## 1 UPES

# University of Petroleum \& Energy Studies <br> School of Business <br> Kandoli Campus, Dehradun <br> End Semester Examination - May, 2018 

Programme Name: MBA (O\&G)
Subject:_Petroleum Financial Management
Subject code: FINC 7013

Semester: II
M.Marks: 100

Duration: 3 Hrs

Note: All sections are compulsory. Section-A
(10*2)
Objective type (Kindly write Full Answers)
Q1.

1. What is Full Form of IRR?
(a) International Repo Rate
(b) Internal Rate of Return
(c) Internal Rate of Revenue
(d) Indian Repo Rate
2. For applying NPV, $\qquad$ is considered:
(a) Profit After Tax
(b) Profit After Tax and Before Depreciation
(c) Profit Before tax and After Depreciation (d) Profits Before Tax
3. What results in uniform cash flows for an indefinite period:
(a) Annuity
(b) Perpetuity
(c) Cash Flows
(d) Profitability
4. Which of the following method is Non Discounted Cash Flow method of Capital Budgeting?
(a) ARR
(b) IRR
(c) NPV
(d) PI
5. Discounting refers to:
(a) Conversion of Future Value in Present Value
(b) Conversion of Present Value in Future Value
(c) Decrease the Present Value
(d) Increase the Future Value
6. What results in uniform cash flows for an definite period:
(a) Annuity
(b) Perpetuity
(c) Cash Flows
(d) Profitability
7. Which of the following is Discounted Cash Flow Technique of Capital Budgeting :
(a) Discounted Pay Back Period
(b) Pay Back Period
(c) Accounting Rate of Return
(d) None of these
8. Which decisions relate to acquisition of asset and generally have long term strategic implications?
(a) Investing
(b) Financing
(c) Dividend
(d) Working Capital
9. In 2003 the price of ONGC stock was Rs.25; in 2018, the price of the same is Rs.250.

Compute CAGR
(a) $10 \%$
(b) $16.59 \%$
(c) $15.48 \%$
(d) $11.11 \%$
10. The situation where the management has to decide the combination of profitable projects
which yields highest IRR with in available funds is called:
(a) Capitalizing
(b) Capital Structuring
(c) Capital Budgeting (d) Capital Rationing

## Section (B) Short Types (4*5 marks) 20 Marks

Q2. What are the important determinants of Working Capital Management?
Q3. Differentiate between the business risk \& Financing risk of a firm. How are they measured by leverages?

Q4. Explain the conceptual difference between IRR \& MIRR
Q5. What is Capital Asset Pricing Model, \& states its assumptions?

## Section C <br> Descriptive type Questions.

(10*3 Marks)
Q6. Estimate Working capital requirement for A ltd.
Raw material per unit Rs. 180
Direct Labour per unit Rs. 130
Overhead per unit Rs. 160
Total cost Per unit Rs. 470
Profit Per unit Rs. 30
Selling price Per unit Rs. 500

## Level of activity 104000 units

1. Raw material in stock, average for 4 weeks
2. Work in progress average for 2 weeks
3. Finished goods in stock average for 4 weeks
4. Credit allowed by suppliers average for 4 weeks
5. Credit allowed to debtors average for 8 weeks
6. Lag in payments of wages average for 1.5 weeks
7. Cash at bank is expected to be Rs. 25000

You may assume that production is carried on evenly throughout the year ( 52 weeks) and all sales are on credit basis.

Q7. As a Financial Analyst of Power Finance Corp., you are requested to calculate the Weighted Average Cost of Capital. The following data is available to you:

Debentures (Rs. 100 each) Rs. 400000
Preference Shares( 100 each) Rs. 100000
Equity Shares (10 each) Rs. 500000
(a) Rs. 100/Deb. redeemable at Par after 20 Years, Coupon Rate $12 \%$, Flotation cost $4 \%$ and selling price Rs. 100
(b) Rs.100, $10 \%$ Pref. Share to be issued at Par and redeemable at Par after 15 Years, floatation Cost 5\%.
(c) Equity Share may be issued at Rs. 22 each, floatation cost Rs. 2 per share and dividend/share is Rs.2, the expected growth rate in dividend is $5 \%$.The company tax rate may be assumed as $50 \%$.

Q8. A Co. is considering Two Investment Proposals, to purchase Either Machine A or Machine B. The following information is as follows:

|  | Cash Outflows | Cash Inflow at the end of: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 1 | 2 | 3 | 4 | 5 (Yr.) |
|  |  |  |  |  |  |  |
| Machine A | 25 | - | 10 | 15 | 16 | 13 |
| Machine B | 45 | 18 | 17 | 16 | 17 | 10 |
| The cost of capital is $\mathbf{1 2 \%}$. |  |  |  |  |  |  |

The cost of capital is $\mathbf{1 2 \%}$.
As a Finance Manager in the light of following methods, calculate:

## 1. Discounted Payback Period

2. Net Present Value.

Advice the company to decide upon which Machine the company should purchase.

- Note: All inflow \& outflow are in Lakhs.


## Section -D Case

(30Marks)

XYZ Ltd. plans to extend assets by $50 \%$. To finance the expansions, it is choosing between a straight $12 \%$ debt issue and equity shares. Its balance sheet and profit and loss account are shown below:

## Balance Sheet as at 31 ${ }^{\text {st }}$ March 2018

| Liabilities | Rs. (lakhs) | Assets | Rs. (lakhs) |
| :--- | :---: | :---: | :---: |
| $11 \%$ debentures | 40.00 |  |  |

Equity shares of Rs. 10 each 100.00

| Retained earnings | 60.00 | Total assets | 200.00 |
| :--- | ---: | ---: | ---: |
| $\mathbf{2 0 0 . 0 0}$ | $\mathbf{2 0 0 . 0 0}$ |  |  |

## P \& L Account of XYZ Ltd. for the year ended March $31^{\text {st }} 2018$

Particulars
Sales
Total cost (excluding interest)
Net income before interest and taxes (EBIT)
Interest on debentures @ 11\%
Income before taxes (EBT)
Taxes @ 40\%
Profit after tax (PAT)
No. of Equity Shares

Rs. (in lakhs)
600.00
540.00
60.004.40
55.60
22.24
33.36
10.00

Earnings per share (Rs. 33.36/10.00) Rs. 3.336
P/E Ratio $\quad 7.5$
Market price $(7.5 \times 3.336) \quad$ Rs. 25.02

If XYZ Ltd. finance Rs. 1 crore expansion with debt, the rate of the incremental debt will be $12 \%$ and the price/ earnings ratio of the Equity shares will be 5 times. If the expansion is financed by equity, the new shares can be sold at Rs. 12 per share and the price/earnings ratio will remain at 7.5 times.

## Required:

(i) Assuming that net income before interest and taxes (EBIT) is $10 \%$ of sales. Calculate, Earnings per share at sales levels of Rs. 4 crores, Rs. 8 crores and Rs. 10 crores, when Financing is with (a) equity shares, and (b) debt.

10 Marks
(ii) Using the P/E ratio, calculate the market value per share for each sales level for both the Debt and the equity financing. 10 Marks
(iii) At what level of earnings before interest and taxes (EBIT), after the new capital is Acquired, would earnings per share (EPS) be the same whether new funds are raised by Issuing equity shares or raising debt? 10 Marks

