**ECO 331 FOUNDATIONS OF FINANCE**

**END TERM (VARIANT I)**

**Time Allowed: 100 MINUTES Max. Marks: 35**

This quiz consists of two-parts Part A – 25 marks; Part B – 10 marks.

**Part A**: **10 MULTIPLE CHOICE QUESTIONS - 20 marks.** Select the correct alternative (only one)

**10 True and False questions – 5 marks** . A separate response sheet is provided for PART A

**Part B** : Marks are indicated alongside the question. Please show proper working and state clearly any assumptions that you make.

**PART A**

1. In applying the constant-growth dividend discount model, lowering the required rate of return on the stock will cause the stock’s intrinsic value (price) to:
   1. increase.
   2. decrease.
   3. remain unchanged.
   4. decrease or increase, depending on other factors.
2. A company’s current ratio is 3.0. If the company uses cash to retire notes payable due within one year, would this transaction increase or decrease the current ratio and asset turnover ratio?

|  |  |  |
| --- | --- | --- |
|  | **Current Ratio** | **Asset Turnover Ratio** |
| A. | Increase | Increase |
| B. | Increase | Decrease |
| C. | Decrease | Increase |
| D. | Decrease | Decrease |

1. An analyst applied the DuPont System to the following data for a company:

* Equity multiplier 2.2
* Dividend payout ratio 20%
* Total asset turnover 3.0
* Net profit margin 6%
* Gross Profit Margin = 15%

The company’s return on equity is *closest* to:

* 1. 43.2%
  2. 27.3%.
  3. 33.4%.
  4. 39.6%.

1. A company pays an annual dividend per share of Rs.5.20. The risk-free rate is 6 percent, the risk premium for this stock is 6 percent and beta=1. If the annual dividend is expected to remain at Rs.5.20, the value of the company’s stock is *closest* to:
   1. Rs.62.27.
   2. Rs.36.25.
   3. Rs.52.00.
   4. Rs.43.33.
2. A company pays a dividend of Rs.6 this year and it is expected to grow at 8%. The current market price of the company’s common stock is Rs.60 per share. The company’s tax rate is 40% percent. The company’s after-tax cost of retained earnings is *closest* to:
   1. 11.28%.
   2. 10.8%.
   3. 18%.
   4. 18.8%
3. Which of the following classifies (as operating or financing cash flow) dividends paid, and interest paid?

|  |  |  |
| --- | --- | --- |
|  | Dividends paid | Interest paid |
| A. | Financing | Operating |
| B. | Financing | Financing |
| C. | Operating | Financing |
| D. | Operating | Operating |

1. If a company recognizes revenue faster than justified, which of the following *best* describes whether accounts receivable, inventory, and retained earnings are overstated or understated?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Accounts receivable | Inventory | Retained Earnings |
| A. | Overstated | Overstated | Overstated |
| B. | Overstated | Understated | Overstated |
| C. | Understated | Overstated | Overstated |
| D. | Understated | Overstated | Understated |

1. Following information about a company for a year is given:

* Cash paid for factory Rs.30,000
* Cash paid for salaries Rs.60,000
* Cash paid to suppliers Rs.40,000
* Cash paid for interest to bondholders Rs.20,000
* Cash collected from customers Rs.150,000
* Cash collected for sale of equipment Rs.75,000
* Depreciation expense Rs.10,000

What is its net cash flow from operations for the year?

* 1. Rs.20,000.
  2. Rs.30,000.
  3. Rs.50,000.
  4. Rs.75,000.

1. Which of the following are relevant in determining project cash flow for a capital investment?
   1. Sunk costs.
   2. Opportunity costs.
   3. Side effects such as lost sales.
   4. Changes in net working capital.
   5. Financing costs
      1. I and II only.
      2. III and V only.
      3. II, III, and IV only.
      4. II, III, IV, and V only
      5. I,II,III and IV only
      6. II and III only
2. A firm must externally raise Rs.25 million for a new project. The flotation costs for selling debt and equity are 4 percent and 12 percent, respectively. The firm has a target debt-to-equity ratio of 50 percent. If the firm considers flotation costs, how much capital must the firm raise for the new project?
   1. Rs.27.17 million.
   2. Rs.27.33 million.
   3. Rs.27.57 million.
   4. Rs.29.00 million.

**True or False (10 questions – 5marks)**

State True or False (no reasoning is required)

1. A disadvantage of the corporate form of organization is that corporate stockholders are more exposed to personal liabilities in the event of bankruptcy than are investors in a typical partnership.
2. For a stock to be in equilibrium as the book defines it, its market price should exceed its intrinsic value.
3. Companies typically provide four basic financial statements: the fixed asset statement, the current income statement, the balance sheet, and the cash flow statement.
4. On the balance sheet, total fixed assets must always equal the sum of total liabilities plus equity.
5. The amount shown on the balance sheet as “retained earnings” is equal to the firm net income for the year minus any dividends it paid.
6. The balance sheet measures the flow of funds into and out of various accounts over time, while the income statement measures the firm’s financial position at a point in time.
7. An increase in accounts receivable represents an increase in net cash provided by operating activities because receivables will produce cash when they are collected.
8. To estimate the cash flow from operations, depreciation must be added back to net income because it is a cash charge that has been deducted from revenue.
9. The primary reason that the NPV method is conceptually superior to the IRR method for evaluating mutually exclusive investments is that multiple IRRs may exist, and when that happens, we don’t know which IRR is relevant.
10. Normal Projects M and N have the same NPV when the discount rate is zero. However, Project M’s cash flows come in faster than those of N. Therefore, we know that at any discount rate greater than zero, N will have the higher NPV.

**PART B**

1. A company is considering an investment of $200,000 for a project. The project consists of an outlay of $25,000 for non-depreciable land plus $175,000 for equipment that will be depreciated straight line to zero over 5 years. Total investment in net working capital will be $30,000. Each year sales will be $220,000 and cash operating expenses will be $90,000. At the end of year 5 the company will sell off the fixed capital assets including land for $50,000. The tax rate for income and capital gains is 40%. Determine the relevant cash flows and calculate the NPV (10%). ***5 marks***
2. A fast-growing company wants to expand its total assets by 50% by the end of the current year. You have been given below the company’s capital structure which it considers it to be optimal. There are no short term debts.

8% Debentures Rs. 4,00,000

9% Preference Shares Rs.1,00,000

Equity Shares Rs. 5,00,000

Rs.10,00,000

New debentures would be sold at 14% coupon rate and will be sold at par. Preference share will have a 15% rate and will also be sold at par. Equity shares currently selling at Rs.100 can be sold to net the company Rs.95. The shareholders required rate of return is to be 17% consisting of a dividend yield of 10% and an expected growth rate of 7%. Retained earnings for the year are estimated to be Rs.50,000 (ignore depreciation). The corporate tax rate is 50%. You are required to calculate the following values:

1. Assuming all assets expansion (gross expenditure for fixed assets plus related working capital) is included in the capital budget, what is the required amount of capital budget?
2. How much of the capital budget must be financed by external equity (i.e., issue of new equity shares) to maintain the optimal capital structure?
3. Calculate the cost of (a) new issue of equity shares and (b) retained earnings.
4. Calculate the weighted average cost of capital using marginal weights.

***(1,1,2,1 = 5 marks)***

**ECO: 331 FOUNDATIONS OF FINANCE (END TERM)**

**(VARIANT I)**

Name :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Roll No:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MULTIPLE CHOICE QUESTIONS**

|  |  |
| --- | --- |
| **Question Number** | **Response (write only A, B, C or D)** |
| **1.** |  |
| **2.** |  |
| **3.** |  |
| **4.** |  |
| **5.** |  |
| **6.** |  |
| **7.** |  |
| **8.** |  |
| **9.** |  |
| **10.** |  |

**True and False**

|  |  |
| --- | --- |
| **Question Number** | **Response (write only T or F)** |
| **1.** |  |
| **2.** |  |
| **3.** |  |
| **4.** |  |
| **5.** |  |
| **6.** |  |
| **7.** |  |
| **8.** |  |
| **9.** |  |
| **10.** |  |