

**Note: All questions are compulsory.**

**Question 1(9 marks)**

**Total value of business as on 31.03.2015 (2 marks)**

	<i>` in thousands</i>
Closing Capital Employed as on 31.3.2015	16,960
<i>Less:</i> Goodwill appearing in the Balance Sheet as purchased Goodwill	(2,400)
<i>Add:</i> Goodwill	<u>8,225</u>
Total Value of Business	<u>22,785</u>

**Working Notes:**

**1. Calculation of Average Capital Employed (3 marks)**

	31.3.2013 <i>` in thousands</i>	31.3.2014 <i>` in thousands</i>	31.3.2015 <i>` in thousands</i>
Purchased Goodwill*	4,000	3,200	2,400
Tangible Assets	7,200	8,000	8,800
Inventories	4,800	5,600	6,400
Trade Receivables	80	640	1,760
Cash & Cash Equivalents	<u>480</u>	<u>800</u>	<u>1,600</u>
	16,560	18,240	20,960
<i>Less:</i> Trade payables	<u>(2,400)</u>	<u>(3,200)</u>	<u>(4,000)</u>
	14,16	15,04	16,96
Closing Capital	0	0	0
<i>Add:</i> Opening Capital Employed	<u>14,640</u>	<u>14,160</u>	<u>15,040</u>
Total	<u>28,800</u>	<u>29,200</u>	<u>32,000</u>
Average Capital Employed	<u>14,400</u>	<u>14,600</u>	<u>16,000</u>

\*Since the goodwill has been purchased, it is taken as a part of Capital employed. However, writing off of the goodwill is an extra-ordinary item, therefore not considered while calculating Future Maintainable Profit.

**2. Valuation of Goodwill (2 marks)**

**(i) Future Maintainable Profit**

	31.3.201	31.3.2014	31.3.2015

		3 `in thousand s	`in thousands	`in thousands
	Future Maintainable Profit	1,680	2,480	3,280
	Less : Opening Profit	(480)	(560)	(640)
	Add: Appreciation of closing inventory	800	800	800
	Less: Appreciation of opening inventory	-	(800)	(800)
	Add: Transferred to General Reserve	800	800	800
	Goodwill written off		800	800
		<u>2,800</u>	<u>3,520</u>	<u>4,240</u>
	Less: Normal Return @ 12.5% on ACE	<u>(1,800)</u>	<u>(1,825)</u>	<u>(2,000)</u>
(ii)	Super Profit	1,000	1,695	2,240

(iii) Average super profit =  
 $(1000+1695+2240)/3 = 1645$  thousands (1 marks)

(iv) Value of Goodwill at five years' purchase

= ` 1,645 thousands  $\times$  5 = ` 8,225 thousands (1 mark)

### Question 2(9 Marks)

#### Market Share of Agile Ltd. (2 marks)

Calculation of Last year's market share =  $100\% - 63\% = 37\%$

Increase or decrease in market share of other players  $[0.25 + (.25 \times 150\%) - 2.5/5] = 0.125\%$  i.e. increase in others' market share every year over the period of 5 years. Hence, market share of Agile Ltd. is expected to decrease by 0.125% every year over the period of 5 years, from the current level of 37%.

#### Brand Valuation under Market Approach (7 marks)

Year	Market Size (` in Crore)	Market Share of Agile Ltd.	Market Share (` in Crores)	Expected Profit (` in Crores)	Discount Factor	Discounted Cash Flow (` in Crores)
1	$7500 \times 109\% = 8,175$	36.875%	3014.53	@ 10% = 301.45	0.909	274.02
2	$8,175 \times 109\% = 8910.75$	36.75%	3274.70	@ 13% = 425.71	0.826	351.64
3	$8,910.75 \times 109\% =$	36.625%	3557.28	@ 18% =	0.751	480.87

	9712.72			640.31		
4	9,712.72 x 109% = 10,586.86	36.5%	3864.20	@23% = 888.77	0.683	607.03
5	10,586.86 x 109% = 11,539.68	36.375%	4197.56	@28% = 1,175.32	0.621	729.87
	Brand Value					2,443.43

Brand Value of Agile Ltd. under Market Oriented Approach is 2,44 3.43 crores.

### Question 3 (8 Marks)

(i) Since, the hire-purchaser paid the first instalment due on 31.3.2015, the notional principal outstanding on 1-4-2015 was ` 246.20 lakhs (refer W.N.).

In the year ended 31.03.2016, the instalment due of ` 70 lakhs has not been received. However, it was due on 31.3.2016 i.e. on the balance sheet date, and therefore, it will be classified as standard asset. Abhiram Ltd. will recognize ` 13.29 lakhs as interest income included in that due instalment as this should be treated as finance charge. (Refer W.N.)

#### (ii) <sup>+</sup> The net book value of the assets as on 31.3.2016

	` in lakhs
Overdue instalment	70
Instalments not due (` 70 lakhs x 3)	<u>210</u>
	280

2 marks

Less: Finance charge not matured and hence not credited to Profit and loss account (10.23 + 7.00 + 3.28)	<u>(20.51)</u>
	259.49
Less: Provision as the NBFC prudential norms (Refer point (iii))	<u>(49.49)</u>
Net book value of assets for Abhiram Ltd.	<u>210.00</u>

2 marks

#### (iii) Amount of Provision

	` in lakhs
Overdue instalment	70
Instalments not due (` 70 lakhs x 3)	<u>210</u>
	280
Less: Finance charge not matured and hence not credited to Profit and loss account (10.23 + 7.00 + 3.28)	<u>(20.51)</u>
	259.49
Less: Depreciated value (cash price less depreciation for two years on SLM @ 20%) [350-(350 x 20% x 2 years)]	<u>(210)</u>
Provision to be created as the NBFC prudential norms	<u>49.49</u>

2 marks

Since, the instalment of ` 70 lakhs not paid, was due on 31.3.2016 only, the asset is classified as standard asset. Therefore, no provision has been made for it.

**Note:** If provision @ 0.30% is made on standard asset that will not be clubbed with the above provision and will be shown as "Contingent Provisions against Standard Assets".

**Working Note: (2 marks)**

It is necessary to segregate the instalments into principal outstanding and interest components by using I.R.R. @ 5.40 %.

( in lakhs)

<b>Time</b>	<b>Opening outstanding amount</b> <b>(a)</b>	<b>Cash flow</b> <b>(b)</b>	<b>Interest @ 5.4%</b> <b>(c) = (a x 5.4%)</b>	<b>Principal repayment</b> <b>(d) = (b-c)</b>	<b>Closing outstanding</b> <b>(e) = (a - d)</b>
31-3-2014		(300)	-		300.00
31-3-2015	300	70	16.20	53.80	246.20
31-3-2016	246.20	70	13.29	56.71	189.49
31-3-2017	189.49	70	10.23	59.77	129.72
31-3-2018	129.72	70	7.00	63.00	66.72
31-3-2019	66.72	70	3.28*	66.72	0.00

\* Difference in interest value is due to approximation.

**Question 4(16 Marks)**

**Balance Sheet of A Ltd. (after absorption of B Ltd.) as on 31<sup>st</sup> March,2015 (2 marks)**

<b>Particulars</b>	<b>Note No.</b>	<b>(Rs.)</b>
<b>I Equity and Liability</b>		
<b>1. Shareholders fund</b>		
a) <u>Share capital</u>	<b>1</b>	49,73,950
b) Reserves and Surplus	<b>2</b>	7,56,040
<b>2. Non-current liabilities</b>		
Long term borrowings		8,00,000
<u>Current liabilities</u>		<u>9,80,000</u>
Total		<u>75,09,990</u>
<b>II Assets</b>		
<b><u>Non-current Assets</u></b>		
Fixed Assets		
Tangible Assets(Rs.30,50,000+ Rs.7,30,000)		37,80,000
<b><u>Current Assets</u></b>		
a) Inventories		13,90,000
b) Trade receivables		17,20,000
c) Cash and Cash equivalents		<u>6,19,990</u>
		<b><u>75,09,990</u></b>

**Notes to Accounts: (2 marks)**

		Rs.	Rs.
1.	<b>Share Capital</b> 4,97,395 Equity Shares of Rs.10 each fully paid (out of which 47,395 shares were allotted to vendors for consideration other than cash )		<b>49,73,950</b>
2.	<b>Reserves and surplus</b>		
	<b>General Reserve</b>	<b>4,46,000</b>	
	<b>Profit and loss account</b>	<b>2,38,000</b>	
	<b>(Rs.6,34,000- Rs.3,60,000-Rs. 36,000)</b>		
	<b>Securities premium reserve (47,395 shares x Rs.1.52)</b>	<b><u>72,040</u></b>	<b>7,56,040</b>

**Working Notes:**

**(1) Computation of Net Assets(excluding inter-company investments) (2 marks)**

	A Ltd.	B Ltd.
	Rs.	Rs.
<b>Total Assets</b>		
Assets Excluding invest	57,84,000	20,50,000
Dividend receivable	_____ -	<u>72,000</u>
(A)	<u>57,84,000</u>	<u>21,22,000</u>
External Liabilities		
Current Liabilities	6,00,000	3,80,000
Proposed dividend	3,60,000	-
Dividend distribution tax@10%	36,000	-
10% Debentures	_____ -	<u>8,00,000</u>
(B)	<u>9,96,000</u>	<u>11,80,000</u>
Net Assets(A) –(B)	<u>47,88,000</u>	<u>9,42,000</u>

**Note:** (1) **Dividend distribution tax has been calculated without grossing up.**

(2) Since the Preference Shares of B Ltd. Do not have priority over the payment of capital and dividend ,they have to be treated at par with the equity shares .Both types of shares have the same paid up value.

(2). In view of the above , the proration of shareholding in B Ltd. Is worked out , as follows: **(2 marks)**

**(a) A Ltd. in B Ltd.**

$$\frac{\text{Number of shares held by B Ltd.}}{\text{Total number of Equity and Preference Shares of B Ltd.}} = \frac{30,000}{1,00,000 + 50,000} = \frac{1}{5}$$

**(a) B Ltd. in A Ltd.**

$$\frac{\text{Number of shares held by B Ltd.}}{\text{Total number of Equity A Ltd.}} = \frac{90,000}{4,50,000} = \frac{1}{5}$$

**(3) Calculation of intrinsic value of shares:(2 marks)**

Let 'a' be the intrinsic value of shares of A Ltd. And 'b' be the intrinsic value of Shares of B Ltd.

$$\text{Now, } a = \text{Rs.}47,88,000 + 1/5 \times b$$

$$B = \text{Rs.}9,42,000 + 1/5 \times a$$

By substituting the value of a in b , we get

$$b = \text{Rs.}9,42,000 + 1/5(\text{Rs.}47,88,000 + 1/5 \times b)$$

$$b = \text{Rs.}9,42,000 + 9,57,600 + b/25$$

$$\frac{24b}{25} = \text{Rs.}18,99,600$$

$$b = \frac{\text{Rs.}18,99,600 \times 25}{24}$$

$$b = \text{Rs.}19,78,750$$

$$a = \text{Rs.}47,88,000 + \frac{19,78,750}{5} = \text{Rs.}51,83,750$$

$$\text{Intrinsic value of shares of A. Ltd.} = \frac{\text{Rs.}51,83,750}{4,50,000} = 11.52$$

$$\text{Intrinsic value of shares of B. Ltd.} = \frac{\text{Rs.}19,78,750}{1,00,000 + 50,000} = \text{Rs.}13.19$$

**(4) Calculation of Purchase Consideration : (2 marks)**

No. of shares held by outside shareholders of B Ltd.

$$= 1,00,000 - 30,000 + 50,000 = 1,20,000$$

Intrinsic value of shares = 1,20,000 x Rs. 13.19 per share

$$= 15,82,800$$

Shares to be issued on the basis of Intrinsic value of shares

$$= \frac{\text{Rs.}15,82,800}{\text{Rs.}11.52} = 1,37,395.83 \text{ shares}$$

Less : Shares already held by A Ltd. = 90,000.00 shares

Number of shares to be issued = 47,395.83 shares

**(5) Total Purchase price(1 mark)**

	Rs.
Additional shares in A.Ltd.(47,395 shares of Rs.11.52)	5,45,990
Cash for fractional shares(0.83 x Rs.11.52)	<u>10</u>
Value of 30,000 shares already held by A Ltd.	5,46,000
(30,000 shares x Rs.13.19)	<u>3,96,000*</u>
<b>Total</b>	<u><b>9,42,000</b></u>

\*Approximate figure has been considered.

(6) General Reserve (1 mark)

	Rs.
As per balance sheet	3,50,000
Add: Appreciation in the of shares held B Ltd. (Rs.3,96,000 –Rs.3,00,000)	<u>96,000</u>
Closing balance	<u>4,46,000</u>

(7) Bank Balance(2 marks)

		A Ltd.	B Ltd.
		Rs.	Rs.
As per balance sheet		6,24,000	3,20,000
Dividend received		<u>        -</u>	<u>72,000</u>
		6,24,000	3,92,000
Less : Dividend Payment	3,60,000		
Dividend tax @10%	36,000		
Cash for fraction shares	<u>        10</u>	<u>(3,96,010)</u>	<u>        -</u>
		<u>2,27,990</u>	<u>3,92,000</u>
Total bank balance			<u>6,19,990</u>

**Question 5 (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	$K_d = 10\% (1 - 0.40) \times 4,00,000 / 19,00,000$	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	13,00,000	$K_e = [8\% + 1.2 (15\% - 8\%)] \times 13,00,000 / 19,00,000$	11.22%
	19,00,000	Total	13.74%

2 marks

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