

**Paper-12: FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE**

Time Allowed: 3 Hours

Full Marks: 100

*The figures in the margin on the right side indicate full marks.*

Answer Question No. 1 from Part A which is compulsory and any five questions from Part B.

**PART A (25 Marks)**

1. (a) In each, of the cases given below, one out of four answers is correct. Indicate the correct answer (= 1 mark) and give workings/reasons briefly in support of your answer (= 1 mark)

**[2x9=18]**

(i) An investor has ₹ 5,00,000 to invest. What will be his expected risk premium in investing in equity versus risk-free securities in the following conditions :

Investment	Probability	Expected return
Equity	0.6	₹ 2,00,000
	0.4	(-) ₹ 1,50,000
Risk-free security	1.0	₹ 25,000

- A. ₹ 35,000
- B. ₹ 45,000
- C. ₹ 60,000
- D. ₹ 85,000

(ii) Snow White Ltd. has a debt-equity mix of 30/70. If Snow White Ltd's debt beta is 0.3 and overall beta for its activity (or projects) is 1.21, what is the beta for its equity?

- A. 1.65
- B. 1.60
- C. 1.52
- D. None of the above

(iii) The value of a share of MN Ltd. after right issue was found to be ₹ 75. The theoretical value of the right is ₹ 5. The number of existing shares required for a rights share is 2. The subscription price at which the right share issued were:

- A. ₹ 22.50
- B. ₹ 40.00
- C. ₹ 65.00
- D. ₹ 82.00

(iv) An Indian company is planning to invest in US. The US inflation rate is expected to be 3% and that of India is expected to be 8% annually. If the spot rate currently is ₹ 45/US\$, what spot rate can you expect after 5 years?

- A. ₹ 59.09/US\$
- B. ₹ 57.00/US\$
- C. ₹ 57.04/US\$
- D. ₹ 57.13/US\$

## PTP\_Final\_Syllabus 2008\_Jun2015\_Set 1

---

- (v) PQ Ltd. is selling its products on credit basis and its customers are associated with 5% credit risk. The annual turnover is expected at ₹ 5,00,000 if credit is extended with cost of sales at 75% of sale value. Credit period for 60 days. The cost of capital of the company is 15%. Administration cost 2% of sales. The net profit of the company is :
- A. ₹ 1,25,000
  - B. ₹ 77,670
  - C. ₹ 88,430
  - D. ₹ 1,10,500
- (vi) The average daily sales of a company are ₹5 lac. The company normally keeps a cash balance of ₹ 80000.If the weighted operating cycle of the company is 45 days, its working capital will be:
- A. ₹112.9 lac.
  - B. ₹ 113.3 lac
  - C. ₹ 5.8 lac
  - D. ₹ 225.8 lac.
- (vii) HP Leasing Company expects a minimum yield of 10% on its investment in the leasing business. It proposes to lease a machine costing ₹ 5,00,000 for ten years. If yearly lease payments are received in advance , the lease rental to be charged by the company for lease will be :
- A. ₹ 81372
  - B. ₹ 73975
  - C. ₹ 72,370
  - D. None of (A), (B), (C).
- (viii) The balance sheet of ABC Ltd. Shows the capital structure as follows :  
2,50,000 equity shares of ₹ 10 each; 32,000, 12% preference shares of ₹ 100 each; general reserve of ₹ 14,00,000; securities premium account ₹ 6,00,000; 25,000, 14% fully secured non-convertible debentures of ₹ 100 each.; term loans from financial institutions ₹ 10,00,000.  
The leverage of the firm is:
- A. 67.2%
  - B. 62.5%
  - C. 59.8%
  - D. 56.3%
- (ix) The stock of Blue Company sells for ₹ 120. The present value of exercise price and the value of a call option are ₹ 108.70 and ₹ 19.80 respectively. Hence the value of the put option is:
- A. ₹ 8.50
  - B. ₹ 9.00
  - C. ₹ 10
  - D. Zero

**(b) Match the assumptions to the different 'Capital Structure theories':**

**Assumptions**

- (i) Cost of debt and cost of equity are constant, and overall cost of capital decreases with increase in leverage.
- (ii) Cost of debt and overall cost of capital are constant, and cost of equity will change with the degree of leverage.
- (iii) Value of firm increases with increase in financial leverage upto a certain limit only.
- (iv) Overall cost of capital and the value of firm are independent of the capital structure.

Capital Structure theories

- (A) Modigliani- Miller Approach
- (B) Traditional Approach
- (C) Net Income Approach
- (D) Net Operating Income Approach

(Note: Your answer may be of the form:

Assumption No----- Capital letter indicating Capital Structure theory)

**[1/2x4=2]**

**(c) State if each of the following sentences is T (= true) or F (= false):**

**[5]**

- (i) LIBOR for treasury bill rate is the example of basis swaps.
- (ii) A project is a "One-shot" major undertaking.
- (iii) The key issue of the theory of capital structure is to examine whether a business can change its value and cost of capital by changing its capital structure.
- (iv) Commercial paper introduced by RBI in early 1990, is 'a secured promissory note' tied to any specific transaction.
- (v) A call option is 'in-the money' when the price of the underlying asset is below the exercise price of the call.

**Part B (75 Marks)**

- 2. (a)** Khan Industrial Ltd. Is thinking of investing in a project costing ₹ 20 lakhs. The life of the project is five years and the estimated salvage value of the project is zero. Straight line method of charging depreciation is followed. The tax rate is 50%. The expected cash flows before tax are as follows :

Year	1	2	3	4	5
Estimated Cash flow before depreciation and tax (₹ lakhs)	4	6	8	8	10

You are required to determine the : (i) Payback Period for the investment, (ii) Average Rate of Return on the investment, (iii) Net Present Value at 10% Cost of Capital, (iv) Benefit-Cost Ratio.

**[3+3+3+1]**

- (b)** State Balance Score Card [BSC]? Describe its perspectives?

**[2+3]**

## PTP\_Final\_Syllabus 2008\_Jun2015\_Set 1

3. (a) List out the steps involved to determine the financial viability of a project. [4]

(b) The following data is available for Bajaj Ltd.:

Sales	₹ 2,00,000
Less : Variable cost @30%	<u>60,000</u>
Contribution	1,40,000
Less : Fixed Cost	<u>1,00,000</u>
EBIT	40,000
Less : Interest	<u>5,000</u>
Profit before tax	<u>35,000</u>

Find out:

- (i) Using the concept of financial leverage, by what percentage will the taxable income increase if EBIT increase by 6%?
- (ii) Using the concept of operating leverage, by what percentage will EBIT increase if there is 10% increase in sales, and
- (iii) Using the concept of leverage, by what percentage will the taxable income increase if the sales increase by 6%? Also verify results in view of the above figures.

[2×3=6]

(c) Mr. Shoaib is contemplating purchase of 1000 equity shares of a company. His expectation of return is 10% before tax by way of dividend with an annual growth of 5%. The company's last dividend was ₹ 2 per share. Even as he is contemplating, Mr. Shoaib suddenly finds, due to a budget announcement dividends have been exempted from tax in the hands of recipients. But the imposition of distribution tax on the company is likely to yield a fall in dividend of ₹ 0.20 per share. Shoaib's marginal tax rate is 30%. Required: Calculate what should be Mr. Shoaib's estimate of the price per share before and after the budget announcement. [5]

4. (a) The Directors of Grasswood Ltd. present you with the Balance sheets as on 30th June, 2013 and 2014 and ask you to prepare statements which will show them what has happened to the money which came into the business during the year 2014.

Liabilities :	30.6.13	30.6.14
Authorised capital 15,000 shares of ₹ 100 each	15,00,000	15,00,000
Paid up capital	10,00,000	14,00,000
Debentures (2014)	4,00,000	—
General Reserve	60,000	40,000
P & L Appropriation A/c	36,000	38,000
Provision for the purpose of final dividends	78,000	72,000
Sundry Trade Creditors	76,000	1,12,000
Bank Overdraft	69,260	1,29,780
Bills Payable	40,000	38,000
Loans on Mortgage	—	5,60,000
	<b>17,59,260</b>	<b>23,89,780</b>

## PTP\_Final\_Syllabus 2008\_Jun2015\_Set 1

<b>Assets :</b>		
Land & Freehold Buildings	9,00,000	9,76,000
Machinery and Plant	1,44,000	5,94,000
Fixtures and Fittings	6,000	5,500
Cash in hand	1,560	1,280
Sundry Debtors	1,25,600	1,04,400
Bills Receivable	7,600	6,400
Stock	2,44,000	2,38,000
Prepayments	4,500	6,200
Share in other companies	80,000	2,34,000
Goodwill	2,40,000	2,20,000
Preliminary expenses	6,000	4,000
	<b>17,59,260</b>	<b>23,89,780</b>

You are given the following additional information:

- A.** Depreciation has been charged (i) on Freehold Buildings @ 2½% p.a. on cost ₹ 10,00,000. (ii) on Machinery and plant ₹ 32,000 (iii) on Fixtures and Fittings @5% on cost, ₹ 10,000. No depreciation has been written off on newly acquired Building and Plant and Machinery.
- B.** A piece of land costing ₹ 1,00,000 was sold in 2014 for ₹ 2,50,000. The sale proceeds were credited to Land and Buildings.
- C.** Shares in other companies were purchased and dividends amounting to ₹ 6,000 declared out of profits made prior to purchase has received and use to write down the investment (shares).
- D.** Goodwill has been written down against General Reserve.
- E.** The proposed dividend for the year ended 30th June 2013 was paid and, in additions, an interim dividend, ₹ 52,000 were paid. **[10]**

**(b)** Describe the basic elements of joint venture? **[5]**

**5. (a)** A company requires ₹ 20 lacs and provides the following information:

- Target Debt Equity Ratio = 3:2
- $K_d = 12\%$ , for the first 4 lacs and 12.5% for the balance
- EPS for the current year ₹ 20 per share
- Dividend payout ratio 60%, growth rate 5%
- Current MPS ₹ 90. Flotation Cost ₹ 6 each
- Present Equity Share Capital ₹ 2 lacs, divided into fully paid shares of ₹ 10 each.
- Corporate Tax Rate 30%.

Calculate weighted Marginal Cost of Capital.

**[8]**

## PTP\_Final\_Syllabus 2008\_Jun2015\_Set 1

- (b) Zenith Ltd. currently has an annual turnover of ₹ 20 lakhs and an average collection period of 4 weeks. The company propose to introduce a more liberal credit policy which they hope will generate additional sales, as shown below:

	Additional Collection Period	Sales	default
1	2 Weeks	2,00,000	2%
2	4 Weeks	2,50,000	3%
3	6 Weeks	3,50,000	5%
4	8 Weeks	5,00,000	8%

The selling price of the product is ₹ 10 and the variable cost per unit is ₹ 7.

The current bad debt loss is 1 % and the desired rate of return on investment is 20%. For the purpose of calculation, a year is to be taken to comprise of 52 weeks. Indicate which of the above policies you would recommend the company to adopt. [7]

6. (a) An import house in India has bought goods from Switzerland for SF 10,00,000. The exporter has given the Indian company two options.
- (i) Pay immediately the bill for SF 10,00,000;
  - (ii) Pay after 3 months, with interest @ 5% p.a..

The importer's bank charges 14% on overdrafts. If the exchange rates are as follows, what should the company do?

Spot (₹/SF) : 30.00/30.50

3-month (₹/SF) : 31.10/31.60. [6]

- (b) You are given the following information about current rates for Sterling Spot & Forward.

	Spot	1-month Forward	3-month Forward
Canadian Dollar	1.8630 - 0.8640	30 - 20 cents Premium	0.90 - 80 Premium
Belgian Franc	72.20 - 30	10 - 20 cents Discount	45 - 55 Discount
Danish Kroner	13.01 - 02	44 - 45 5/8 Discount	18 3/8 – 19 3/4%Discount
German DM	3.065 - 075	2 - 1.5 Premium	5.5 - 5.0 Premium

Calculate the cost or value in sterling to a customer, who wishes to

- (i) Buy Canadian dollars 25000 spot
- (ii) Buy Belgian francs 75000 three months forward
- (iii) Sell Danish Kroner 20000 three months forward
- (iv) Sell DM 6000 one month forward. [9]

## PTP\_Final\_Syllabus 2008\_Jun2015\_Set 1

---

7. (a) Sun Ltd., an Indian Company has an export exposure of 120 lakhs Yen value December end. The current spot rates are:

₹/\$ = 64.5 and

¥/\$ = 120.25

It is estimated that Yen (¥) will depreciate against dollar to 140 and Rupee will depreciate against dollar to 70. Forward rate for December, 2014:

¥/\$ = 128.50 and

₹/\$ = 66.50

(i) You are required to calculate the expected loss, if hedging is not done.

(ii) How the position will change with company taking a forward cover.

**[3+2]**

- (b) Given the following quotes for per unit of each currency against US dollar, on two different dates:

British Pound	1.5398	1.6385
Canadian Dollar	0.6308	0.6591
EMU euro	0.9666	1.0835
Japanese yen	0.008273	0.008343
Mexican peso	0.1027	0.0917
Swedish Krona	0.1033	0.1179

Calculate the rate of appreciation or depreciation of each currency over the period? **[5]**

- (c) State currency futures? List the steps involved in the technique of hedging through futures. **[5]**

8. Write short notes on (any three):

**[5×3=15]**

(a) Off Balance sheet financing

(b) Merchant Banker

(c) Index future

(d) Bought-out deals