

MOCK TEST PAPER – 1
FINAL COURSE: GROUP – I
PAPER – 1: FINANCIAL REPORTING
SUGGESTED ANSWERS/HINTS

1. (a) 1. Computation of Net Assets

<i>Particulars</i>	<i>₹</i>
Property, plant and equipment (as per valuation)	6,20,000
Other Assets (as per agreement)	<u>1,30,000</u>
Total Assets	7,50,000
Less: Sundry Creditors	(80,000)
10% Debentures	<u>(70,000)</u>
Net Assets	<u>6,00,000</u>

2. Settlement of Purchase Consideration

<i>Particulars</i>	<i>₹</i>
Average annual profits (before debenture interest)	90,000
Less: Debenture interest	<u>(7,000)</u>
Average annual profits (after debenture interest)	<u>83,000</u>
Capitalisation @ 10%	8,30,000
Less: Net assets as calculated above to be settled by shares	<u>(6,00,000)</u>
Excess to be settled by debentures	<u>2,30,000</u>
Issue by Great Ltd.	
- 12% Debentures	2,30,000
- Equity shares	<u>6,00,000</u>
Total purchase consideration	<u>8,30,000</u>

- (b)** In the case of tax free companies, no deferred tax liability or asset is recognized in respect of timing differences that originate and reverse in the tax holiday period. Deferred tax liability or asset is created in respect of timing differences that originate in a tax holiday period but are expected to reverse after the tax holiday period. For this purpose, adjustments are done in accordance with the FIFO method.

In the first year, out of ₹ 200 lakhs, ₹ 80 lakhs will reverse in the tax holiday period. Therefore, Deferred Tax Liability will be created on remaining timing

difference of ₹ 120 lakhs @ 35% (i.e.) ₹ 42 lakhs.

In the second year, the entire ₹ 400 lakhs will reverse only after the tax holiday period. Therefore, deferred tax charge in the Statement of Profit and Loss for the second year will be ₹ 400 x 35% = 140 lakhs and total deferred tax liability in the Balance Sheet will be (42+140) = ₹ 182 lakhs.

- (c) According to AS 28 "Impairment of Assets", an impairment loss on a revalued asset is recognised as an expense in the statement of profit and loss. However, an impairment loss on a revalued asset is recognised directly against any revaluation surplus for the asset, to the extent, that the impairment loss does not exceed the amount held in the revaluation surplus for that same asset.

Impairment Loss and its treatment

	₹
Current carrying amount (including revaluation amount of ₹ 14 lakhs)	27,30,000
Less: Current recoverable amount	<u>(12,00,000)</u>
Impairment Loss	<u>15,30,000</u>
Impairment loss charged to revaluation reserve	14,00,000
Impairment loss charged to profit and loss account	1,30,000

After the recognition of an impairment loss, the depreciation (amortization) charge for the asset should be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

In the given case, the carrying amount of the asset will be reduced to ₹ 12,00,000 after impairment. This amount is required to be depreciated over remaining useful life of 3 years (including current year). Therefore, the depreciation for the current year will be ₹ 4,00,000.

- (d) (i) Tangible objects or intangible rights carrying probable future benefits, owned by an enterprise are called assets. N Ltd. sells these empty bottles by calling tenders. It means further benefits are accrued on its sale. Therefore, empty bottles are assets for the company.
- (ii) As per AS 2 "Valuation of Inventories", inventories are assets held for sale in the ordinary course of business. Stock of empty bottles existing on the Balance Sheet date is the inventory and N Ltd. has detailed controlled recording and accounting procedure which duly signify its materiality. Hence stock of empty bottles cannot be considered as scrap and should be valued as inventory in accordance with AS 2.

2. Consolidated Balance Sheet of M Ltd. with its subsidiaries E Ltd. and N Ltd.

As on 31st March, 2021

Particulars	Note No.	(₹ in thousand)
I. Equity and Liabilities		
(1) Shareholder's Funds		
(a) Share Capital		40,000
(b) Reserves and Surplus	1	11,645
(2) Minority Interest	2	8,005
(3) Current Liabilities		
(a) Trade payables	3	4,900
(b) Other current liabilities	4	4,650
Total		69,200
II. Assets		
(1) Non-current assets		
(a) Property, plant and equipment	5	69,200
Total		69,200

Notes to Accounts

		(₹ in thousand)	(₹ in thousand)
1.	Reserves and surplus		
	Capital Reserve [Refer Note 5]	902.5	
	General Reserve ₹		
	M Ltd. 1,800		
	E Ltd. 160		
	N Ltd. <u>112.5</u>	2,072.5	
	Profit & Loss A/c ₹		
	Balance on 1.04.2020 1,500		
	Profit during 2020-2021 7,000		
	Add: Interest on Loan <u>400</u>		
	8,900		
	Less: Dividend payable <u>(4,000)</u>		
	4,900		
	Add: P & L of E Ltd. 2,720		
	Add: P & L of N Ltd. <u>1,050</u>	<u>8,670</u>	11,645

2.	Minority interest			
	E Ltd.	4,880		
	N Ltd.	<u>3,125</u>	8,005	
3.	Trade payables			
	Creditors			
	M Ltd.	2,500		
	E Ltd.	1,000		
	N Ltd.	<u>1,400</u>	4,900	
4.	Other current liabilities			
	Dividend payable			
	M Ltd.	4,000		
	E Ltd. (Minority)	400		
	N Ltd. (Minority)	<u>250</u>	4,650	
5.	Property, plant and equipment			
	M Ltd.	21,800		
	E Ltd.	32,800		
	Less: Unrealized profit N Ltd.	<u>(300)</u>	32,500	
	N Ltd.	<u>14,900</u>	69,200	

Workings Notes:

- A. M Ltd.'s holding in E Ltd. is 1,60,000 shares out of 2,00,000 shares, i.e., $\frac{4}{5}$ th or 80%; Minority holding $\frac{1}{5}$ th or 20%.
- B. M Ltd.'s holding in N Ltd. is 75,000 shares out of 1,00,000 shares, i.e., $\frac{3}{4}$ th or 75%; Minority holding $\frac{1}{4}$ th or 25%.

Analysis of Reserves and Profits of Subsidiary Companies

		<i>E Ltd. (₹'000)</i>	<i>N Ltd. (₹'000)</i>	<i>Minority interest in E Ltd. ($\frac{1}{5}$) (₹'000)</i>	<i>Minority interest in N Ltd. ($\frac{1}{4}$) (₹'000)</i>
1.	Reserve (pre-acquisition reserves and profits)				
	Reserves on 1.04.2020	800	750		
	Profit on 1.04.2020	<u>2,000</u>	<u>800</u>		
		2,800	1,550		
	Less: Minority interest	<u>(560)</u>	<u>(387.5)</u>	560	387.5
		<u>2,240</u>	<u>1,162.5</u>		

2. Reserve (post-acquisition)				
Reserves as per Balance Sheet	1,000	900		
Less: Reserve (pre-acquisition)	<u>(800)</u>	<u>(750)</u>		
	200	150		
Less: Minority interest	<u>(40)</u>	<u>(37.5)</u>	40	37.5
	<u>160</u>	<u>112.5</u>		
3. Profit and Loss Account				
Profit for the year as per Balance Sheet	3,800	1,800		
Less: Interest on Loan (5,000 x 8%)	<u>(400)</u>			
	3,400			
Less: Minority Interest	<u>(680)</u>	<u>(450)</u>	680	450
	2,720	1,350		
Less: Unrealised profit on stock transfer	<u>-</u>	<u>(300*)</u>		
	<u>2,720</u>	<u>1,050</u>		
4. Share Capital				
As per Balance sheet	20,000	10,000		
Less: Minority interest	<u>(4,000)</u>	<u>(2,500)</u>	<u>4,000</u>	<u>2,500</u>
Transferred for computation of Goodwill/Capital Reserve	<u>16,000</u>	<u>7,500</u>		
			5,280	3,375
Less: Dividend payable shown separately			<u>(400)</u>	<u>(250)</u>
Transferred to Consolidated Balance Sheet			<u>4,880</u>	<u>3,125</u>
Total			8,005	

5. Computation of Cost of Control i.e. Goodwill / Capital Reserve on consolidation
(₹ in thousand)

	<i>E Ltd.</i>	<i>N Ltd.</i>
Cost of Investments	18,000	8,000
Less: Paid up value of shares [Refer Note 4]	<u>(16,000)</u>	<u>7,500</u>

* As per para 17 of AS 21, 'Unrealised profits resulting from intragroup transactions that are included in the carrying amount of assets, such as inventory and fixed assets, are eliminated in full.

	2,000	500
Less: Pre-acquisition Reserve [Refer Note 1]	<u>(2,240)</u>	<u>(1,162.5)</u>
Capital reserve	<u>(240)</u>	<u>(662.5)</u>
Total Capital Reserve (₹ 240 + ₹662.5)	902.5	

3.

Balance Sheet of Better Ltd. as on 31st March, 2021

Particulars	Note No.	After reconstruction	Before reconstruction
		(₹ in crores)	(₹ in crores)
I. Equity and Liabilities			
(1) Shareholder's Funds			
(a) Share Capital	1	300	300
(b) Reserve and Surplus	2	800	750
(2) Non-Current Liabilities			
Long-term borrowings	3	315	250
(3) Current Liabilities		1,250	1,300
Total		2,665	2,600
II. Assets			
(1) Non-current assets			
(a) Property, plant and equipment	4	765	600
(2) Current assets		1,900	2,000
Total		2,665	2,600

Notes to Accounts

Particulars		After reconstruction	Before reconstruction
		(₹ in crores)	(₹ in crores)
1. Share Capital			
Authorised:			
50 crores equity shares of ₹10 each		<u>500</u>	<u>500</u>
Issued and subscribed:			
30 crores equity shares of ₹ 10 each fully paid up		300	300

2.	Reserves and surplus				
	Capital reserves	40		40	
	Add: Capital profit on reconstruction [WN 1(ii & iii)]	50		-	
	Revenue reserves	700		700	
	Surplus	<u>10</u>	800	<u>10</u>	750
3.	Long term Borrowings				
	Best Ltd. (Interest @ 15% p.a.) [WN 1(i)]	15			
	Others	<u>300</u>	315		250
4.	Property, plant and equipment				
	Gross block	925		1,000	
	Less: Depreciation	<u>(160)</u>		<u>(400)</u>	
	Net block		765		600

Best Ltd.
Balance Sheet as at 31st March, 2021

Particulars	Note No.	After reconstruction	Before reconstruction
		(₹ in crores)	(₹ in crores)
I. Equity and Liabilities			
(1) Shareholder's Funds			
(a) Share Capital	1	200	200
(b) Reserves and Surplus	2	465	450
(2) Non-Current Liabilities			
Long-term borrowings		300	350
(3) Current Liabilities		950	900
Total		1,915	1,900
II. Assets			
(1) Non-current assets			
Property, plant and equipment	3	300	400
(2) Current assets			
(a) Short term loans and advances	4	15	-
(b) Other current assets		1,600	1,500
Total		1,915	1,900

Notes to Accounts

Particulars		After reconstruction		Before reconstruction	
		(₹ in Crores)		(₹ in Crores)	
1. Share Capital					
Authorized:					
50 crores equity shares of ₹ 10 each			<u>500</u>		<u>500</u>
Issued and subscribed:					
30 crores equity shares of ₹ 10 each fully paid up			200		200
2. Reserves and surplus					
Capital reserves	20			20	
Add: Capital profit on reconstruction [WN 1(ii)]	<u>15</u>	35		<u>-</u>	20
Revenue reserves		425			425
Surplus		<u>5</u>			<u>5</u>
		<u>465</u>			<u>450</u>
3. Property, plant and equipment					
Gross block	400			700	
Less: Depreciation	<u>(100)</u>			<u>(300)</u>	
Net block			300		400
4. Short term loans and advances					
Loan to Better Ltd.[WN 1(i)]			15		----

(b) Net asset value of Master Win's holdings

	Pre-reorganisation (₹)	Post-reorganisation (₹)	Change (Gain) (₹)
Net asset value of one equity share: (Refer to working notes)			
Better Ltd.	35.00	36.67	1.67
Best Ltd.	32.50	33.25	0.75
Net asset value of equity shares owned by Master Win			

Better Ltd. (50,000 shares)	17,50,000	18,33,500	83,500
Best Ltd. (30,000 shares)	<u>9,75,000</u>	<u>9,97,500</u>	<u>22,500</u>
	<u>27,25,000</u>	<u>28,31,000</u>	<u>1,06,000</u>

Master Win has gained in terms of net asset value of his holdings as indicated in the last column.

Working Notes:

(1) Better Ltd.

(₹ in crores)

		<i>Pre-re- organisation figures</i>	<i>Sale of division B</i>	<i>Purchase of division D of Best Ltd.</i>	<i>Post-re- organisa- tion figures</i>
		(a)	(b)	(c)	(d) = (a) – (b) + (c)
(i)	Property, plant and equipment				
	Cost	1,000	400	325	925
	Depreciation	<u>(400)</u>	<u>(240)</u>	—	<u>(160)</u>
	Written down value (I)	<u>600</u>	<u>160</u>	<u>325</u>	<u>765</u>
	Current assets	2,000	900	800	1,900
	Current liabilities	<u>(1,300)</u>	<u>(750)</u>	<u>(700)</u>	<u>(1,250)</u>
	Net current assets (II)	<u>700</u>	<u>150</u>	<u>100</u>	<u>650</u>
	Funds employed [(I) + (II)]	1,300	310	425	1,415
	Loan funds:				
	Others (III)	(250)	(200)	(250)	(300)
	Best Ltd. (balance payable on transfer of divisions i.e. ₹ 140 – ₹ 125) (IV)	—	—	—	<u>(15)</u>
	Net worth (I + II – III – IV)	<u>1,050</u>	<u>110</u>	<u>175</u>	<u>1,100</u>

Calculation of Profit / (Loss) on Division sale and purchase

		(₹ in crores)
(ii)	Sale of division B	
	Transfer price	125
	Cost of the division (₹160 + ₹ 150 – ₹ 200)	<u>(110)</u>
	Capital Profit	<u>15</u>
(iii)	Purchase of division D of Best Ltd.	
	Agreed value of assets less liabilities taken over ₹ (325 + 800-700 – 250)	175
	Less: Transfer price	<u>(140)</u>
	Capital Profit	<u>35</u>
(iv)	Pre-reorganisation net worth	1,050
	Add: Capital profit on	
	Sale 15	
	Acquisition <u>35</u>	<u>50</u>
	Post-reorganisation net worth	<u>1,100</u>

No. of equity shares 30 crores

Net asset value of equity share: ₹

Pre-reorganisation 1,050/30 = 35.00

Post-reorganisation 1,100/30 = 36.67 (rounded off)

(2) Best Ltd.

(i) (₹ in crores)

	Pre-re- organisation figures (a)	Sale of division D (b)	Purchase of division B of Better Ltd. (c)	Post-re- organisation figures (d) = (a) – (b) + (c)
Property, plant and equipment				
Cost	700	500	200	400

Depreciation	(300)	(200)	—	(100)
Written down value (I)	<u>400</u>	<u>300</u>	<u>200</u>	<u>300</u>
Current assets	1,500	800	900	1,600
Current liabilities	<u>(900)</u>	<u>(700)</u>	<u>(750)</u>	<u>(950)</u>
Net current assets (II)	<u>600</u>	<u>100</u>	<u>150</u>	<u>650</u>
Funds employed [(I) + (II)]	1,000	400	350	950
Loan funds—others (III)	<u>(350)</u>	<u>(250)</u>	<u>(200)</u>	<u>(300)</u>
	650	150	150	650
Better Ltd. (balance on account of transfers of divisions) (IV)	—	—	—	15
Net worth (I + II – III + IV)	<u>650</u>	<u>150</u>	<u>150</u>	<u>665</u>

(ii) (₹ in crores)

	Purchase of division B of Better Ltd.		Sale of division D
Value of assets less liabilities (Value to Best Ltd.)	(200 + 900 – 750 – 200)	150	(300 + 800 – 700 – 250)
Less: Transfer Price	<u>(125)</u>		<u>(140)</u>
Capital Profit/(Capital Loss)	<u>25</u>		<u>(10)</u>

(iii) (₹ in crores)

Pre-reorganisation net worth		650
Add: Capital profit on - acquisition	25	
- Sale	<u>(10)</u>	<u>15</u>
Post-reorganisation net worth		<u>665</u>

No. of equity shares 20 crores

Net asset value of equity share: ₹

Pre-reorganisation 650/20 = 32.50

Post-reorganisation 665/20 = 33.25

4. (a) Computation of probable market price based on actual dividend

Actual dividend per share	₹ 25
Adjusted yield (W.N.3)	17.98%

Market price for shares of ₹100 paid up	₹139.04
Market price for shares of ₹80 paid up	₹111.23

Working Notes:

1. Asset backing position of Prosperous Ltd

Particulars	₹
Property, plant and equipment	17,20,000
Government securities	1,50,000
Current assets	<u>11,30,000</u>
Total assets	30,00,000
Less: Liabilities	
12% Debentures	(4,00,000)
Current liabilities and provisions	<u>(8,00,000)</u>
Net assets	18,00,000
Less: Preference share capital	<u>(6,00,000)</u>
Net assets available to equity share holders	<u>12,00,000</u>

$$\text{Ratio of net asset to equity share capital} = \left[\frac{12,00,000}{8,00,000} \times 100 \right] = 150\%$$

2. Payout ratio

Particulars	₹
Profit available for distribution	
Profit before tax	8,00,000
Less: Tax @ 50%	<u>(4,00,000)</u>
Profit after tax	<u>4,00,000</u>
Total dividend paid	
Preference shareholders (14% of ₹ 6,00,000)	84,000
Equity shareholders (25% of ₹ 8,00,000)	<u>2,00,000</u>
Total dividend paid	<u>2,84,000</u>
Pay-out ratio $\left[\frac{2,84,000}{4,00,000} \times 100 \right]$	71%

3. Computation of adjusted yield

	<i>Asset backing ratio</i>	<i>Pay-out ratio</i>
Representative Company	250%	50%
Prosperous Ltd. (W.N.1 and 2)	150%	71%
Variation	100%	(21%)
Degree of variation	$\left[\frac{100}{250} \times 100 \right] = 40\%$	$\left[\frac{(21)}{50} \times 100 \right] = (42\%)$
Nature of adjustment to yield	May increase	May decrease
Quantum of adjustment (Assuming 100% variance = 1% risk)	0.40	(0.42)

Adjusted yield = 18% + 0.40% - 0.42% = 17.98%

- (b) Difference between AS 10 'Property, Plant and Equipment' and Ind AS 16 'Property, Plant and Equipment'

- (i) **Fixed Assets retired from Active Use and Held for Sale:** Ind AS 16 does not deal with the assets 'held for sale' because the treatment of such assets is covered in Ind AS 105, Non-current Assets Held for Sale and Discontinued Operations. AS 10 deals with accounting for items of fixed assets retired from active use and held for sale.
- (ii) **Stripping Costs in the Production Phase of a Surface Mine:** Ind AS 16 provides guidance on measuring 'Stripping Costs in the Production Phase of a Surface Mine'. AS does not contain this guidance.

5. (a) Notes on Share Capital to the financial statements for the year ended 31st March, 2021

	<i>Current year ended on 31st March, 2021</i>
Authorised Share Capital	
1,00,000 Equity shares (previous year 80,000) of ₹ 10 each	<u>10,00,000</u>
Issued, Subscribed and Paid-up Share Capital	
90,000 Equity shares (previous year 70,000) of ₹ 10 each	9,00,000
Less: Calls unpaid on 100 equity shares of ₹ 10 each	<u>(500)</u>
	<u>8,99,500</u>

Reconciliation of shares outstanding at the beginning and at the end of the reporting period

	Current year ended on 31 st March, 2021	
	Number of shares	₹
Equity shares at the commencement of the period	70,000	7,00,000
Shares issued under the right issue	5,000	50,000
Shares issued to the public during the year	5,000	50,000
Shares issued on exercise of Employee Stock Option	<u>10,000</u>	<u>1,00,000</u>
Equity shares at the end of the period	<u>90,000</u>	<u>9,00,000</u>

Rights, preferences and restrictions attached to equity shares

The company has a single class of equity shares. Accordingly, all equity shares rank equally with regard to dividends and share in the company's residual assets. The equity shares are entitled to receive dividend as declared from time to time. Failure to pay any amount called up on shares may lead to forfeiture of the shares. On winding up of the company, the holders of equity shares will be entitled to receive the residual assets of the company.

- (b) Since the exercise price varies depending on the outcome of a performance condition that is not a market condition, the effect of that performance condition (i.e. the possibility that the exercise price might be ₹ 40 and the possibility that the exercise price might be ₹ 30) is not taken into account when estimating the fair value of the stock options at the grant date. Instead, the enterprise estimates the fair value of the stock options at the grant date under each scenario and revises the transaction amount to reflect the outcome of that performance condition at the end of every year based on the information available at that point of time.

Calculation of compensation expenses to be charged every year

Year	Calculation	Compensation expenses for the period (₹)	Cumulative compensation expense (₹)
1	10,000 options x ₹ 16 x 1/3	53,333	53,333
2	(10,000 options x ₹ 16 x 2/3) – ₹ 53,333	53,334	1,06,667
3	(10,000 options x ₹ 12 x 3/3) – ₹ 1,06,667	13,333	1,20,000

6. (a) Calculation of net assets as on 30.04.2021

	₹ in lakhs	₹ in lakhs
Opening bank balance [₹ (100 – 90 – 7) lakhs]	3.00	
Add: Proceeds from sale of securities	40.00	
Dividend received	<u>1.20</u>	44.20
Less:		
Cost of securities	(28.20)	
Fund management expenses		
[₹ (4.50 – 0.25) lakhs]	(4.25)	
Capital gains distributed		
[75% of ₹ (40.00 – 38.00) lakhs]	(1.50)	
Dividends distributed (75% of ₹ 1.20 lakhs)	<u>(0.90)</u>	<u>(34.85)</u>
Closing bank balance		9.35
Add: Closing market value of portfolio		<u>101.90</u>
		111.25
Less: Arrears of expenses		<u>(0.25)</u>
Closing net assets as on 30.4.2021		<u>111.00</u>

Calculation of NAV per unit as on 30.4.2021

Closing net assets as on 30.4.2021	₹ 111.00 lakhs
Number of units	10 lakhs
Closing Net Assets Value (NAV) per unit	₹ 11.10

(b) Separation of Equity and Debt Portion

	₹
Present value of the principal repayable in 4 years	
₹ 30,00,000 × 1.10 × 0.68 (10% Discount factor)	22,44,000
Present value of Interest 1,80,000 × 3.17	
(4 years cumulative 10% discount factor)	<u>5,70,600</u>
Total liability component (Debt Portion)	28,14,600
Equity Portion (Balance)	<u>1,85,400</u>
Proceeds of the issue	<u>30,00,000</u>

7. (a) AS 17 'Segment Reporting' requires that in measuring and reporting segment revenue from transactions with other segments, inter-segment transfers should be measured on the basis that the enterprise actually used to price these transfers. The basis of pricing inter-segment transfers and any change therein should be

disclosed in the financial statements. Hence, the enterprise can have its own policy for pricing inter-segment transfers. Further, inter-segment transfers may be based on cost, below cost or market price. However, whichever policy is followed, the same should be disclosed and applied consistently. Therefore, in the given case inter-segment transfer pricing policy adopted by the company is correct if, followed consistently.

- (b) According to para 92 of AS 15 (Revised) "Employee Benefits", actuarial gains and losses should be recognized immediately in the statement of profit and loss as income or expense. Therefore, surplus of ₹ 6 lakhs in the pension scheme on its actuarial valuation is required to be credited to the profit and loss statement of the current year. Hence, Kumar Ltd. cannot spread the actuarial gain of ₹ 6 lakhs over the next 2 years by reducing the annual contributions to ₹ 2 lakhs instead of ₹ 5 lakhs. It has to contribute ₹ 5 lakhs annually for its pension schemes.
- (c) Yes, both sales and gain of B Ltd. should be recognized. In accordance with AS 9, at the Balance Sheet date what was pending was merely a formality to register the deed. It is clear that significant risk and rewards of ownership had passed before the balance sheet date i.e. assets is in use by A Ltd. Further the registration of the property in the name of A Ltd. post the balance sheet date confirms the condition of sale which existed at the balance sheet date. Therefore, as per AS 4, it is an adjusting event and the sale will be recognised in the previous year.

(d) Calculation of Economic Value Added

	₹
Net Operating Profit After Tax	25,00,000
Less: Cost of capital employed (Refer W.N.)	<u>(6,00,000)</u>
Economic Value Added	<u>19,00,000</u>

Economic value added is greater than zero. Therefore, the company qualifies for the loan.

Working Note:

Calculation of Cost of Capital employed	₹
Average total assets	75,00,000
Less: Average current liabilities	<u>(15,00,000)</u>
Capital employed	<u>60,00,000</u>
Cost of capital = Capital employed x Weighted average cost of capital $= ₹ 60,00,000 \times \frac{10}{100} = ₹ 6,00,000$	

- (e) 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_{τ} = 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 employees

$$= \frac{30,000}{(1+0.15)^{(62-60)}} + \frac{30,000}{(1+0.15)^{(62-61)}}$$

$$= \frac{30,000}{(1+0.15)^2} + \frac{30,000}{(1+0.15)}$$

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

$$\text{Value of the employees} = ₹ 48,771.27 \times 50 = ₹ 24,38,564$$