College Name: $\qquad$

Student Name: $\qquad$ Seat No: $\qquad$

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# KARACHI UNIVERSITY BUSINESS SCHOOL UNIVERSITY OF KARACHI FINAL EXAMINATION; AFFILIATED COLLEGE JUNE 2015 INTRODUCTION TO BUSINESS FINANCE; BA (H)-412 (PART B) BBA - IV 

Date: June 09, 2015
Max Time: 1.5 Hrs Max Marks: $\mathbf{3 0}$

## INSTRUCTIONS:

1. Attempt any 4 questions. Do not write anything on the question paper.
2. Mobile phones or any other communicating device will not be allowed in the examination room. Students will have to remove the batteries of these devices before entering the examination hall.
Q. 1 Green Grocers is deciding among two mutually exclusive projects. The two projects have the following cash flows:

| Year | Project A <br> Cash Flow | Project B <br> Cash Flow |
| :---: | :---: | :---: |
|  | $-\$ 50,000$ | $-\$ 30,000$ |
| 1 | 10,000 | 6,000 |
| 2 | 15,000 | 12,000 |
| 3 | 40,000 | 18,000 |
| 4 | 20,000 | 12,000 |

The company's cost of capital is 10 percent (WACC $=10 \%$ ). What is the net present value (NPV) of the project with the highest internal rate of return (IRR)?
Q. 2 Bates Motors has the following information for the previous year: Net income $=\$ 200$; Net operating profit after taxes (NOPAT) $=\$ 300$; Total assets $=\$ 1,000$; and Total net operating capital $=\$ 800$. The information for the current year is: Net income $=\$ 500$; Net operating profit after taxes (NOPAT) = \$400; Total assets $=\$ 1,300$; and Total net operating capital $=\$ 900$. What is the free cash flow for the current year?
Q. 3 A company has the following balance sheet. What is its net operating working capital?

| Cash | \$ 10 | Accounts payable | \$ 20 |
| :---: | :---: | :---: | :---: |
| Short-term investments | 20 | Accruals | 30 |
| Accounts receivable | 30 | Notes payable | 20 |
| Inventory | 40 | Current liabilities | 70 |
| Current assets | 100 | Long-term debt | 30 |
| Net fixed assets | 80 | Common equity | 10 |
|  |  | Retained earnings | 70 |
| Total assets | \$180 | Total liab. \& equity | \$180 |

Q. 4 You have recently been hired to improve the performance of Multiplex Corporation, which has been experiencing a severe cash shortage. As one part of your analysis, you want to determine the firm's cash conversion cycle. Using the following information and a 365 -day year, what is your estimate of the firm's current cash conversion cycle?

- Current inventory $=\$ 120,000$.
- Annual sales $=\$ 600,000$.
- Accounts receivable $=\$ 157,808$.
- Accounts payable $=\$ 25,000$.
- Total annual purchases $=\$ 365,000$.
- Purchases credit terms: net 30 days.
- Receivables credit terms: net 50 days.
Q. 5 You have just bought a security which pays $\$ 500$ every six months. The security lasts for ten years. Another security of equal risk also has a maturity of ten years, and pays 10 percent compounded monthly (that is, the nominal rate is 10 percent). What should be the price of the security that you just purchased?

