would be.
   i. Fall
   ii. Rise.
   iii. Remain unchanged.
   iv. Cannot be determined without more information.

   Answer: 

9). Which of the following is a characteristic of an efficient financial market?
   i. Absence of underpriced or overpriced securities
   ii. Abundance of bargain opportunities
   iii. Necessity of active portfolio management
   iv. Focus on security analysis
   v. None of the above

   Answer: 

10). Which of the following would be consistent with a more aggressive approach to financing working capital?
    i. Financing short-term needs with short-term funds.
    ii. Financing permanent inventory buildup with long-term debt.
    iii. Financing seasonal needs with short-term funds.
    iv. Financing some long-term needs with short-term funds.
    v. None of the above

   Answer: 

(Total 20 Marks)
Part B

(01) a) Mesna Plantation Ltd currently pays dividend of Rs 2 per share. This dividend is expected to grow at 20% annual rate over the next three years and then to grow at 6% per year in the foreseeable future. How much would you pay for a share of this stock if you require a 20% rate of return?

(05 Marks)

b) Mr. Silva expects to deposit, Rs.1,000; Rs.4,000; Rs.9,000; Rs.5,000; and Rs.2,000 respectively at the end of years 1 to 5. Alternatively, he could deposit a single amount today at the beginning of year 1. If he can earn 10% compounded annually, what is the single deposit need to be deposited today?

(05 Marks)

c) Assume that you won a contest that has paid you a single Rs.5,000. At the age of 22, you have decided to invest these funds for 45 years until you retire. During this time your deposit will earn an interest of 13%, compounded annually, every year. As soon as you retire (45 years from today) you will start withdrawing retirement funds every year for 33 years, and you will be received 8% interest compounded annually for your deposit. How much can you withdraw each year in retirement?

(05 Marks)

(Total 15 Marks)

(02) a) “Determination of capital structure of a company is influenced by a number of factors”. List and briefly describe six (06) such factors.

(05 Marks)

b) NCF Apparels Ltd has estimated the cost of debt and equity for various proportions of debt in its capital structure as follows.

<table>
<thead>
<tr>
<th>Proportion of Debt [Debt/ (Debt + Equity)]</th>
<th>Cost of Debt $K_d$ %</th>
<th>Cost of Equity $K_e$ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.00</td>
<td>12.0</td>
</tr>
<tr>
<td>0.1</td>
<td>6.71</td>
<td>12.1</td>
</tr>
<tr>
<td>0.2</td>
<td>7.00</td>
<td>12.5</td>
</tr>
<tr>
<td>0.3</td>
<td>7.29</td>
<td>13.0</td>
</tr>
<tr>
<td>0.4</td>
<td>7.86</td>
<td>13.9</td>
</tr>
<tr>
<td>0.5</td>
<td>8.71</td>
<td>15.0</td>
</tr>
<tr>
<td>0.6</td>
<td>10.71</td>
<td>17.0</td>
</tr>
</tbody>
</table>
Applicable tax rate for the company is 30%.

You are required to

a) Determine the NCF Apparels Ltd’s optimal capital structure
b) If the company’s current capital structure consists of 60% debt, calculate how much higher the NCF Apparels Ltd’s Weighted Average Cost of Capital is than at the optimal capital structure.

(Total 15 Marks)

(03) Power Solution Ltd manufactures components for the motor car industry. It is considering automating its production division which produces some special rubber fitting. The automated equipment will cost Rs.700,000. It will replace equipment with a scrap value of Rs 50,000 and a book written-down value of Rs.180,000. At present, the line has a capacity of 1.25 million units per annum. But, typically it has only been run at 80% of capacity because of the lack of demand for its output. The new automated division has a capacity of 1.4 million units per annum. Its economic lifetime is expected to be five years and its scrap value at that time is Rs.100,000.

The Accountant has prepared the following cost estimates based on output of 1,000,000 units per annum:

<table>
<thead>
<tr>
<th></th>
<th>Existing production division (per unit)</th>
<th>New production division (per unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.</td>
<td>Rs.</td>
</tr>
<tr>
<td>Materials</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>Labor</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Variable overhead</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Fixed overhead</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>Selling price</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Profit per unit</td>
<td>30</td>
<td>70</td>
</tr>
</tbody>
</table>

Fixed overheads include depreciation on the old machine of Rs.40,000 per annum and Rs.120,000 per annum for the new machine. It is considered that, for the company overall, fixed overheads are unlikely to change. The introduction of the new machine will enable stocks to be reduced by Rs.160,000. The company use 10% as its cost of capital. Applicable tax rate for the company is 30%.

You are required to:

Determine the viability of the new project using the Net Present Value Approach.
Saniru Ltd is a listed company that owns and operates a chain of retail outlets throughout the country. The following is an extract from the balance sheet of the company at 31st March 2013.

<table>
<thead>
<tr>
<th>Shares/Bonds</th>
<th>No. of shares/bonds</th>
<th>Rs’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated ordinary share capital</td>
<td>20,000</td>
<td>200</td>
</tr>
<tr>
<td>Reserves</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>9% irredeemable preference share capital</td>
<td>5,000</td>
<td>50</td>
</tr>
<tr>
<td>8% quoted corporate bonds</td>
<td>2,500</td>
<td>250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600</strong></td>
<td></td>
</tr>
</tbody>
</table>

The ordinary shares were quoted at Rs.30 per share ex-div on 31st March 2013. The beta of Saniru Ltd shares is 0.8, the annual yield on treasury bills is 5% and financial markets expects an average annual return of 15% on the all share price index. The market price per preference shares was Rs. 9 ex-div on 31st March 2013. Bond interest is paid annually. On 31st March 2013, the bonds were priced at Rs. 100.50 ex-interest per Rs.100 nominal value. The bonds mature on 31st March 2014. The applicable tax rate for the company is 30%.

The company has decided to invest in a new project which involves in an acquisition of a supplier company in the financial year ending 2014. This would require major investment and will be financed by a new issue of shares.

**You are required to:**

(a) **Calculate** the Weighted Average Cost of Capital of Saniru Ltd at 31st March 2013.  

(12 Marks)

(b) **Comment** on the gearing of Saniru Ltd and its impact on its Weighted Average Cost of Capital.  

(03 Marks)  
(Total 15 Marks)

(05) Write short notes on following:

a) Importance of working Capital Management  
b) Factors affecting to the dividend decisions of a company  
c) Efficient Market Hypotheses  
d) Modigliani Miller theory

(Total 5x4 =20 Marks)