J.K. SHAH TEST SERIES
Evaluate Learn Succeed

SUGGESTED SOLUTION

FINAL May 2019 EXAM

SUBJECT- FR

Test Code – FNJ 7128

BRANCH - () (Date :)

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Answer 1:

(A)

Outstanding Amount at the end of 8th year = `85,00,000 x 1.12 x 1.12 x 1.12 x 1.12 x 1.12

= ` 1,49,79,904 (i.e. adding interest for 4th to 8th year)

Rescheduled amount to be paid at the end of the 8th year = `1,50,00,000

Additional amount to be paid on rescheduling = `1,50,00,000 - `1,49,79,904

= ` 20,096.

At the end of the 8^{th} year, book value of loan will become Nil.

Note: In the above solution it is assumed that interest due for the 7^{th} and 8^{th} year have also not been paid. **(5 marks)**

(B)

In this case, Company A Ltd. has issued warrants entitling the shareholders to purchase equity shares of the Company at a fixed price. Hence, it constitutes a contractual arrangement for issuance of fixed number of shares against fixed amount of cash.

Now, evaluating this contract under definition of derivative –

(i) The value of warrant changes in response to change in value of underlying equity shares;

(ii) This involves no initial net investment

(iii) It shall be settled at a future date.

Hence, this warrant meets the definition of derivative.

Applying definition of equity under Ind AS 32, a derivative contract that will be settled by exchange of fixed number of equity shares for fixed amount of cash meets definition of equity instrument. The above contract is derivative contract that will be settled by issue of fixed number of own equity instruments by A Ltd. for fixed amount of cash and hence, meets definition of equity instrument.

(5 marks)

Answer 2:

Calculation of Market Share of S Ltd.

Last year's market share = 100% – (15 + 30 + 40)% = 15%

Increase or decrease in market share of other players [0.4+0.3– 0.5) = 0.2% i.e. increase in others' market share every year over the period of 6 years. Hence, market share of S Ltd. is expected to decrease by 0.2% every year over the period of 6 years, from the current level of 15%. **(2 marks)**

Brand Valuation under Market Approach

Year	Market Size (Rs. in Crores)	Market Share of S Ltd. (in %)	Market Share (Rs. in Crores)	Expected Profit (Rs. in Crores)	Discount Factor	Discounted Profit (Rs. in Crores)
1	10,000 x 108% = 10,800	14.8%	1598.4	@ 10% = 159.84	0.909	145.29
2	10,800 x 108% = 11,664	14.6%	1702.94	@ 12% = 204.35	0.826	168.80

3	11,664 x 108% = 12,597.12	14.4%	1813.99	@ 12% = 217.68	0.751	163.48
4	12,597.12 x 110% = 13,856.83	14.2%	1967.67	@ 12% = 236.12	0.683	161.27
5	13,856.83 x 110% = 15,242.52	14%	2133.95	@ 12% = 256.07	0.621	159.02
6	15,242.52 x 110% = 16,766.77	13.8%	2313.81	@ 12% = 277.66	0.564	156.60
	Brand Value					**954.46**

Brand Value of S Ltd. under Market Oriented Approach is Rs. 954.46 crores. **(8 marks)**

Answer 3:

Computation of Economic Value Added

	Rs. in lakhs
NOPAT	192.50
Less: Cost of Capital	(137.50)
Economic Value Added	55.00

MVA of Vijay Ltd. is Rs. 7,010 crore.

The MVA of Rs. 7,010 crore is the difference between the current market value of Vijay Ltd. and the capital contributed by the fund providers. While EVA measures current earning efficiency of the company, MVA takes into consideration the EVA from not only the assets in place but also from the future projects/activities of the company. The difference between MVA over EVA thus represents the value attributed to the future potential of the company & may change from time to time based on market sentiments. In short, the MVA is the net present value of all future EVA's.

(4 marks)

Working Notes: **(6 marks)**

1. **Calculation of Net Profit before interest and tax**

   Interest on Debentures = 2,50,000 units x 100 x 10% = Rs. 25,00,000

Financial Leverage = Profit Before Interest and Tax (PBIT) / PBIT less interest

$$1.10 = \frac{PBIT}{PBIT - \text{\`{} } 25,00,000}$$

$1.10 (PBIT – \text{\`{} } 25,00,000) = PBIT$

$1.10\ PBIT – \text{\`{} } 27,50,000 = PBIT$

$1.10\ PBIT – PBIT = \text{\`{} } 27,50,000$

$0.10\ PBIT = \text{\`{} } 27,50,000$

$PBIT = \text{\`{} } 2,75,00,000$

2. Calculation of NOPAT

NOPAT = PBIT – Interest –Tax + Interest (net of tax)

or
NOPAT = PBIT – Tax
NOPAT = Rs. 2,75,00,000 x (1-0.3)= Rs. 1,92,50,000.

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

	Rs.in lakhs	*Rs.in lakhs (1)*	*Weight (2)*	*Cost% (3)*	*WACC% (4)=2x3*
Equity Shareholders' fund					
Common Shares	791				
Securities Premium	80				
Free Reserves	75				
Capital Reserves	54				
		1,000	0.80	12	9.6
Debenture holders' fund		250	0.20	7*	1.4
		1,250	1.00		11.00

Cost of Capital = Capital Employed x WACC%
= Rs. 1,250 lakhs x 11%
= Rs. 137.50 lakhs
* Rate of interest on debentures is taken net of tax of 30%

Answer 4:
(A)

(i) The contractual cash flows are solely payments of principal and interest on the principal amount outstanding. Linking payments of principal and interest on the principal amount outstanding to an unleveraged inflation index resets the time value of money to a current level. In other words, the interest rate on the instrument reflects 'real' interest. Thus, the interest amounts are consideration for the time value of money on the principal amount outstanding.

However, if the interest payments were indexed to another variable such as the debtor's performance (eg the debtor's net income) or an equity index, the contractual cash flows are not payments of principal and interest on the principal amount outstanding (unless the indexing to the debtor's performance results in an adjustment that only compensates the holder for changes in the credit risk of the instrument, such that contractual cash flows are solely payments of principal and interest). That is because the contractual cash flows reflect a return that is inconsistent with a basic lending arrangement. **(4 marks)**

(ii) The contractual cash flows are not payments of principal and interest on the principal amount outstanding. That is because the issuer may be required to defer interest payments and additional interest does not accrue on those deferred interest amounts. As a result, interest amounts are not consideration for the time value of money on the principal amount outstanding.

If interest accrued on the deferred amounts, the contractual cash flows could be payments of principal and interest on the principal amount outstanding. **(4 marks)**

(B)

a) Calculation of Business consideration to Sind Ltd.

EPS for 31.3.2015 = 180,000/150,000 = Rs. 1.2

Value per share = Rs. 1.2 x 10 = RS. 12

Consideration = Rs. 12 x 150,000 = RS. 18,00,000

To be paid as under :

10% Debenture	9,00,000
Equity Shares (9,00,000/18 = 50,000 shares)	9,00,000
	18,00,000

(b) Consideration paid to Hind Ltd.

Total consideration as given	90,00,000
50% shares of Vinyl Ltd.	45,00,000
Numbers of shares® Rs. 18 per shares	2,50,000

(c) Analysis of Profit of Sind Ltd. as on 31/3/2016

	Pre-acquisition	**Post-acquisition**
Retained Earnings	14,38,150	9,20,000
Vinyl Ltd share 100%	14,38,150	9,20,000

(d) Calculation of goodwill or Cost of control

Amount paid		18,00,000
Less:		
Paid up value of share	15,00,000	
Pre-acquisition profit	14,38,150	29,38,150
Capital Reserve		**11,38,150**

(e) Calculation of Goodwill of Hind Ltd.

Amount paid (1/2x90 lakhs)		45,00,000
Less:		
Paid up value of share (1 /2 of 1.7 lakhs @ Rs. 10 each)	8,50,000	
Pre-acquisition profit [1/2 x (1523760-560000)]	4,81,880	13,31,880
		31,68,120
Less: Impairment		2,40,000
Goodwill		**29,28,120**

f) Reserve and Surplus

Vinyl Ltd.	48,60,000
Share of Sind Ltd.	9,20,000
Share of JV	2,80,000
	60,60,000
Less: Goodwill w/o	2,40,000
	58,20,000

Securities premium: (50,000+2,50,000) x8 = Rs. 24,00,000

Reserve and Surplus = 58,20,000+11,38,150 +24,00,000=93,58,150

(1 mark x 6 = 6 marks)

(g) Consolidation of assets and liabilities -

Consolidated Balance Sheet of Vinyl Ltd and its subsidiary and Joint Venture as on 31/3/2016

		Rs.
Equity and Liabilities		
(1)	**Shareholder's Funds**	
	(a) Share Capital	50,00,000
	(b) Reserve and Surplus	93,58,150
(2)	**Non-current Liabilities**	
	Long-term borrowings	21,00,000
(3)	**Current Liabilities**	
	Trade Payables	10,98,175

(4)	**Short term Provision**		
	Provision for tax		16,96,110
	Total		**1,92,52,435**

(4 marks)

Assets			
(1)	**Non-Current assets**		
	Tangible asset-Fixed		1,35,18,200
	Intangible asset		29,28,120
(2)	**Current assets**		
	(a)	Inventories	14,04,055
	(b)	Trade receivables	8,95,285
	(c)	Cash and Cash equivalents	5,06,775
	Total		**1,92,52,435**

(2 marks)