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UNIVERSITY OF PETROLEUM & ENERGY STUDIES

DEHRADUN

End Semester Examination-May 2017

Examination : End Semester	**Programme: MBA (ET)**
Max. Marks : 100	**Semestre : II**
Duration :3 hours	**Course Code : MBEF 921**
Course Title : Financial Management in Energy Sector	

SECTION A **(Marks: 1*20)**

(Answer all the following Questions)

1. If the percentage change in EPS is +80% and the percentage in EBIT is +40 %, the degree of Financial Leverage is

   a. 2
   b. 5
   c. 10
   d. 4

2: Discount/Premium is computed as a % of

   a. Time Value of Money
   b. Face Value
   c. Redeemable value
   d. Both a & b above

3: If the investment of the machinery is Rs. 50000 and it will generate Rs. 10000 each year for 10 years, Pay Back Period is

   a. 5 years
   b. 4 years
   c. 3 years
   d. 2years

4: If EBIT is Rs. 1, 00,000 and Ko is 15% then the value of firm " V" would be.

   a. Rs. 6,66,667
   b. Rs. 8,00,000
   c. Rs. 6,00,000
   d. Rs. 4,00,000

5: Share Price Increases with the Increase in the D/P ratio. This is the proposition of

   a. Net Operating Income Approach
   b. Gordan Model
   c. MM Approach
   d. Walter Approach

6: In case of conflict in ranking, ___________ method provides better results than NPV.

a. ARR b. IRR c. Payback Period d. Discounted Payback period.

Differentiate the Following: (Answer in brief)

7: Gross Working Capital and Net Working Capital

8: IRR and ARR

9: Operating Leverage and Financial Leverage

Fill in the Blanks

10: Market value of Equity is Rs. 20, 00,000 and the Market Value of Deb is Rs. 10,00,000 .Cost of Debt is 10% and Cost of equity is 15%. The Overall Cost of Capital is…………….(Using $K_o = K_i$ (B/V) $+K_e$ (S/V)

11: Bird in the hand argument as per Gordan model is defined as………………………..

12: Operating Cycle is defined as …………………… ……………………………………………………..

13: Rate of Interest is 15% pa. Effectively Quarterly Compounding Rate is ………………………………

14: Beta as per CAPM model- Cost of Equity Calculation is defined as……………………………………

15: Capital Structure is defined as…………………………………………………………………………

16: Net working capital is equal to…… ……………………………………………………………..

17: Cost of Equity (As per Dividend Growth Model) is equal to……………………………

18: Time Value of Money is defined as……………………………………………………………

19: Net Operating Income of Capital Structure interprets that...

20: Unsystematic Risk is defined as ……………….…………………………………………..

SECTION B (Marks: 4*5)

(Answer any four of the following five Questions)

21. How Capital Structure is constructed considering the impact on value of the firm and overall (WACC) cost of Capital using Net Income Approach of Capital Structure?

Write Short Notes on the following:

22. Book Building

23. Combined Leverage

24. Factoring

25. ADR

SECTION C (Marks: 2*15)

(Answer any two of the following three Questions)

26. Super Dairy limited intends to buy dairy equipment. The details pertaining to the two options available are as follows:

	Machine 1	**Machine 2**
Cost	Rs. 30,00,000	Rs. 40,00,000
Useful Life	6 years	5 years
Scrap Value	Rs.5,00,000	Rs. 8,00,000
Debt Equity ratio for purchase	60/40	50/50
Fixed Cost	Rs 8,00,000	Rs 10,00,000
Variable Cost (% of Revenue)	40%	50%
Cost of Capital	12%	20%

The expected revenues for the operation of the dairy equipment are as follows:

Year	**Machine 1(Rs)**	**Machine 2(Rs)**
1	20,00,000	25,00,000
2	32,00,000	45,00,000
3	25,00,000	30,00,000
4	26,00,000	35,00,000
5	30,00,000	28,00,000
6	35,00,000	NIL

The Company intends to charge depreciation on straight line basis. The interest rate for the loan investment is 6% per anum. The applicable tax rate is 15%.

Estimate the Discounted payback period, IRR and NPV of the equipments and suggest which one should be procured?

27. The following details are pertaining to 3 different capital structure scenarios for a firm:

	Scenario 1	**Scenario 2**	**Scenario 3**
Project Cost	5,00,000	5,00,000	5,00,000
Debt Equity Ratio	70/30	50/50	30/70
Rate of Interest on loan	15%	15%	15%
Kd	18%	18%	18%
Ke	23%	23%	23%
EBIT	3,00,000	3,00,000	3,00,000
Face Value of Share	Rs 10	Rs 10	Rs 10
Tax Rate	20%	20%	20%

Taking into account the above details enumerate how the value of firm behaves with the change in capital structure as per the Net Income Approach. Discuss the theories of NOI and MM considering the overall cost of capital to be 23%.

28. What are the various sources of working capital available for the industries from the Indian financial institutions?

SECTION D (Marks: 30)

(Answer the following Question)

29. XYZ Ltd for its project investments intends to raise 5000 crores from debt, preference, common equity and retained earnings with a volume of Rs 1200 crores, 1500 crores, 1300 crores and 1000 crores respectively. For estimating the cost of all the components of capital structure the company intends to take into account the time value of money for a realistic estimation.

The 6 year Preference equity has been planned to be issued with a face value of Rs 10 at a discount of 15%. The flotation cost is 5% of the realized value. The preference equity is planned to be redeemed with a premium of 20% to be paid at the end of the maturity period. The redemption of face value through calls is planned as below:

Year	Face Value redemption
1	1
2	1.5
3	1.5
4	2
5	1
6	3

For the equity issue the bankers have advised that the company would have to offer a discount of 8% on the current market price of Rs 520 per share. The face value of the share is Rs 100. The company can go ahead with plan of dividend of Rs18 in the very first year. The flotation cost would be 5% of the issue proceeds.

The simulated past information regarding the dividend of an equal size organization is as follows:

Year	Dividend
1	16
2	7
3	8
4	6
5	10

The company intends to raise the debt by issuing 20% 8 year redeemable debenture to be redeemed at a premium of 15% at the end of the maturity period. The face value of the debenture is Rs100 and it is intended to be issued at a discount of 17% and a flotation cost of 10% on realized value. The applicable tax rate for all the estimation is 15%.

A. Suggest the Weighted Average cost of Capital for the firm
B. Suggest whether the company should accept the proposal of the merchant bankers if the expected market return on the project is 20%.