# College of Applied Business (CAB) 

Sent-up Examination, February 2015

BBA / Fifth Semester / FIN 202: Basic Financial Management
Candidates are required to give their answers in their own words as far as practicable.

## Section A

Time 20 minutes

## Brief answer questions:

$[10 \times 1=10]$
Indicate whether the following statements are 'True' or 'False'. Support your answer with reasons.

1. Cash flow statements report a company's inflows and outflows of cash during the accounting period.
2. Financial ratio analysis considers both quantitative and qualitative aspect to the financial statement at the time of accounting period.
3. There is no cost for internally generated funds because it does not have floatation cost.
4. The projects which have IRRs higher than their average cost of capital should be accepted.
5. In case of mutually exclusive projects, all projects with positive NPV are accepted.
6. The excess of current assets over current liabilities is known as net working capital.
7. Capital structure is the mix (composition) of Long-term debt, preferred stock and common equity.
8. The cash break-event point is always higher than general accounting BEP.
9. A business firm has degree of operating leverage of 2 times and degree of financial leverage of 1.5 times. If the firm is going to increase its sales by 20 percent then its EBT will be changed by 40 percent.
10. Lead time of a firm is 7 days and time between two orders (order frequency) is 3 days. The optimal order size of the firm is 10,000 units and in this situation goods in transit is equal to 20,000 units.

## Section B

Time 30 minutes
Short answer questions: [Attempt ANY TWO]
11. Wealth maximization is superior goal to profit maximization.
12. The Koshi Bread Company buys and then sells (as bread) 2.6 million bushels of wheat annually. The wheat must be purchased in multiples of 2,000 bushels. Ordering costs, which include grain elevator removal charges of Rs 3,500 are Rs 5,000 per order. Annual carrying costs are 2 percent of the purchase price of Rs 5 per bushel. The company maintains a safety stock of 200,000 bushels. The delivery time is 6 weeks.
a. What is the EOQ?
b. At what inventory level should an order be placed to prevent having to draw on the safety stock?
c. What is the total inventory costs including the cost of carrying the safety stock?
13. The shareholders' equity position of HP Incorporation is as follows:

| Particulars | Amount (Rs) |
| :--- | :---: |
| Common stock (10,000 shares @ Rs 10 par) | 100,000 |
| Additional paid in capital | 50,000 |
| Retained earnings | 350,000 |
| Total shareholders' equity | 500,000 |

Current market price per share is Rs 25, EPS is Rs 5, and DPS is Rs 2. If the firm declares stock dividend of 10 percent, what would be effect on number of shares, par value, market price, EPS, DPS and in shareholders' equity account?
14. Kathmandu Garment Export Inc. has Rs $5,000,000$ of debt outstanding and it pays an interest rate of 12 percent annually. Corporation's annual sales are Rs $20,000,000$. If average tax rate is 25 percent and its net profit margin on sales is 3 percent. If the corporation does not maintain a TIE ratio of at least 4 times, and its bank will refuse to renew the loan and bankruptcy will result.
(a) What is corporation's TIE ratio?
(b) By what percentage net profit margin should increase in order to get loan renewed?
15. The selling price per unit is Rs 20; variable cost per unit is Rs 10 and fixed cost is Rs 100,000 which includes Rs 40,000 depreciation.
a. Calculate gain or loss at production and sales of 5,000 units and of 15,000 units.
b. Calculate BEP and Cash BEP.
c. If firm is producing and selling 6,200 units. Are creditors feeling that firm is going to be bankruptcy and is slow in paying bills?
d. If firm is producing 20,000 units using 10 percent loan of Rs 100,000. Calculate degree of operating leverage and degree of financial leverage.
e. What is required sales units for financial BEP if use of 10 percent debt is Rs 100,000 and 5 percent preferred stock of Rs 50,000 . The corporate tax rate is 50 percent.

## Section C

## Time 80 minutes

## Comprehensive answer questions:

$$
[2 \times 10=20]
$$

16. Consider the following information and calculate cost of capital for difference sources:
i. 10 percent coupon bond with 5 years maturity is currently trading at Rs 900 and floatation charge is 2 percent. Corporate tax rate is 40 percent (use approximate method).
ii. The expected dividend yield is 6 percent, growth rate is 9 percent, and current market price is Rs 50 per share. Net proceed from the sale of stock is Rs 45 and only internal equity is used.
iii. An 11 percent preferred stock trading at par and corporate tax rate is 40 percent.
iv. In case of (ii), external equity capital is used.
v. If the firm has Rs 100,000 of retained earnings, firm uses 40 percent from debt, 10 percent from preferred stock and remaining from equity capital for the total budget of Rs $1,000,000$. Calculate overall cost of capital of the firm (use information (i) to (iv).
vi. If debt to equity ratio is 25 percent. Cost of debt after tax is 6 percent and WACC is 10 percent. What is cost of equity?
vii. The ROA is 3 percent and ROE is 5 percent, what is the debt ratio?
17. (a) Your division is considering the following two investment projects and that the investments will produce the following after-tax cash flows. $[3+1+0.5+0.5]$

| Year | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :--- | ---: | ---: | ---: | ---: |
| Project A (Rs) | 2,000 | 1,000 | 1,000 | 1,000 |
| Project B (Rs) | 2,000 | 1,500 | 1,000 | 500 |

i. What is the IRR for each of the projects?
ii. What is the NPV of each project if cost of capital is 10 percent?
iii. If the two projects are independent, which project/projects should the firm undertake?
iv. If the two projects are mutually exclusive, which project should the firm undertake?
(b) A plant was purchased at Rs 10,000 five years ago with 10 years maturity. The plant requires Rs 2,000 working capital and its expected cash salvage value at the end of life is Rs 1,000 . Now, new plant is going to be established to replace the existing plant. Purchase price of new plant is Rs 40,000 and installation and transportation cost is Rs 10,000 . The life of new plant is 5 years and it requires total working capital of Rs 5,000 . The book salvage value and cash salvage value of new plant at the end of 5 year are Rs 5,000 and 6,000 respectively. If the existing plant is replaced by new plant, annual sales are increased by Rs 15,000 and annual operating cash expenses are decreased by Rs 5,000 . Today, existing plant can be sold at Rs 4,000 and its removable charge is 10 percent. The straight line method of depreciation is used for both plants. The corporate tax rate is 20 percent. Calculate initial outlay, annual net cash flow and final year's cash flow
[2+2+1]

