J.K. SHAH TEST SERIES
Evaluate Learn Succeed

FINAL CA – May 2018
Financial Reporting

Test Code – F4
Branch: Andheri Date: 03.12.2017

(50 Marks)

Note: All questions are compulsory.

Question 1 (8 marks)

a. Employees Compensation Account (1 mark)

Year		`	*Year*		`
2010-11	To Provision for Liability (W.N. 3)	1,27,200	2010-11	By Profit & Loss A/c	1,27,200
2011-12	To Provision for Liability (W.N. 3)	1,52,633	2011-12	By Profit & Loss A/c	1,52,633
2012-13	To Provision for Liability (W.N. 3)	2,02,867	2012-13	By Profit & Loss A/c	2,02,867

Provision for Liability Component Account (1 mark)

Year		`	*Year*		`
2010-11	To Balance c/d	1,27,200	2010-11	By Employees Compensation A/c	1,27,200
2011-12	To Balance c/d	2,79,833	2011-12	By Balance b/d	1,27,200
				By Employees Compensation A/c	1,52,633
		2,79,833			2,79,833
2012-13	To Balance c/d	4,82,700	2012-13	By Balance b/d	2,79,833
				By Employees Compensation A/c	2,02,867
		4,82,700			4,82,700

If Employee opts for Cash settlement

Provision for Liability Component Account (1/2 mark)

Year	*Particulars*	`	*Year*	*Particulars*	`
2013-14	To Bank (5000 x ` 96.54)	4,82,700	2013-14	By Balance c/d	4,82,700

If employee opts for Equity Settlement

Provision for Liability Component Account (1/2 mark)

Year	*Particulars*	`	*Year*	*Particulars*	`
2013-14	To ESOP outstanding A/c	4,82,700	2013-14	By Balance c/d	4,82,700

ESOP Outstanding Account
(1 mark)

Year		`	*Year*		`
2013-14	To Equity Share Capital A/c (6000 x ` 10)	60,000	2013-14	By Provision for Liability Component A/c	4,82,700
	To Securities Premium A/c	12,86,700		By Bank (6,000 x ` 144)	8,64,000
		13,46,700			13,46,700

Working Notes:

(b) Computation of Fair Values (2 mark)

Fair value of shares subject to lock in as on 1st April, 2010	` 60
% of increase in fair value of shares not subjected to lock in	20%
Fair value as on 1st April, 2010 of shares not subject to lock in (60+20%)	` 72
% increase over previous value in respect of fair value on 31.03.2011	6%
Fair value of shares not subject to lock in restriction on 31.03.2011 (72 + 6%)	` 76.32
% increase over previous value in respect of fair value on 31.03.2012	10%
Fair value of shares not subject to lock in restriction on 31.03.2012 (76.32 + 10%)	` 83.95
% increase over previous value in respect of fair value on 31.03.2013	15%
Fair value of shares not subject to lock in restriction on 31.03.2013 (83.95 + 15%)	` 96.54

2. Expense to be recognized in respect of Equity Component (1 mark)

Fair value under Equity Settlement Option (6,000 x ` 60)	3,60,000
Less: Fair value under cash settlement (liability component) option (5,000 x ` 72)	3,60,000
Equity component	Nil
Expenses to be recognized each year for equity component	Nil

3. Expenses to be recognized for Liability Component (1 mark)

	2010-11	*2011-12*	*2012-13*
Number of shares (A)	5000	5000	5000
Fair value at the end of each year (B)	76.32	83.95	96.54
Expenses to be recognized*	1,27,200	1,52,633	2,02,867

*Expenses to be recognized each year has been calculated on the basis:

$\frac{\text{Fair Value} \times \text{No. of years Expired}}{\text{Period}}$ –Expenditure recognised till previous year Vesting

Question 2 (8 marks)

(a) E.V.A. = Operating Profit – Taxes paid – (Capital Employed x WACC)

= NOPAT - (Capital Employed x WACC)

= 2,24,000 – (15,00,000 x 13.74%)

= ` 2,24,000 – ` 2,06,100 = ` 17,900.

2 marks

Working Notes

1. Operating Capital

	`
Equity share capital	10,00,000
Reserve & Surplus	3,00,000
12% Preference share capital	2,00,000
10% Debentures	4,00,000
Total	19,00,000
Less: Non-trade (non-operating) investment	4,00,000
Capital Employed	15,00,000

2 marks

2. Calculation of NOPAT

	`
PBT = Profit after tax + taxes (2,00,000 x 40/60) = 2,00,000 + 1,33,333	3,33,333
Add: Interest expenses (4,00,000 x 10%)	40,000
Operating PBIT	3,73,333
Less: Tax @ 40%	(1,49,333)
NOPAT	2,24,000

2 marks

3. Calculation of Weighted Average Cost of Capital (WACC)

Nature	*Amount*	*Calculation*	*Cost*
Cost of debt	4,00,000	Kd =10% (1 - 0.40) x 4,00,000/19,00,000	1.26%
Cost of Preference share capital	2,00,000	Kp = 12% x 2,00,000/19,00,000	1.26%
Cost of Equity	13,00,000	Ke = [8% + 1.2 (15% - 8%)] x 13,00,000/19,00,000	11.22%
	19,00,000	Total	13.74%

2 marks

Question 3 (16 marks)

Consolidated Balance Sheet of Vinyl Ltd. with its Subsidiary Sind Ltd. and Jointly Controlled Entity Hind Ltd. as on 31st March, 2016 (5 marks)

Particulars	Note No.	
Equity and Liabilities		
(1) Shareholder's Funds		
(a)Share Capital	1	50,00,000
(b)Reserves and Surplus	2	93,58,150
(2) Non –current Liabilities		
Long –term borrowings	3	21,00,000
(3) Current Liabilities		
(a) Trade Payables	4	10,98,175
(b) Short-term provisions	5	16,96,110
Total		1,92,52,435
II. Assets		
(1) Non –current assets		
Fixed assets		
(a) Tangibles assets	6	1,35,18,200
(b) Intangible assets (W.N.6)		29,28,120
(2) Current assets		
(a) Inventories	7	14,04,055
(b) Trade receivables	8	8,95,285
(c) Cash and cash equivalents	9	5,06,775
Total		1,92,52,435

Notes to Accounts (4 marks)

1.	Share Capital			
	Equity Capital 5,00,000 shares of '10 each			50,00,000
	(out of the above 3,00,000 shares of '10 each have been issued for consideration other than cash)			
2.	Reserves Surplus			
	Retained Earnings(w.N.4)		58,20,000	
	Capital Reserve (W.N.5)		11,38,150	
	Securities Premium (W.N.7)		24,00,000	93,58,150
3.	Long Term Borrowings			
	10% Debentures			
	Vinyl Ltd.	12,00,000		
	Add: Issued to Sind Ltd.	9,00,000		21,00,000
4.	Trade Payables			
	Vinyl Ltd.	4,26,860		
	Sind Ltd.	3,48,620		
	Hind Ltd.(50%)	3,22,695		
5.	Short –term provisions			
	Provision for taxes			
	Vinyl Ltd.	5,98,300		

	Sind Ltd.	8,36,210		
	Hind Ltd.(50%)	2,61,600		16,96,110
6.	Tangible assets			
	Fixed assets (assumed to be tangible in nature)			
	Vinyl Ltd.	47,22,400		
	Sind Ltd.	27,63,000		
	Hind Ltd.(50%)	11,45,300		
	Plant and Machinery			
	Vinyl Ltd.	28,39,860		
	Sind Ltd.	13,61,200		
	Hind Ltd.(50%)	6,86,440	48,87,500	1,35,18,200
7.	Inventories			
	Vinyl Ltd.	8,16,400		
	Sind Ltd.	4,28,350		
	Hind Ltd.(50%)	1,59,305		14,04,055
8.	Trade Receivable			
	Vinyl Ltd.	4,29,550		
	Sind Ltd.	3,15,720		
	Hind Ltd.(50%)	1,50,015		8,95,285
9.	Cash and cash equivalents			
	Vinyl Ltd.	2,76,950		
	Sind Ltd.	1,74,710		
	Hind Ltd.(50%)	55,115		5,06,775

Working Notes: (7 marks)

1. Purchase consideration paid to Subsidiary Sind Ltd.
   Earnings per share for the year 31st March,2015
   $=\frac{180000}{150000\ equity\ shares}$= 1.20 per share

   Marketing per share = 1.20 x10(i.e. P/E ratio) = 12 per share
   Purchase consideration = 12 x 1,50,000shares =18,00,000
   Purchase consideration to be paid as under
   10% Debentures 9,00,000

Equity shares (50,000 shares of 18 each) 9,00,000
18,00,00

2. Consideration paid to Jointly Controlled Entity Hind Ltd.

Total market value (as given)	90,00,000
50%share acquired by Vinyl Ltd. (2,50,000 shares x@18 each)	45,00,000

3. Analysis of General reserve of Sind Ltd. As on 31st March ,2016

Retained earnings given in balance sheet on 31.3.2016	23,58,150
Less :Current profit for the year ended 31.3.2016(Post acquisition)	(9,20,000)
Pre-acquisition retained earnings	14,38,150

4. Retained Earnings in the Consolidated Balance Sheet as per Proportionate Consolidation Method

Balance in Vinyl Ltd. Balance sheet	48,60,000

Add: Share in post –acquisition profit of Sind Ltd.	9,20,000
Add :Share in post –acquisition profits of Hind Ltd.	
(5,60,000 x 50%) (joint venture)	2,80,000
	60,60,000
Less :Goodwill (written off)	(2,40,000)
	58,20,000

5. Capital Reserve

Amount Paid for Sind Ltd.		18,00,000
Less Paid up value of shares	15,00,000	
Pre-acquisition profit(W.N.3)	14,38,150	(29,38,150)
Capital Reserve		11,38,150

6. Goodwill

Amount paid for 50% shares of Hind Ltd.	45,00,000
Less: Paid up value of shares(17,00,000 x50%)	(8,50,000)
Pre-acquisition (15,23,760 -5,60,000) x 50%	(4,81,880)
Goodwill	31,68,120
Less Impairment (Written off)	(2,40,000)
	29,28,120

7. Securities Premium

Issued to Sind Ltd.(50,000 x8)	4,00,000
Issued to Hind Ltd.(2,50,000 x8)	20,00,000
	24,00,000

Question 4 (8 marks)

According to Lev and Schwartz, the value of human capital embodied in a person of age τ is the present value of his remaining future earnings from employment. Their valuation model for a discrete income stream is given by the following formula:

$$V\tau = \sum_{t=\tau}^{t} \frac{I(t)}{(1+r)^{t-\tau}}$$

Where,

$V\tau$ = the human capital value of a person τ years old. I(t) = the person's annual earnings up to retirement.

r = a discount rate specific to the person. t = retirement age.

Value of skilled employees: (4 marks)

$$= \frac{50,000}{(1+0.15)^{(65-62)}} + \frac{50,000}{(1+0.15)^{(65-63)}} + \frac{50,000}{(1+0.15)^{(65-64)}}$$

` 32,875.81 + ` 37,807.18 + ` 43,478.26 = ` 1, 14,161.25

Total value of skilled employees is ` 1, 14,161.25 × 20 = ` 22,83,225.

Value of unskilled employees (4 marks)

= 30,000 + 30,000 = 30,000 + 30,000

$(1+0.15)^{(62-60)}$ $(1+0.15)^{(62-61)}$ $(1+0.15)^2$ $(1+0.15)$

= ` 22,684.31 + ` 26,086.96 = ` 48,771.27

Total value of the unskilled employees = ` 48,771.27× 25 = ` 12,19,282

Total value of human resources (skilled and unskilled) = ` 22,83,225 + ` 12,19,282 = ` 35,02,507.

Question 5 (10 marks)

It is necessary to segregate the instalments into principal outstanding and interest components by using I.R.R. @ 10.42%. (3 marks)

(` in lakhs)

Time	*Opening outstanding amount (a)*	*Cash flow (b)*	*Interest (c)*	*Principal repayment (d)*	*Closing outstanding (e)*
31-3-2009		*(-) 60*	*-----*	*---*	*60.00*
31-3-2010	*60.00*	*16*	*6.25*	*9.75*	*50.25*
31-3-2011	*50.25*	*16*	*5.24*	*10.76*	*39.49*
31-3-2012	*39.49*	*16*	*4.11*	*11.88*	*27.60*
31-3-2013	*27.60*	*16*	*2.88*	*13.12*	*14.48*
31-3-2014	*14.48*	*16*	*1.52*	*14.49*	*0.00*

(i) As the hire-purchaser paid the first instalment, the notional principal outstanding on 1-4-2010 was `50.25 lakhs. Provider Ltd. Should not recognize 5.24 lakhs as interest income as this should be treated as finance charge (not collected). (Refer W.N.1) (2 marks)

(ii) The net book value of the assets as on 31-3-2011 (3 marks) (Refer to note 2)

	` in lakhs
Over due instalment	16.00
Instalments not due (` *16 lakhs x 3)*	48.00
	64.00
Less: Finance charge (not collected)	5.24
	58.76
Less: Instalments not due	48.00
Net book value of assets for Provider Ltd.	10.76

(iii) The asset under hire purchase should be classified as sub -standard and a provision should be should be made at 10% of net book value of assets. i.e. ` 10.76 lakhs = ` 1.08 lakhs as per NBFC Prudential Norms laid down by RBI. (2 marks)

Working Notes:

1. Cash price is ` 80 lakhs. Down payment is ` 20 lakhs. Therefore principal value of asset for purchasing company's point of view as on 31-3-2009 is ` 60 lakhs (i.e. ` 80 lakhs – ` 20 lakhs). When company pays first instalment of ` 16 lakhs, it pays interest @ 10.42% for one year, i.e. ` 6.25 lakhs and repayment of principal in this instalment is of ` 9.75 (i.e.16 -6.25). The principal outstanding on 1-4-2010 is ` 50.25 lakhs (i.e ` 60 lakhs – ` 9.75 lakhs)

2. As per Para 8(2)(ii)(b) of NBFC Prudential Norms (Reserve Bank of India) Directions 1988 , provision is to be made at the rate of 10% of the net book value which is to be calculated as follows (as per Para 8(2)(ii):

Total Dues (Over due and future instalment)	------------
Less: Finance Charge not credited to profit and loss Account	------------
Less: Depreciated value of the underlying asset	------------
Net Book Value	------------

Depreciated Value= Original Cost – Depreciation Charge @20% p.a. on S.L.M. computed notionally on new asset.

= For second hand asset, actual acquisition cost is treated as original cost.

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