

**PAPER – 20: Financial Analysis & Business Valuation**

**Time Allowed: 3 Hours**

**Full Marks: 100**

**Working Notes should form part of the answer.**

**“Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates.”**

**Section A**

**(Answer Question No. 1 and Question No. 2 which are compulsory and any two from the rest in this section)**

**1.**

(i) Profit and Loss Account (Extract) of Pushkar Ltd. for the year ended 31.03.2013

	₹
1. Income	
Sales	1,14,000
Interest	400
Gain on sale of Investment	1,400
	1,15,800
2. Expenses	
Cost of goods sold	89,000
Depreciation	17,800
Administration and selling and distribution	9,200
Interest	2,800
Loss on sale of plant and machinery	600
	1,19,400
3. Profit before tax and extraordinary item	(-) 3,600
4. Income tax	---
5. Extraordinary item	---
6. Net profit	(-) 3,600

(ii) Balance sheet (Extract) of Pushkar Ltd. as on 31<sup>st</sup> March

**A. Sources of Funds**

	2013 ₹	2012 ₹
1. Shareholders' funds		
Equity share capital	31,000	17,000
Profit and loss account	20,400	24,000
	51,400	41,000
2. Loan Funds		
Secured loans	19,400	11,400
Unsecured loans	36,200	38,200
	55,600	49,600
3. Current Liabilities		
Bills payable	1,200	1,800
Creditors	4,800	35,600
Income tax payable	1,800	3,400

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

4. Total sources of funds (1+2+3)	7,800	40,800
	1,14,800	1,31,400

### B. Application of Funds

	2013 ₹	2012 ₹
Fixed Assets:	1,44,000	1,08,000
Less: Accumulated depreciation	72,400	61,000
Net fixed assets	71,600	47,000
Investments	3,600	13,200
Current Assets:		
Inventories	30,200	23,800
Debtors (net)	5,800	33,200
(Provision of ₹ 1,600 and ₹ 2,400, respectively made)		
Prepaid expenses	1,200	400
Cash and cash equivalents	2,400	13,800
Total application of funds	1,14,800	1,31,400

(iii) Other relevant information for the year ended 31.03.2013:

1. Bad debts of ₹ 2,800 written off in respect of debtors and provided ₹ 2,000 for doubtful debts, included in administration and selling and distribution expenses.
2. Investments:
  - (a) Purchased investments for ₹ 6,000
  - (b) Sold investments for ₹ 17,000 (cost ₹ 15,600)
3. Plant and machinery:
  - (a) Purchased machinery worth ₹ 30,000 in cash
  - (b) Purchased machinery worth ₹ 15,000 in exchange of secured debentures
  - (c) Sold machinery worth ₹ 2,000 (cost ₹ 9,000; accumulated depreciation of ₹ 6,400)
4. Shares, debentures and loans:
  - (a) Shares issued at par ₹ 10,000
  - (b) Redeemed secured debentures of ₹ 3,000
  - (c) Unsecured loans repaid ₹ 2,000
  - (d) Secured debentures of ₹ 10,000 converted into equity shares of ₹ 10 at par.

Read the above carefully and answer the following questions —

- a. Calculate the amount of cash collected from customers. Also calculate the total payments made to creditors, employees etc.
- b. Prepare a statement of cash flows under indirect method.
- c. Show the supplemental schedule for non-cash transactions and disclose the accounting policy of Pushkar Ltd. in this context.

**[(2+3)+(3+2+2)+3]**

## 2.

(i)

### Rinita Ltd. Profit & Loss Statement (Extract)

Year		2011 - 2012		2012 - 2013
	₹	₹	₹	₹
Sales (1)		12,00,000		15,00,000

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

Less: Cost of Goods (2)				
Opening Stocks	1,80,000		2,00,000	
Add: Purchases	9,00,000		12,00,000	
	10,80,000		14,00,000	
Less: Closing Stock	2,00,000	8,80,000	4,00,000	10,00,000
Gross Profit Stock (1) – (2) = 3		3,20,000		5,00,000
Expenses	1,00,000		1,50,000	
Depreciation	75,000		1,20,000	
Interest on Overdraft	15,000	1,90,000	40,000	3,10,000
Profit before Interest and Tax		1,30,000		1,90,000
Less: Interest on Loan			-	35,000
Profit before tax (PBT)		1,30,000		1,55,000
Provision for Taxation (1,97,500 – 1,20,000)				77,500
Profit after tax (PAT)				77,500
Proposed Dividend				60,000
Transfer to Reserve				17,500

(ii)

Rinita Ltd.  
Balance Sheet (Extract) as on 31<sup>st</sup> March

Year		2012		2013
		₹	₹	₹
Net Block: (1)		5,00,000		8,00,000
Net current Assets: (2)				
(a) – (b)				
Receivables	2,00,000		2,95,000	
Cash at Bank	50,000		20,000	
Quick Assets	2,50,000		3,15,000	
Stock	2,00,000		4,00,000	
(a)	4,50,000		7,15,000	
Liabilities other than Overdraft:				
Payables	1,00,000		2,00,000	
Provision for Taxation	1,20,000		1,97,500	
Proposed dividend	40,000		60,000	
	2,60,000		4,57,500	
Bank Overdraft	1,00,000		2,50,000	
(b)	3,60,000	90,000	7,07,500	7,500
Capital Employed (1) + (2) = (3)		5,90,000		8,07,500
Represented by:				
Share capital		4,00,000		4,00,000
Reserve & surplus		1,90,000		2,07,500
		5,90,000		6,07,500
Loan			-	2,00,000
Capital Employed		5,90,000		8,07,500

At the end of March, 2012 the provision for taxation appears to be disproportionate to the amount of the profit before tax of ₹ 1,30,000. It may be possible that the figure of tax-provision

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

includes an amount in respect of unassessed income of previous years or provision made in excess of what is genuinely required.

You are required to answer the following questions —

- Calculate the ratios related to the profitability, solvency and capitalisation of the company.
- Analyse and comment upon the present state, trend in respect of profitability, solvency and capitalisation of the company.

[8+7]

### 3.

(a) The Capital of Madhu Co. Ltd., is as follows:

	(₹)
9% preference shares of ₹10 each	3,00,000
Equity shares of ₹10 each	8,00,000
	11,00,000

The accountant has ascertained the following information:

Profit (after tax at 60%) ₹ 2,70,000; Depreciation ₹ 60,000; Equity dividend paid 20%; market price of equity shares ₹50. You are required to state the following, showing the necessary Workings:

- Dividend yield on the equity shares.
- Cover for the preference and equity dividends.
- Earnings for equity shares.
- Price – earnings ratio.

(b) How fixed assets are analysed in financial modeling?

[5+5]

### 4.

(a) From the following income statement prepares a common-size income statement and also interprets the result.

Particulars	2011-12 (₹ crores)	2012-13 (₹ crores)
Sales/Income from operations	1,18,353.71	1,39,269.46
Excise duty, sales tax etc.	6,660.99	5,826.46
Net sales	1,11,692.72	1,33,443.00
Other income	478.28	5,628.79
Total income	1,12,171.00	1,39,071.79
Variation in stocks	(654.60)	1,867.16
Purchases	1,821.28	6,007.71
Raw material consumed	76,871.66	90,303.85
Manufacturing expenses	5,855.06	4,074.66

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

Payment for employees	2,094.09	2,119.33
Sales and distribution expenses	3,661.45	3,229.59
Establishment expenses	2,108.76	2,710.31
Preoperative expenses of projects under commissioning	(111.21)	(175.46)
Total Expenditure	91,646.49	1,10,137.15
Profit before Interest, Depreciation and Tax	20,524.51	28,934.64
Interest and Finance charges	1,188.89	1,077.36
Profit before Depreciation and Tax	19,335.62	27,857.28
Depreciation	4,815.15	4,847.14
Profit before tax	14,520.47	23,010.14
Provision for tax : Current	1,657.44	2,651.96
Deferred	919.63	899.89
Profit after tax	11,943.40	19,458.29

**(b)** What are the assumptions of Univariate model in respect of distress prediction? **[8+2]**

**5.**

**(a)** The balance sheets of XYZ Ltd. for the past two years are as under:

Liabilities	31-3-12	31-3-13	Assets	31-3-12	31-3-13
Equity shares	51,000	51,000	Gross fixed assets	61,000	73,000
General reserve	10,000	14,000	Less: accumulated depreciation	16,000	21,000
Surplus	4,000	4,800	Net fixed assets	45,000	52,000
Public deposits	8,000	2,000	Long term investments	30,000	32,000
Debentures	15,000	17,000	Sundry debtors	16,500	12,000
Term loan	20,000	18,000	Inventories	32,000	34,000
Trade creditors	8,000	10,800	Miscellaneous expenses	9,500	10,000
Short term bank borrowing	15,000	20,000			
Provision for tax	2,000	2,400			
Total	1,33,000	1,40,000		1,33,000	1,40,000

- (i) One of the important ratios considered by a bank for lending purposes is the ratio of the total outside liabilities to tangible net worth. What is this ratio for XYZ Ltd. for the year ended 31-3-13?
- (ii) List out the sources and uses of funds for the year ended 31-3-13 classifying them under the heads long-term and short-term.
- (iii) Comment on the uses of funds based on the above.

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

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- (b) A ₹ 1,000 par value bond bearing a coupon rate of 12 per cent will mature after 5 years. What is the value of the bond, if the discount rate is 15 per cent? (Given:  $PVIFA_{15\%, 5 \text{ years}} = 3.352$ ,  $PVIF_{15\%, 5 \text{ years}} = 0.497$ ). **[(2+4+2)+2]**

### Section B

**(Answer Question No. 6 and Question No. 7 which are compulsory and any two from the rest in this section)**

6. SUPER Garments Ltd. is a company which produces and sells to retailers a certain range of fashion clothing. They have made the following estimates of prudential cash flows for the next 10 years.

(₹ in lakhs)

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	3750	4250	5000	6250	7500	8500	9500	11250	12500	15000

SONA Ltd. is a company which owns a series of boutiques in a certain locality. The boutiques buy clothes from various suppliers and retail them. Each boutique has a manager and an assistant but all purchasing and policy decisions are taken centrally. An independent cash flow estimate of SONA Ltd. was as follows;

(₹ in lakhs)

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	300	400	500	700	850	1150	1300	1500	1650	2000

SUPER Garments Ltd. is interested in acquiring SONA Ltd. in order to get some additional retail outlets. They make the following cost-benefit calculation;

- (i) Net value of assets of SONA Ltd.

₹ in lakh

Sundry fixed assets	2000
Investments	500
Stock	<u>1000</u>
Total	3500
Less : Sundry Creditors	<u>1000</u>
Net Assets	2500

- (ii) Sundry fixed assets amounting to ₹ 125,00,000 cannot be used and their net realisable value is ₹ 112,50,000
- (iii) Stock can be realised immediately at ₹ 1,175 lakh.
- (iv) Investments can be disposed off for ₹ 530 lakhs.

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

- (v) Some workers of SONA Ltd. are to be retrenched for which estimated compensation is ₹ 325 lakh.
- (vi) Sundry creditors are to be discharged immediately.
- (vii) Liabilities on account of retirement benefits not accounted for in the balance sheet by SONA Ltd. is ₹ 120 lakhs.
- (viii) Expected cash flows of the combined business will be as follows:

(₹ in lakhs)

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	4500	4750	5750	7375	8750	10000	11250	13250	14500	17250

Find out the maximum value of SONA Ltd. which SUPER Garments Ltd. can quote. Also show the difference in valuation had there been no merger. Use 20% as discount factor.

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @ 20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615

**[15]**

7. X Ltd and Y Ltd, two private Companies, decide to amalgamate their business into a new Holding Company Z Ltd., which was incorporated on 1<sup>st</sup> Nov 2012 with an Authorized Capital of ₹40,00,000 in Equity Share of ₹10 each. The new Company plans to commence operation on 1<sup>st</sup> Jan 2013.

From the information given below, and assuming that all transactions are completed by 30<sup>th</sup> June 2013, you are required to –

Show the computation of the number of shares to be issued to the former shareholders of X Ltd & Y Ltd.

Calculate the Cash Flow available to Z Ltd. based on the information available to you.

Information

- (i) Z Ltd will acquire the whole of Equity Share Capital of X Ltd and Y Ltd by issuing its own shares fully paid.
- (ii) The number of shares to be issued is to be calculated by multiplying the future annual maintainable profits available to the Equity Shareholders in each of the two Companies by the agreed Price Earning Ratios.
- (iii) The following information is relevant.

Particulars	X Ltd	Y Ltd
Equity Shares of ₹10 each fully paid	10,00,000	4,00,000
8% Cumulative Preference Shares	-	1,00,000

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

10% Debentures	2,00,000	-
Future annual maintainable pre-tax profits (before interest/dividends)	2,30,000	1,12,000
Price Earning Ratio	10 times	8 times

- (iv) Shares in the Holding Company are to be issued to the shareholders in Subsidiary Companies at a premium of 20% and thereafter these shares will be marketed on the Stock Exchange.
- (v) It is expected that the Group Profits of the new Company in 2013 will be at least ₹4,50,000 but that will be required as additional Working Capital to facilitate expansion. Accordingly, it is planned to make a further issue of 37,500 Equity shares to the public for Cash at a premium of 30% on 1<sup>st</sup> May 2013. The new shares will not rank for interest / dividend to be paid on 30<sup>th</sup> June 2013.
- (vi) Out of the proceeds of the Public Issue, Z Ltd will advance ₹2,50,000 to X Ltd and ₹2,00,000 to Y Ltd on 1<sup>st</sup> May 2013 for Working Capital. These advances will carry interest @ 15% p.a to be paid monthly.
- (vii) Preliminary Expenses are estimated at ₹8,000 and Administrative Expenses for the half-year ended 30<sup>th</sup> June 2013 at ₹16,000 but this expenditure will be covered by temporary overdraft facility. It is estimated that Bank Overdraft cost will be ₹1,600 in the first six months.
- (viii) A provision for ₹7,500 should be made for Directors Fee for the half year.
- (ix) On 30<sup>th</sup> June 2013, it is planned to pay interim dividend as: Per share X Ltd – 5% , Y Ltd - 4.40%, Z Ltd - 4%
- (x) Income tax 50%. (Say) **[15]**

**8** Following are the information of two companies for the year ended 31st March, 2013:

Particulars	Company X	Company Y
Equity Shares of ₹ 10 each	20,00,000	25,00,000
10% Pref. Shares of ₹ 10 each	15,00,000	10,00,000
Profit after tax	7,50,000	7,50,000

Assume the Market expectation is 18% and 80% of the Profits are distributed.

- (i) What is the rate you would pay to the Equity Shares of each Company?
  - (a) If you are buying a small lot.
  - (b) If you are buying controlling interest shares.
- (ii) If you plan to Invest only in preference shares which company's preference shares would you prefer?



## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

- (iii) Would your rates be different for buying small lot, if the company 'X' retains 30% and company 'Y' 10% of the profits? [10]

- 9 (a) A Ltd. is considering the acquisition of B Ltd. with stock. Relevant financial information is given below.

Particulars	A Ltd.	B Ltd.
Present earnings	₹7.5 lakhs	₹2.5 lakhs
Equity (No. of shares)	4.0 lakhs	2.0 lakhs
EPS	₹ 1.875	₹ 1.25
P/E ratio	10	5

Answer the following question:

- (i) What is the market price of each company?
- (ii) What is the market capitalization of each company?
- (iii) If the P/E of A Ltd. changes to 7.5, what is the market price of A Ltd?
- (iv) Does market value of A Ltd. change?
- (v) What would be the exchange ratio based on Market Price? (Take revised Price of A Ltd.)

- (b) Explain the investment implications of the efficient market theory? [(1×5)+5]

- 10 Given below is the Balance Sheet of MNC Ltd as on 31.03.2013 (₹ Lakhs)

Liabilities	₹	Assets	₹
Share Capital	100.00	Sundry Fixed	144.00
Reserve	64.00	Non- Trade Investments	24.00
Profit and Loss Account	6.00	Stock	15.60
Sundry Creditors	16.40	Debtors	12.40
Proposed Dividend	20.00	Cash & Bank	10.40
Total	206.40	Total	206.40

Other Information:

- (i) Profit Before Tax and Other relevant information: (₹ Lakhs)

Year	Profit Before Tax	Provision for Gratuity required	Gratuity Paid	Loss of uninsured stock
2009	84.00	4.40	-	-

## PTP\_Final\_Syllabus 2012\_Jun2014\_Set 1

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2010	78.00	4.60	3.34	1.24
2011	88.00	5.00	0.64	-
2012	84.00	5.20	2.84	-
2013	74.00	5.40	0.24	-

(ii) Past Tax Rate is 51% while Expected Tax Rate is 45%.

(iii) The Company wants to switch over towards maintaining gratuity provision on actuarial calculation rather than accounting on payment basis. The Company's Non-Trade Investments fetched 11%.

Find out value of Goodwill. It may be assumed that Super Profit, if any, is maintainable for 5 years. 18% should be the appropriate discount factor. Normal Rate of Return may be taken as 15%. **[10]**