# K.J. Somaiya Institute of Management Studies \& Research <br> Course PGDM- Exe (2018-19) - II Tri End Term Exam <br> Sub: Corporate Finance \& Valuation 

Time: 3 hours
Date : 18/03/2019
Marks: 50

## Instructions-

- Question No 1 is compulsory which has 14 marks
- Attempt any three questions from the rest having 12 marks
- Answer each new question on a fresh page
- Write all sub question of a main question together
- Do not write extra answers. Only first four will be assessed

1. Mr Vikas Bhalla, age 32, belongs to a middle class family. He has studied B Tech Computer Science and got a job with a good software company. He is married and has one daughter who is 7 years of age. His present salary is Rs 60000 per month. Minimally at present, he requires Rs 40000 per month for expenses for household. He is residing in his own flat which he got from his father as marriage gift. There is no any home loan. So far he had a financial responsibility towards his sister's marriage, which has now been met.

He has started thinking and planning for his future needs and suitable savings to meet his financial objectives. He has noted following financial goals-

- Required Rs $15,00,000$ when his daughter turns 17 to meet the needs for her education after she finishes school.
- Required Rs $12,00,000$ to meet postgraduate level needs after 15 years from now.
- Required Rs $20,00,000$ for her marriage, 20 years from now.

Analyze and calculate how much he needs to save per month for all three financial goals individually and all together. The money saved and kept in the bank will earn $10 \%$ per annum interest throughout the period.
(6 Marks)
2. A machine purchased six years back for Rs $1,50,000$ has been depreciated to a book value of Rs 90,000 . It originally had a protected life of 15 years. There is a proposal to replace this machine. A new machine will cost Rs $2,50,000$ and result in reduction of operating cost by Rs 30,000 p.a. for next nine years. The existing machine can now be scrapped away for Rs 50,000 . The new machine will also be depreciated over nine years' period with salvage value of Rs 25000. Tax rate is $50 \%$ and the cost of capital is $10 \%$. Determine whether the existing machine should be replaced or not.
(8 Marks)
3. Following information is forecasted by the CS Ltd for the year ending 2016-

|  | Balance as at 1 <br> st <br> April 2016 | Balance as at 31 <br> March 2017 |
| :--- | :---: | :---: |
| Raw materials | 45000 | 65356 |
| Work in progress | 35000 | 51300 |
| Finished goods | 60181 | 70175 |
| Debtors | 112123 | 135000 |
| Creditors | 50079 | 70469 |
| Purchase of raw materials (all <br> credit) |  | 400000 |
| Cost of production |  | 750000 |
| Cost of goods sold |  | 915000 |
| Operating cost |  | 950000 |
| Sales (all credit) |  | 1100000 |

You may take one year as equal to 365 days. You are required to calculate-
a) Net operating cycle period
b) Number of operating cycle in a year
c) Amount of working capital requirement
4. XYZ Ltd is considering 3 financial plans for which the key information is as below:
a) Total investment to be raised Rs $4,00,000$
b) Plans for financing proportion:

| Plans | Equity | Debt | Preference shares |
| :--- | :---: | :---: | :---: |
| A | $100 \%$ | - | - |
| B | $50 \%$ | $50 \%$ | - |
| C | $50 \%$ | - | $50 \%$ |

c) Cost of debt $8 \%$, cost of preference share is $8 \%$
d) Tax rate is $50 \%$
e) Equity shares of the face value of Rs 10 each will be issued at a premium of Rs 10 per share
f) Expected EBIT is Rs $1,60,000$

Determine for each plan:

- Earnings per share EPS
- Compute the EBIT range among the plan (Plan A \& B) and (Plan B \& C) for point of indifference

5. Attempt both subparts (Each subpart carries 6 marks)
a) A firm has current sales of Rs 25648750 . The firm has unutilized capacity. In order to boost its sales, it is considering the relaxation in its credit policy. The proposed terms of credit will be 60 days credit against the present policy o 45 days. As a result, the bad debts will increase from $1.5 \%$ to $2 \%$ of sale. The firm's sales are expected to increase by
$10 \%$. The variable operating costs are $72 \%$ of the sales. The firm's corporate tax rate is $35 \%$, and it requires an after tax return of $15 \%$ on its investment. Should the firm change its credit period?
(b) There are two options available to an investor. The first scheme (A) promises to pay Rs. $1,50,000$ at the end of 10 years if an investment of Rs. 10,000 is made annually. The second scheme (B) promises to pay Rs.1,50,000 at the end of 8 years if Rs. 15,000 is invested annually. Which of the two schemes is better for the investor?
6. Attempt both subparts (Each subpart carries 6 marks)
(a) Explain the concept of buy-back of shares or repurchase of firm's own shares. Describe its advantages over cash dividend.
(b) Explain what you understand by long term financing decision and short term financing decision.
7. A company is considering, purchase of new machinery which costs Rs $8,00,000$ and which has an estimated life of 10 years. This machine will generate additional sales of Rs $4,00,000$ per year, while increased cost of maintenance will be Rs $1,00,000$ per year. The cost of machine is depreciated on a straight line and has no salvage value at the end of its 10 year life. The company has a cost of capital of $12 \%$ and a corporate tax rate of $40 \%$. You are required to calculate:
i. Annual cash flow
ii. Net present value
iii. Payback period
iv. Internal rate of return.

Should the company purchase the new machine?

