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SUGGESTED SOLUTION
IPCC NOVEMBER 2016 EXAM

ACCOUNTS

Test Code - I N J1 1 5 1

BRANCH - (MUMBAI) (Date :04.09.2016)

Head Office :Shraddha, 3rd Floor, Near Chinai College, Andheri (E), Mumbai – 69.

Tel : (022) 26836666

Answer-1 (a) :**Computation of the value of goodwill:**

(i)	Average Profit for three years, ending 30th June; before death:		
	Year ending 30th June, 2012 :	Rs.	Rs.
	1/2 of 2011 profits	33,600	
	1/2 of 2012 profits	<u>37,800</u>	71,400
	Year ending 30th June, 2013 :		
	1/2 of 2012 profits	37,800	
	1/2 of 2013 profits	<u>36,000</u>	73,800
	Year ending 30th June, 2014 :		
	1/2 of 2013 profits	36,000	
	1/2 of 2014 profits	<u>31,200</u>	<u>67,200</u>
	Total		<u>2,12,400</u>
	Average		<u>70,800</u>
(ii)	Super Profit :		Rs.
	Average profits earned		70,800
	Less : Partner's remuneration	45,000	
	Less : 8% on capital employed	<u>12,480</u>	<u>(57,480)</u>
			13,320
	Super Profits		
(iii)	Goodwill @ three years' purchase (13,320 x 3)		39,960

(4 Marks)**Adjustment entries for Goodwill****Journal Entries**

		Dr. Rs.	Cr. Rs.
Clever's Capital Account	Dr.	7,992	
Dull's Capital Account	Dr.	7,992	
To Wise's Capital Account			15,984

(Being Wise's share of goodwill adjusted in the capital accounts of partners on the death of Mr. Wise in their gaining ratio.)

(2 Marks)**Answer-1 (b) :**

Calculation of total Interest and Interest included in each installment

Hire Purchase Price (HPP) = Down Payment + instalments

= 30,000 + 50,000 + 50,000 + 30,000 + 20,000 = 1,80,000

Total Interest = 1,80,000 – 1,50,000 = 30,000

(1 Mark)**Computation of IRR (considering two guessed rates of 6% and 12%)**

Year	Cash Flow	DF @6%	PV	DF @12%	PV
0	30,000	1.00	30,000	1.00	30,000
1	50,000	0.94	47,000	0.89	44,500
2	50,000	0.89	44,500	0.80	40,000
3	30,000	0.84	25,200	0.71	21,300
4	20,000	0.79	15,800	0.64	12,800
		NPV	1,62,500	NPV	1,48,600

(3 Marks)

Interest rate implicit on lease is computed below by interpolation:

$$\text{Interest rate implicit on lease} = 6\% + \frac{1,62,500 - 1,50,000}{1,62,500 - 1,48,600} \times (12 - 6) = 11.39\%$$

$$= 6\% + \frac{12,500}{13,900} \times 6 = 11.39\%$$

(2 Marks)

Thus repayment schedule and interest would be as under:

Installment no.	Principal at Beginning	Interest included in each installment	Gross amount	Installment	Principle at end
Cash down	1,50,000		1,50,000	30,000	1,20,000
1	1,20,000	13,668	1,33,668	50,000	83,668
2	83,668	9,530	93,198	50,000	43,198
3	43,198	4,920	48,118	30,000	18,118
4	18,118	2,064	20,182	20,000	182*
		30,182*			

(2 Marks)

Answer-2 :

In the Books of Kanak Ltd.

Particulars		Dr. Amount Rs.	Cr. AmountRs.
01.04.2016			
Equity share capital A/c	Dr.	45,00,000	
To Equity share capital A/c			45,00,000
(Being sub-division of one share of Rs. 100 each into 10 shares of Rs. 10 each)			
Equity share capital A/c	Dr.	22,50,000	
To Capital reduction A/c			22,50,000
(Being reduction of Equity capital by 50%)			
Capital reduction A/c	Dr.	40,500	
To Bank A/c			40,500
(Being payment in cash of 10% of arrear of preference dividend)			
Bank A/c (2,400 x 98)	Dr.	2,35,200	
To Own debentures A/c (2,400 x 96)			2,30,400
To Capital reduction A/c.			4,800
(Being profit on sale of own debentures of Rs. 2,40,000 transferred to capital reduction A/c)			
12% Debentures A/c.	Dr.	3,60,000	
To Own debentures A/c			3,45,600
To Capital reduction A/c			14,400
(Being profit on cancellation of own debentures transferred to capital reduction A/c)			
12% Debentures A/c	Dr.	8,40,000	
Capital reduction A/c.	Dr.	60,000	
To Machinery A/c			9,00,000
(Being machinery taken up by debenture holders for Rs. 8,40,000)			
Trade payables A/c	Dr.	1,95,000	
Capital reduction A/c (balancing figure)	Dr.	87,000	
To Trade receivables A/c.			1,83,000

To Inventory A/c (Being assets and liabilities revalued)			99,000
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Capital reduction A/c	Dr.	12,99,000	
To Goodwill A/c			60,000
To Discount on debentures A/c.			6,000
To Profit and Loss A/c			12,33,000
(Being the above assets written off)			
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Capital reduction A/c	Dr.	45,000	
To Bank A/c			45,000
(Being penalty paid for avoidance of capital commitments)			
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Capital reduction A/c	Dr.	7,37,700	
To Capital reserve A/c.			7,37,700
(Being the credit balance in Capital Reduction A/c transferred to Capital Reserve)			
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02.04.2016			
Business Purchase A/c	Dr.	39,60,000	
To Liquidators of Ronak Ltd.			39,60,000
(Being the purchase consideration payable to Ronak Ltd.)			
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Fixed Assets A/c	Dr.	22,80,000	
Inventory A/c	Dr.	20,40,000	
Trade receivables A/c	Dr.	13,20,000	
Cash at Bank A/c	Dr.	3,90,000	
To Trade payables A/c.			6,75,000
To 12% Debentures A/c of Ronak Ltd.			6,00,000
To Profit and Loss A/c			45,000
To General reserve A/c Rs. (5,10,000+2,40,000*)			7,50,000
To Business purchase A/c.			39,60,000
(Being the take over of all assets and liabilities of Ronak Ltd. by Kanak Ltd.)			
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Liquidators of Ronak Ltd. A/c	Dr.	39,60,000	
To Equity Share Capital			30,00,000
To 9% Preference share capital			9,60,000
(Being the purchase consideration discharged)			
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12% Debentures of Ronak Ltd. A/c	Dr.	6,00,000	
To 12% Debentures A/c.			6,00,000
(Being Kanak Ltd. issued their 12% Debentures in against of every Debentures of Ronak Ltd.)			

* Rs. 2,40,000 is the balancing figure adjusted to general reserve A/c as per AS 14 "Accounting for Amalgamation".

(7 Marks)

Balance Sheet of Kanak Ltd. as at 2.4.2016

Particulars	Note No	Amount(Rs.)
I. Equity and Liabilities		
(1) Shareholder's Funds		
(a) Share Capital	1	77,10,000
(b) Reserves and Surplus	2	20,72,700
(2) Non-current Liabilities		
(a) Long-term borrowings - 12% Debentures		12,00,000
(3) Current Liabilities		

	(a) Trade payables	<u>17,25,000</u>
	Total	<u>1,27,07,700</u>
II. Assets		
(1) Non-current assets		
(a) Fixed assets		
(i) Tangible assets		58,80,000
(2) Current assets		
(a) Inventories		31,20,000
(b) Trade receivables		30,90,000
(c) Cash and cash equivalents		<u>6,17,700</u>
Total		<u>1,27,07,700</u>

(5 Marks)

Notes to Accounts

		Rs.
1	Share Capital	
	Equity Share Capital	52,50,000
	9% Preference share capital	<u>24,60,000</u>
		<u>77,10,000</u>
2	Reserves and Surplus	
	Profit and Loss A/c	45,000
	General Reserve	
	Share Capital of Ronak Ltd. (Equity + Preference)	42,00,000
	Less: Share Capital issued by Kanak Ltd.	39,60,000
	General reserve (resulted due to absorption)	2,40,000
	Add: General reserve of Ronak Ltd.	5,10,000
	General reserve of Kanak Ltd.	<u>5,40,000</u>
	Capital Reserve	<u>7,37,700</u>
		<u>20,72,700</u>

(2 Marks)

Working Notes:

- Arrear dividend to Preference Shareholders
Preference Share Capital Rs. 15,00,000 @ 9% will yield dividend of Rs. 1,35,000 per year and for 3 years = Rs. 4,05,000. Out of this only 10% is paid and the balance is waived off. Hence, amount paid = Rs. 40,500.
- Profit on redemption of own debentures
Own Debentures with Nominal Value of Rs. 2,40,000 sold for Rs. 98 per deb = 2,40,000 x 98/100 = Rs. 2,35,200.
Book Value = Rs. 5,76,000 / 6,00,000 X 2,40,000 = Rs. 2,30,400. Profit on own debentures sold = Rs. 2,35,200 – Rs. 2,30,400 = Rs. 4,800
Balance of Own Debentures = Rs. 5,76,000 – 2,30,400 = Rs. 3,45,600 which are cancelled
- Purchase Consideration
Equity share capital 30,000 x 50/5 x 10 = Rs. 30,00,000
9% Preference share capital 12,000 x 4/5 x 100 = Rs. 9,60,000
= Rs. 39,60,000

(2 Marks)

Answer-3 :

Investment Account of Mitthan
For the year ended 31.3.2016
(Script: 15% Debentures in Seema Industries Ltd.)
(Interest payable on 30th June and 31st December)

Date	Particulars	Nominal Value Rs.	Interest Rs.	Cost Rs.	Date	Particulars	Nominal Value Rs.	Interest Rs.	Cost Rs.
1.4.15	To Balance A/c	2,00,000	7,500	2,10,000	30.6.15	By Bank A/c.	-	22,500	-
1.5.15	To Bank A/c.	1,00,000	5,000	1,02,000	1.11.15	By Bank A/c.	1,20,000	6,000	1,14,000

30.11.15	To Bank A/c.	80,000	5,000	76,800	1.11.15	By Profit & Loss A/c.	-	-	11,400
31.12.15	To Profit and Loss A/c.			20,000	31.12.15	By Bank A/c	80,000	6,000	1,04,000
31.3.16	To Profit & Loss A/c. (Bal.Fig.)		37,250		31.12.15	By Bank A/c.	-	13,500	-
					31.12.15	By Bank A/c.	-	6,750	-
					31.3.16	By Bal. C/d	1,80,000	-	1,78,800
		3,80,000	54,750	4,08,800			3,80,000	54,750	4,08,800

(5 Marks)

Working Notes:

- (i) Accrued Interest as on 1st April, 2015 = Rs. 2,00,000 x $\frac{15}{100} \times \frac{3}{12}$ = Rs.7,500
- (ii) Accrued Interest as on 1.5.2015 = Rs. 1,00,000 x $\frac{15}{100} \times \frac{4}{12}$ = Rs.5,000
- (iii) Cost of Investment for purchase on 1st May = Rs. 1,07,000 – Rs. 5,000 = Rs. 1,02,000
- (iv) Interest received as on 30.6.2015 = Rs. 3,00,000 x $\frac{15}{100} \times \frac{6}{12}$ = Rs.22,500
- (v) Accrued Interest on debentures sold on 1.11.2015
= Rs. 1,20,000 x $\frac{15}{100} \times \frac{4}{12}$ = Rs.6,000
- (vi) Accrued Interest = Rs. 80,000 x $\frac{15}{100} \times \frac{5}{12}$ = Rs.5,000
- (vii) Accrued Interest on sold debentures 31.12.2015 = Rs. 80,000 x $\frac{15}{100} \times \frac{6}{12}$ = Rs.6,000
- (viii) Sale Price of Investment on 31st Dec. = Rs. 1,10,000-Rs. 6,000 = Rs. 1,04,000
- (ix) Loss on Sale of Debenture on 1.1.2015
Sale Price of debenture 1,14,600
Less: Cost Price of debenture
 $\frac{2,10,000}{2,00,000} \times \text{Rs.}1,20,000$ 1,26,000
Loss on sale 11,400
- (x) Accrued interest as on 31.12.2015 = Rs. 1,80,000 x $\frac{15}{100} \times \frac{6}{12}$ = Rs.13,500
- (xi) Accrued Interest = Rs. 1,80,000 x $\frac{15}{100} \times \frac{3}{12}$ = Rs.6,750
- (xii) Cost of investment as on 31st March = Rs. 1,02,000 + Rs. 76,800 = Rs. 1,78,800
- (xiii) Profit on debentures sold on 31st December
= Rs. 1,04,000 – (Rs. 2,10,000 x 800/2,000) =Rs. 20,000

(7 Marks)

Answer-4 :

Statement showing the calculation of Profits for the pre-incorporation and postincorporation periods

Particulars	Total Amount Rs.	Basis of Allocation	Preincorporation	Postincorporation
			Rs.	Rs.
Gross Profit	6,00,000	1:3	1,50,000	4,50,000
Less: Salaries	1,20,000	Time	40,000	80,000
Rent, rates and taxes	80,000	Time	26,667	53,333
Sales' commission	21,000	Sales(2:5)	6,000	15,000
Depreciation	25,000	Time	8,333	16,667
Interest on debentures	32,000	Post		32,000
Directors' fee	12,000	Post		12,000
Advertisement	36,000	post		36,000
Net profit	2,74,000		69,000*	2,05,000

* Pre-incorporation profit is a capital profit and will be transferred to capital reserve.

(5 Marks)

Working Notes:

1. Sales ratio

Let the monthly sales for first 4 months (i.e. from 1.4.2014 to 31.7.2014) be = x

Then, sales for 4 months = $4x$

Monthly sales for next 8 months (i.e. from 1.8.14 to 31.3.2015) = $x + 25\%$ of $x = 1.25x$

Then, sales for next 6 months = $1.25x \times 8 = 10x$

Total sales for the year = $4x + 10x = 14x$

Sales Ratio = $4x : 10x$ i.e. 2:5

(1 Mark)

2. Gross profit ratio

From 1.4.2014 to 31.7.2014 gross profit is 25% of sales

Then, 25% of $4x = 1x$

gross profit for next 8 months (i.e. from 1.8.14 to 31.3.2015) is 30%

Then, 30% of $10x = 3x$

Therefore gross profit ratio will be 1:3

(1 Mark)

3. Time ratio

1st April, 2014 to 31st July, 2014 : 1st August, 2014 to 31st March, 2015

= 4 months: 8 months = 1:2

Thus, time ratio is 1:2.

(1 Mark)