

Note: **All questions are compulsory.**

**Question 1 (8 marks)**

- A. Calculation of expenses to be recognised in respect of the liability component at the end of each year

**(3 marks)**

Year 1	
Provisions required at the year-end $1,000 \times 52.00 \times 1/3 =$	17,333
Less provision at the beginning of the year	<u>Nil</u>
Expenses for the year	<u>17,333</u>
Year 2	
Provisions required at the year-end $1,000 \times 55.00 \times 2/3 =$	36,667
Less provision at the beginning of the year	<u>17,333</u>
Expenses for the year	<u>19,334</u>
Year 3	
Provisions required at the year-end $1,000 \times 60.00 =$	60,000
Less provision at the beginning of the year	<u>36,667</u>
Expenses for the year	<u>23,333</u>

**B. Journal Entries for each year**

Year	Particulars		
<b>1.</b> <b>(1 mark)</b>	Employee compensation expenses A/c Dr. 17,333 To Provision for liability component of employee share –based payment plan (Being compensation expense recognized in respect of liability component of employee share-based payment plan with cash alternative)		17,333
	Employee compensation expenses A/c Dr. 2,533 To Stock Option Outstanding A/c (Being compensation expense recognized in respect of equity component of employee share-based payment plan with cash alternative)	2,533	2,533
<b>2.</b> <b>(1 mark)</b>	Employee compensation expenses A/c Dr. 19,334 To Provision for liability component of employee share –based payment plan (Being compensation expense recognized in respect of liability component of employee share-based payment plan with cash alternative)	19,334	19,334
	Employee compensation expenses A/c Dr. 2,533 To Stock Option Outstanding A/c	2,533	2,533

	(Being compensation expense recognized in respect of equity component of employee share-based payment plan with cash alternative)			
<b>3.</b>	Employee compensation expenses A/c	Dr.	23,333	
<b>(1 mark)</b>	To Provision for liability component of employee share –based payment plan (Being compensation expense recognized in respect of liability component of employee share-based payment plan with cash alternative)			23,333
	Employee compensation expenses A/c	Dr.	2,533	
	To Stock Option Outstanding A/c (Being compensation expense recognized in respect of equity component of employee share-based payment plan with cash alternative)			2,533
<b>(1 mark)</b>	<b>On settlement for each year</b>			
	<b>Scenario 1: The Cash alternative</b>			
	Provision for liability component of employee share based payment plan	Dr.	60,000	
	To Bank A/c (Being cash paid on exercise of cash alternative under the employee share based payment plan)			60,000
	Stock Options Outstanding A/c	Dr.	7,600	
	To General Reserve (Being the balance standing to the credit of the Stock Options Outstanding Account transferred to the general reserve upon exercise of cash alternative)			7,600
<b>(1 mark)</b>	<b>Scenario 2: The equity alternative</b>			
	Stock Option Outstanding A/c	Dr.	7,600	
	Provision for liability component of employee	Dr.	60,000	
	To Share Capital A/c (1,000 shares x 10)			10,000
	To Securities Premium A/c (Being shares issued on exercise of equity alternative under the employee share based payment plan)			57,600

**Working Note: (1 mark)**

The employee share-based payment plan granted by the enterprise has two components, viz., (i) a liability component, i.e., the employees' right to demand settlement in cash, and (ii) an equity component, i.e., the employees' right to demand settlement in shares rather than in cash. The enterprise measures, on the grant date, the fair value of two components as below:

Fair value under equity settlement 1,200 shares x 48	=	57,600
Fair value under cash settlement 1,000 shares x 50	=	<u>50,000</u>
Fair value of the equity component (57,600-50,000)	=	<u>7,600</u>
Fair value of the liability component	=	50,000

The expense to be recognised in respect of the equity component at the end of each year is one third of the fair value ( ₹ 7,600) determined above.

**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	<u>4,00,000</u>
Total	19,00,000
Less: Non-trade (non-operating) investment	<u>4,00,000</u>
Capital Employed	<u>15,00,000</u>

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%)	<u>40,000</u>
Operating PBIT	3,73,333
Less: Tax @ 40%	<u>(1,49,333)</u>
NOPAT	<u>2,24,000</u>

2 marks

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

Nature	Amount	Calculation	Cost
Cost of debt	4,00,000	$K_d = 10\% (1 - 0.40) \times 4,00,000/19,00,000$	1.26%
Cost of Preference share capital	2,00,000	$K_p = 12\% \times 2,00,000/19,00,000$	1.26%
Cost of Equity	<u>13,00,000</u>	$K_e = [8\% + 1.2 (15\% - 8\%)] \times 13,00,000/19,00,000$	11.22%
	<u>19,00,000</u>	Total	<u>13.74%</u>

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.
-------------	----------

<b>Equity and Liabilities</b>		
<b>(1) Shareholder's Funds</b>		
(a) Share Capital	1	50,00,000
(b) Reserves and Surplus	2	93,58,150
<b>(2) Non –current Liabilities</b>		
Long –term borrowings	3	21,00,000
<b>(3) Current Liabilities</b>		
(a) Trade Payables	4	10,98,175
(b) Short-term provisions	5	<u>16,96,110</u>
Total		<u>1,92,52,435</u>
<b>II. Assets</b>		
<b>(1) Non –current assets</b>		
Fixed assets		
(a) Tangibles assets	6	1,35,18,200
(b) Intangible assets (W.N.6)		29,28,120
<b>(2) Current assets</b>		
(a) Inventories	7	14,04,055
(b) Trade receivables	8	8,95,285
(c) Cash and cash equivalents	9	<u>5,06,775</u>
Total		<u>1,92,52,435</u>

#### Notes to Accounts (4 marks)

1.	Share Capital Equity Capital 5,00,000 shares of '10 each (out of the above 3,00,000 shares of '10 each have been issued for consideration other than cash)		50,00,000
2.	Reserves Surplus Retained Earnings(w.N.4) Capital Reserve (W.N.5) Securities Premium (W.N.7)	58,20,000 11,38,150 <u>24,00,000</u>	93,58,150
3.	Long Term Borrowings 10% Debentures Vinyl Ltd. 12,00,000 Add: Issued to Sind Ltd. <u>9,00,000</u>		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	<u>48,87,500</u>	1,35,18,200
<b>7.</b>	Inventories			
	Vinyl Ltd.	8,16,400		
	Sind Ltd.	4,28,350		
	Hind Ltd.(50%)	<u>1,59,305</u>		14,04,055
<b>8.</b>	Trade Receivable			
	Vinyl Ltd.	4,29,550		
	Sind Ltd.	3,15,720		
	Hind Ltd.(50%)	1,50,015		8,95,285
<b>9.</b>	Cash and cash equivalents			
	Vinyl Ltd.	2,76,950		
	Sind Ltd.	1,74,710		
	Hind Ltd.(50%)	<u>55,115</u>		5,06,775

**Working Notes: (7 marks)**

**1. Purchase consideration paid to Subsidiary Sind Ltd.**

Earnings per share for the year 31<sup>st</sup> March,2015

$$= \frac{180000}{150000 \text{ equity shares}} = 1.20 \text{ per share}$$

Marketing per share = 1.20 x 10 (i.e. P/E ratio) = 12 per share

Purchase consideration = 12 x 1,50,000 shares = 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 31<sup>st</sup> 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)	<u>2,80,000</u>
	60,60,000

Less :Goodwill (written off)	<u>(2,40,000)</u>
	<u>58,20,000</u>

**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)	<u>14,38,150</u>	<u>(29,38,150)</u>
Capital Reserve		<u>11,38,150</u>

**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%		<u>(4,81,880)</u>
Goodwill		31,68,120
Less Impairment (Written off)		<u>(2,40,000)</u>
		<u>29,28,120</u>

**7. Securities Premium**

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

**Question 4 (8 marks)**

Capital Base	=	₹ 2,00,00,000
Actual Profit	=	₹ 22,00,000
Target Profit @ 12.5%	=	₹ 25,00,000

Expected Profit on employing the particular executive

$$= ₹ 25,00,000 + ₹ 5,00,000 = ₹ 30,00,000$$

Additional Profit = Expected Profit – Actual Profit

$$= ₹ 30,00,000 – ₹ 22,00,000 = ₹ 8,00,000$$

$$\text{Maximum bid price} = \frac{\text{Additional Profit}}{\text{Rate of Return on Investment}} \times 100 = \frac{8,00,000}{12.5} = ₹ 64,00,000$$

Maximum salary that can be offered = 12.5% of ₹ 64,00,000 i.e., ₹ 8,00,000

Maximum salary can be offered to that particular executive upto the amount of additional profit i.e., ` 8,00,000.

**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)

<i>Time</i>	<i>Opening outstanding amount</i> <i>(a)</i>	<i>Cash flow</i> <i>(b)</i>	<i>Interest</i> <i>(c)</i>	<i>Principal repayment</i> <i>(d)</i>	<i>Closing outstanding</i> <i>(e)</i>
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)

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

(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:**

- 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)

- 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.

\*\*\*\*\*