

CA - IPCC

COST ACCOUNTING & FINANCIAL MANAGEMENT

NOV, 2012 EXAM PAPER



www.eliteconcepts.in

100% Questions from concepts taught in Classroom

An Analysis of Exam Paper			
• Questions asked in exam are below the level taught in classroom			
Question No. in Exam Paper	Subject	Similar Question no. as per CA. Raj K Agrawal Book	Page no. as per CA. Raj K Agrawal Book
1(a)	Cost & FM	Basic Concept (BEP & Leverage)	
1(b)	Cost	Q16	3.9
1(c)	FM	Q4	1.7
1(d)	Cost	Q4 & Q5	2.16
2(a)	Cost	Q9	4.14
2(b)	FM	Q2 & Q7	8.16 & 8.17
3(a)	FM	Illustration 1	10.7
3(b)	Cost	Q10	12.8
4(a)	Cost	Q9 & Q10	13.6 & 13.7
4(b)	FM	Q8	9.25
5(a)	Cost	Theory	1.16
5(b)	Cost	Theory	Class Notes
5(c)	Cost	Theory	10.1
5(d)	FM	Q19	12.9
6(a)	Cost	Q4, Q5 & Q6	14.2
6(b)	Cost	Q2 & Q3	7.3 & 7.4
7(a)	FM	Q2	12.1
7(b)	Cost	Theory	Class Notes
7(c)	FM	Q20	12.10
7(d)	FM	Q13	12.7
7(e)	FM	Theory	2.6

Q1. Answer the following:

[Marks 4×5 =20]

- (a) X limited has estimated that for a new product its break-even point is 20,000 units if the item is sold for ₹ 14 per unit and variable cost ₹ 9 per unit. Calculate the degree of operating leverage for sales volume 25,000 units and 30,000 units.

$$\text{Ans1(a). BEP} = \frac{\text{Fixed Cost}}{\text{Contribution p.u.}}$$

$$20,000 = \frac{\text{Fixed Cost}}{14 - 9}$$

$$\text{Fixed Cost} = 20,000 \times 5$$

$$\text{Fixed Cost} = ₹ 1,00,000$$

Income Statement

Particulars	25,000 Unit	30,000 Unit
Sale	3,50,000	4,20,000
- Variable cost	<u>2,25,000</u>	<u>2,70,000</u>
Contribution	1,25,000	1,50,000
- Fixed Cost	<u>1,00,000</u>	<u>1,00,000</u>
EBIT	<u>25,000</u>	<u>50,000</u>
Operating Leverage	$= \frac{\text{Contribution}}{\text{EBIT}}$	$= \frac{\text{Contribution}}{\text{EBIT}}$
	$= \frac{1,25,000}{25,000}$	$= \frac{1,50,000}{50,000}$
	= 5	= 3

Q1(b). Accountant of your company had computed labour turnover rates for the quarter ended 30th September, 2012 as 14%, 8% and 6% under Flux method, Replacement method and Separation method respectively. If the number of workers replaced during 2nd quarter of the financial year 2012-13 is 36, find the following:

- (i) The number of workers recruited and joined; and
- (ii) The number of workers left and discharged.

$$\text{Ans1(b). Labour Turnover (under Replacement Method)} = \frac{\text{No. of workers replaced}}{\text{Average no. of workers}}$$

$$8\% = \frac{36}{\text{Average no. of workers}}$$

$$\text{Average no. of workers} = \frac{36}{8\%} = 450$$

$$\begin{aligned} \text{Labour Turnover (Under Separation method)} &= \frac{\text{No. of workers separated}}{\text{Average no. of workers}} \\ 6\% &= \frac{\text{No. of workers separated}}{450} \end{aligned}$$

$$\text{No. of workers separated} = 450 \times 6\% = 27$$

$$\text{Labour Turnover (Under Flux Method)} = \frac{\text{No. of Accession} + \text{No. of Separation}}{\text{Average no. of workers}}$$

$$14\% = \frac{\text{No. of Accession} + 27}{450}$$

$$63 = \text{No. of Accession} + 27$$

$$\text{No. of Accession} = 63 - 27 = 36$$

$$(i) \quad \text{No. of Workers Recruited \& Joined} = 36$$

$$(ii) \quad \text{No. of Workers Left \& discharged} = 27$$

Q1(c). X is invested ₹ 2,40,000 at annual rate of interest of 10%. What is the amount after 3 years if the compounding is done?

(i) Annually

(ii) Semi-annually.

Ans1(c).

(i) Annually Compounding

$$A = P \left(1 + \frac{r}{100}\right)^t$$

$$A = 2,40,000 \left(1 + \frac{10}{100}\right)^3$$

$$= 2,40,000 \times 1.331 = ₹ 3,19,440$$

(ii) Semi-Annual Compounding

$$A = P \left(1 + \frac{r}{200}\right)^{2t}$$

$$= 2,40,000 \left(1 + \frac{10}{200}\right)^6$$

$$= 2,40,000 \times 1.34 = ₹ 3,21,600$$

Q1(d). KL Limited produces product 'M' which has a quarterly demand of 8,000 units. The product requires 3 kgs quantity of material 'X' for every finished unit of product. The other information are follows:

Cost of material 'X' : ₹ 20 per kg.
 Cost of placing an order : ₹ 1000 per order
 Carrying Cost : 15% per annum of average inventory

You are required:

- Calculate the Economic Order Quantity for material 'X'.
- Should the company accept an offer of 2 percent discount by the supplier, if he wants to supply the annual requirement of material 'X' in 4 equal quarterly instalments?

Ans1(d). Annual Demand of Product = 8,000 × 4 = 32,000 unit
 Annual Demand of Raw Material = 32,000 unit × 3 = 96,000 unit
 A = 96,000 unit
 O = ₹ 1,000
 C = 20 × 15% = ₹ 3

(i) EOQ = $\sqrt{\frac{2AO}{C}}$

$$= \sqrt{\frac{2 \times 96,000 \times 1,000}{3}}$$

$$= 8,000 \text{ unit}$$

(ii) Supply in Quarterly installment means 96,000/ 4 = 24,000

Particulars	8,000 Units	24,000 Units
Purchase Cost	96,000 × 20 = 19,20,000	96,000 × 19.6 = 18,81,600
Ordering Cost = No. of Order × O	$\frac{96,000}{8,000} \times 1,000 = 12,000$	$\frac{96,000}{24,000} \times 1,000 = 4,000$
Carrying Cost = $\frac{1}{2} \times \text{Order Size} \times C$	$\frac{1}{2} \times 8,000 \times 3 = 12,000$	$\frac{1}{2} \times 24,000 \times 2.94 = 35,280$
Total Cost	<u>19,44,000</u>	<u>19,20,880</u>

Discount Offer of 2% should be accepted

[Mark 8 × 2 = 16]

Q2(a). The following account balances and distribution of indirect charges are taken from the accounts of a manufacturing concern for the year ending on 31st March, 2012:

Item	Total Amount (₹)	Production Departments			Service Departments	
		X (₹)	Y (₹)	Z (₹)	A (₹)	B (₹)
Indirect Material	1,25,000	20,000	30,000	45,000	25,000	5,000
Indirect Labour	2,60,000	45,000	50,000	70,000	60,000	35,000
Superintendent's Salary	96,000	-	-	96,000	-	-
Fuel & Heat	15,000					
Power	1,80,000					
Rent & Rates	1,50,000					

Insurance	18,000					
Meal Charges	60,000					
Depreciation	2,70,000					

The following departmental data are also available:

	Production Departments			Service Departments	
	X	Y	Z	A	B
Area (Sq. ft)	4,400	4,000	3,000	2,400	1,200
Capital Value of Assets (₹)	4,00,000	6,00,000	5,00,000	1,00,000	2,00,000
Kilowatt Hours	3,500	4,000	3,000	1,500	—
Radiator Sections	20	40	60	50	30
No. of Employees	60	70	120	30	20

Expenses charged to the service departments are to be distributed to other departments by the following percentages:

	X	Y	Z	A	B
Department A	30	30	20	-	20
Department B	25	40	25	10	-

Prepare an overhead distribution statement to show the total overheads of production departments after re-apportioning service departments' overhead by using simultaneous equation method. Show all the calculations to the nearest rupee.

Ans2(a).

Items	Basis	X	Y	Z	A	B
Indirect Material		20,000	30,000	45,000	25,000	5,000
Indirect Labour		45,000	50,000	70,000	60,000	35,000
Superintendant Salary		--	--	96,000	--	--
Fuel & Heat	Radiator Sections	1,500	3,000	4,500	3,750	2,250
Power	KWH	52,500	60,000	45,000	22,500	--
Rent & Rates	Area	44,000	40,000	30,000	24,000	12,000
Insurance	Value of Assets	4,000	6,000	5,000	1,000	2,000
Meal	No. of Employees	12,000	14,000	24,000	6,000	4,000
Depreciation	Value of Asset	<u>60,000</u>	<u>90,000</u>	<u>75,000</u>	<u>15,000</u>	<u>30,000</u>
		<u>2,39,000</u>	<u>2,93,000</u>	<u>3,94,500</u>	<u>1,57,250</u>	<u>90,250</u>

Let total overhead of Dept. A be x and Dept B be y

$$x = 1,57,250 + 10\% \text{ of } y$$

$$y = 90,250 + 20\% \text{ of } x$$

or $x = 1,57,250 + 0.1 y$

or $x - 0.1y = 1,57,250$ ----(i)

$$y = 90,250 + 0.2x$$

$$y - 0.2x = 90,250$$

$$0.1y - 0.02x = 9,025$$

----(ii) (Multiplying both side by 0.1)

Solving the above Equation (i) & (ii), we get:

$$x - 0.1y = 1,57,250$$

$$-0.02x + 0.1y = 9,025$$

$$0.98x = 1,66,275$$

$$x = \frac{1,66,275}{0.98} = 1,69,668$$

Now Putting the value of x in Eq (i)

$$1,69,668 - 0.1y = 1,57,250$$

$$0.1y = 1,69,668 - 1,57,250$$

$$0.1y = 12,418$$

$$y = \frac{12,418}{0.1} = 1,24,180$$

Total Overhead of Service Department A & B

Particulars	A	B
Total Overhead	1,69,668	1,24,180
Less: Proportionate Overhead t/t other Service Dept.		
A $1,69,668 \times 20\%$	33,934	-
B $1,24,180 \times 10\%$	-	12,418
	<u>1,35,734</u>	<u>1,11,762</u>

Distribution of Service Department Overhead to Production Department

Particulars	X	Y	Z
Overhead	2,39,000	2,93,000	3,94,500
Distribution of Overhead of A (30:30:20)	50,900	50,900	33,934
Distribution of Overhead of B (25:40:25)	31,045	49,672	31,045
Total	3,20,945	3,93,572	4,59,479

CA IPCC (FACE TO FACE CLASSES)

*Classes by CA Raj K Agrawal & CA Shilpum Khanna
who demonstrated excellence in Academic and Teaching Career.*

Fresh Batch Commencing on 19th Nov

Demo Available

CA FINAL (SATELLITE CLASSES)

*Elite Concepts launches Satellite Class for CA-Final by Renowned Faculties viz.
Sanjay Saraf, Jayesh Gupta, Prakash Saraf, Siddhartha Agarwal.*

Fresh Batch Commencing on 20th Nov

Best Quality

Demo Available

Audio & Video

CA CPT (FACE TO FACE CLASSES)

*Classes by Dr. Vikas Kumar, CS Apoorva Singh, CA Shilpum Khanna
& H P Tiwari*



-----We are Here for You-----

Elite Concepts

2nd Floor, D 64/29 F Bank Colony
Near Hotel Padmini International
Sigra-Mahmoorganj Road, Varanasi

Contact:: 9792950555

Website:: www.eliteconcepts.in

Q2(b). The following accounting information and financial ratios of M Limited relate to the year ended 31st March, 2012:

Inventory Turnover Ratio	6 Times
Creditors Turnover Ratio	10 Times
Debtors Turnovers Ratio	8 Times
Current Ratio	2.4
Gross Profit Ratio	25%

Total sales ₹ 30,00,000; cash sales 25% of credit sales; cash purchases ₹ 2,30,000; working capital ₹ 2,80,000; closing inventory is ₹ 80,000 more than opening inventory.

You are required to calculate:

- (i) Average inventory
- (ii) Purchases
- (iii) Average Debtors
- (iv) Average Creditors
- (v) Average Payment Period
- (vi) Average Collection Period
- (vii) Current Assets
- (viii) Current Liabilities

Ans2(b). GP = 25%
 $\therefore$ COGS = 75% $\times$ Sale
 COGS = 75% $\times$ 30,00,000
 COGS = 22,50,000

(i) Inventory Turnover Ratio = $\frac{\text{COGS}}{\text{Avg Inventory}}$
 6 = $\frac{22,50,000}{\text{Avg Inventory}}$
 Average Inventory = 3,75,000

(ii) Average Inventory = $\frac{\text{Opening Inventory} + \text{Closing Inventory}}{2}$
 3,75,000 = $\frac{\text{Opening Inventory} + (\text{Opening Inventory} + 80,000)}{2}$
 7,50,000 = 2 Opening Inventory + 80,000
 Opening Inventory = 3,35,000
 Closing Inventory = 3,35,000 + 80,000 = 4,15,000
 Purchases = COGS + Closing Inventory – Opening Inventory
 = 22,50,000 + 4,15,000 – 3,35,000
 = 23,30,000

(iii) Let credit sale be x
 Cash sale = .25x
 Cash Sale + Credit Sale = 30,00,000
 .25x + x = 30,00,000
 1.25 x = 30,00,000
 x = 24,00,000

Debtor Turnover Ratio = $\frac{\text{Credit Sale}}{\text{Avg. Debtor}}$

8 = $\frac{24,00,000}{\text{Avg. Debtor}}$
 Avg. Debtor = 3,00,000

(iv) Credit Purchases = Total Purchases – Cash Purchases
 = 23,30,000 – 2,30,000

$$= 21,00,000$$

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchase}}{\text{Avg. Creditor}}$$

$$10 = \frac{21,00,000}{\text{Avg. Creditor}}$$

$$\text{Avg. Creditor} = 2,10,000$$

$$(v) \quad \text{Avg. Payment Period} = \frac{\text{Avg. Creditor}}{\text{Credit Purchase per day}}$$

$$= \frac{2,10,000}{21,00,000} \times 366$$

$$= 37 \text{ days}$$

$$(vi) \quad \text{Avg. Collection Period} = \frac{\text{Avg. Debtor}}{\text{Credit Sale per day}}$$

$$= \frac{3,00,000}{24,00,000} \times 366$$

$$= 46 \text{ days}$$

$$(vii) \quad \text{Current Asset} = \text{Debtor} + \text{Cl. Inventory}$$

$$= 3,00,000 + 4,15,000$$

$$= 7,15,000$$

$$(viii) \quad \text{Current liabilities} = \text{Current Asset} - \text{Working Capital}$$

$$= 7,15,000 - 2,80,000$$

$$= 4,35,000$$

[Marks 12]

Q3(a). Following are the summarized Balance Sheets of JKM Limited as on 31st March, 2011 and 2012:

Liabilities	31 st March		Assets	31 st March	
	2011 (₹)	2012 (₹)		2011 (₹)	2012 (₹)
Equity Share Capital	50.00	55.00	Goodwill	5.00	4.20
Capital Reserve	-	2.50	Land & Building	20.00	18.00
General Reserve	4.00	6.00	Plant & Machinery	22.00	31.00
Profit & Loss Account	5.30	6.70	Investment	2.00	3.50
Proposed Dividend	8.00	11.00	Stock	8.60	12.70
Bills Payable	2.00	1.80	Sundry Debtors	10.20	13.00
Sundry Creditors	3.50	4.60	Bills Receivables	1.00	0.70
Provision for Tax	4.00	5.00	Cash in hand & Bank	7.20	8.90
			Share Issue Exp.	0.80	0.60
	76.80	92.60		76.80	92.60

Additional Information:

- A machine (original cost ₹ 2,80,000; Book Value ₹ 1,70,000) was sold during the year for ₹ 1,50,000.
- Depreciation for 2011-12 was amounted to ₹ 3,00,000 on plant and machinery and ₹ 50,000 on land and building.
- A piece of land had been sold out on 01-11-2011 and the profit on the sale has been credited in capital reserve.
- ₹ 40,000 is received as dividend including ₹ 15,000 pre-acquisition profit, which is credited to investment account.
- An interim dividend of ₹ 2,50,000 has been paid during the year 2011-12.
- Income tax paid during the year 2011-12, amounted to ₹ 3,80,000.

Required:

- Prepare a schedule of changes in the working capital.
- Prepare funds flow statement as on 31st March, 2012.

Ans3(a). Schedule of Changes in the Working Capital

Particulars	Last Year	Current Year	Working capital	
			Increase	Decrease
<u>Current Assets</u>				
Stock	8.60	12.70	4.10	-
debtor	10.20	13.00	2.80	-
B/R	1.00	.70	-	.30
Cash & Bank	7.20	8.90	1.70	-
<u>Current Liabilities</u>				
Bills Payable	2.00	1.80	0.20	-
Creditors	3.50	4.60	-	1.10
Net increase in W.C			-	7.40
Total			8.80	8.80

Fund from operation

C/s bal of P/L	6.70
+ Transfer to G/R	2.00
<u>(+/-) Non-Fund Item /Non-Operational Item</u>	
+ Depreciation on Land & Building	0.50
+ Depreciation on plant & Machinery	3.00
+ Proposed for tax	4.80
+ Proposed Dividend	11.00
+ Propose Interim dividend	2.50
+ G/W Written off	0.80
+ Share issue exp. w/off	0.20
+ Loss on Sale of P & M	0.20
- Dividend Received	(.25)
- Op. Bal of P\L	(5.30)
Total	26.15

Fund flow Statement

Sources of Fund	₹
Fund from Operation	26.15
Raising of equity share capital	5.00
Sale of Plant & Machinery	1.50
Sale of land & Building	4.00
Dividend on Investment	0.40
Total	37.05
Application of Fund	₹
Net Increase in Working Capital	7.40
Dividend paid	8.00
Interim dividend paid	2.50
Payment of Tax	3.80
Purchase of Investment	1.65
Purchase of P & M	13.70
Total	37.05

Working Note:**Plant & Machinery A/c**

Particulars	Amounts	Particulars	Amounts
To Bal B/d	22,00,000	By Bank	1,50,000
To Bank (B/F)	13,70,000	By P/L (Loss on Sale)	20,000
		By P/L (Depreciation)	3,00,000
		By Bal c/d	31,00,000
	35,70,000		35,70,000

Land & Building A/c

Particulars	Amounts	Particulars	Amounts
To Bal B/d	20,00,000	By Bank	4,00,000
To Capital Reserve	2,50,000	By Depreciation	50,000
		By Bal c/d	18,00,000
	22,50,000		22,50,000

Investment

Particulars	Amounts	Particulars	Amounts
To Bal B/d	2,00,000	By Bank (Pre Acq Div)	15,000
To Bank	1,65,000	By Bal c/d	3,50,000
	3,65,000		3,65,000

Prov. For Tax A/c

Particulars	Amounts	Particulars	Amounts
To Bank	3,80,000	By Bal b/d	4,00,000
To Bal c/d	5,00,000	By P/L (B/F)	4,80,000
	8,80,000		8,80,000

Q3(b). From the following particulars compute a conservation estimate of profit by 4 methods on a contract which has 80 % complete: **[Marks 4]**

	₹
Total expenditure to date	8,50,000
Estimate further expenditure to complete the contract	1,70,000
Contract Price	15,30,000
Work Certified	10,00,000
Work not certified	85,000
Cash received	8,16,000

Ans3(b).**Computation of Estimated Profit**

Particulars	Amount
Contract Price	15,30,000
Less: Cost till date	8,50,000
Less: Further Estimated Cost	<u>1,70,000</u>
	<u>5,10,000</u>

Computation of Notional Profit

Particulars	Amount
Work Certified	10,00,000
Work Uncertified	85,000
Less: Cost till date	<u>8,50,000</u>
	<u>2,35,000</u>

Stage of Completion:

$$= \frac{\text{Work Certified}}{\text{Contract Price}} = \frac{10,00,000}{15,30,000} = 65.36\%$$

Profit transferred to Profit & Loss A/c

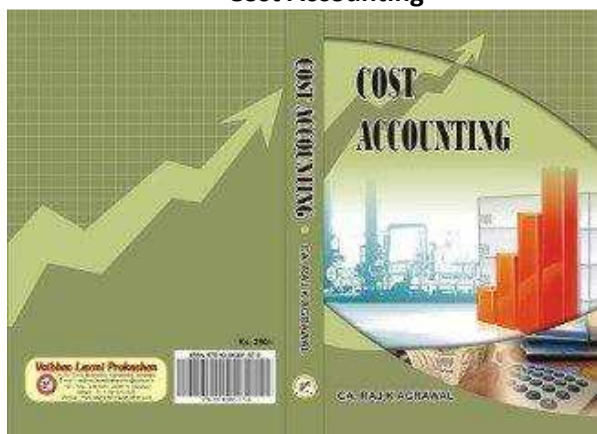
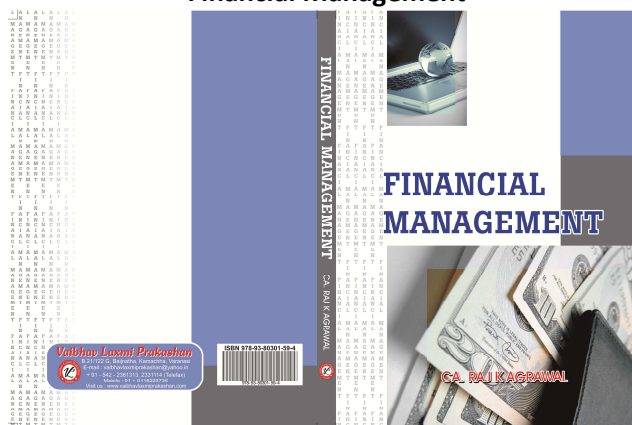
$$= \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 2,35,000 \times \frac{2}{3} \times \frac{8,16,000}{10,00,000} = 1,27,840$$

Fours Methods of Transferring Profit to Profit & Loss A/c Based on Estimated Profit:

1. $\text{Estimated Profit} \times \frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$
 $= 5,10,000 \times \frac{10,00,000}{15,30,000} \times \frac{8,16,000}{10,00,000} = 2,72,000$
2. $\text{Estimated Profit} \times \frac{\text{Cost till date}}{\text{Total Estimated Cost}}$
 $= 5,10,000 \times \frac{8,50,000}{10,20,000} = 4,25,000$
3. $\text{Estimated Profit} \times \frac{\text{Work Certified}}{\text{Contract Price}}$
 $= 5,10,000 \times \frac{10,00,000}{15,30,000} = 3,33,333$
4. $\text{Estimated Profit} \times \frac{\text{Cost till date}}{\text{Total Estimated Cost}} \times \frac{\text{Cash Recived}}{\text{Work Certified}}$
 $= 5,10,000 \times \frac{8,50,000}{10,20,000} \times \frac{8,16,000}{10,00,000} = 3,46,800$

Most Conservative profit to be transferred to Profit & Loss A/c = 1,27,840

Cost Accounting**Financial Management**

Q4(a).

[Marks 6]

The standard labour employment and the actual labour engaged in a 40 hours week for a job are as under:

Category of Workers	Standard		Actual	
	No. of Workers	Wage Rate Per Hour ₹	No. of Workers	Wage Rate Per Hour ₹
Skilled	65	45	50	50
Semi-skilled	20	30	30	35
unskilled	15	15	20	10

Standard output : 2000 units; Actual output : 1800 units; Abnormal Idle time 2 hours in the week. Calculate:

- Labour Cost Variance
- Labour Efficiency Variance
- Labour Idle Time Variance.

Ans 4(a). Data for labour variance

Budget (2000 unit)				Standard (1800 unit)			Actual (1800 unit)		
Hour	Rate	Amount		Hour	Rate	Amount	Hour	Rate	Amount
S	2,600	45	1,17,000	2,340	45	1,05,300	1900	50	95,000
							100	50	5,000
SS	800	30	24,000	720	30	21,600	1140	35	39,900
							60	35	2,100
US	600	15	9,000	540	15	8,100	760	10	7,600
							40	10	400
						1,35,000			1,50,000

Calculate of labour Variance

Particulars	S	SS	US	Total
(i) LCV = (SC – AC)	1,05,300 – 1,00,000 = 5,300(F)	21,600 – 42,000 = 20,400 (A)	8,100 – 8,000 = 100 (F)	15,000 (A)
(ii) LEV = (Std hour – Actual Working hour) SR	(2,340 – 1,900) 45 = 19,800 (F)	(720 – 1140) 30 = 12,600 (A)	(540 – 760) 15 = 3,300 (A)	3,900 (F)
(iii) L Idle V = Idle time × SR	100 × 45 = 4,500 (A)	60 × 30 = 1,800(A)	40 × 15 = 600(A)	6,900 (A)

Q4(b). SS Limited is considering the purchase of a new automatic machine which will carry out some operations which are at present performed by manual labour. NM-A₂ two alternative models are available in the market. The following details are collected:

[Marks 10]

		Machine	
		NM-A ₁	NM-A ₂
Cost of Machine	(₹)	20,00,000	25,00,000
Estimated working life		5 Years	5 Years
Estimated saving in direct wages per annum	(₹)	7,00,000	9,00,000
Estimated saving in scrap per annum	(₹)	60,000	1,00,000
Estimated additional cost of indirect material per annum	(₹)	30,000	90,000
Estimated additional cost of indirect labour per annum	(₹)	40,000	50,000
Estimated additional cost of repairs and maintenance per annum	(₹)	45,000	85,000

Depreciation will be charged on a straight line method. Corporate tax rate is 30 % and expected rate of return may be 12%.

You are required to evaluate the alternative by calculating the:

- Pay-back Period
- Accounting (Average) Rate of Return; and
- Profitability Index or P.V. Index (P.V. factor for ₹ 1 @ 12% 0.893; 0.797; 0.712; 0.567; 0.507)

Ans 4(b).

Income	NM – A ₁	NM – A ₂
Estimate saving in Wages	7,00,000	9,00,000
Estimated saving in Scrap	<u>60,000</u>	<u>1,00,000</u>
(A)	<u>7,60,000</u>	<u>10,00,000</u>
Expenditure		
Additional Cost of indirect mat	30,000	90,000
Additional Cost of indirect Lab	40,000	50,000
Additional Cost of R & M	<u>45,000</u>	<u>85,000</u>
(B)	<u>1,15,000</u>	<u>2,25,000</u>
Incremental Income (A- B)	6,45,000	7,75,00
Less: Depreciation	<u>4,00,000</u>	<u>5,00,000</u>
PBT	2,45,000	2,25,000
Less: Tax @ 30%	<u>73,500</u>	<u>67,500</u>
PAT	1,71,500	1,57,500
Add: Depreciation	<u>4,00,000</u>	<u>5,00,000</u>
Annual Inflow	<u>5,71,500</u>	<u>6,57,500</u>

(i) Payback Period NM – A₁

$$= \frac{\text{Outflow}}{\text{Annual Inflow}}$$

$$= \frac{20,00,000}{5,71,500}$$

$$= 3.5 \text{ year}$$

NM – A₂

$$= \frac{25,00,000}{6,57,500}$$

$$= 3.8 \text{ year}$$

NM – A₁ should be preferred

(ii) Average Rate of Return

<u>Particulars</u>	<u>NM – A₁</u>	<u>NM – A₂</u>
PAT (A)	1,71,500	1,57,500
Avg. CE (B)	$\frac{20 \text{ Lac} + 0}{2}$ = 10 Lac	$\frac{25 \text{ Lac} + 0}{2}$ = 12.5 Lac
Avg. Rate of Return (A/B)	= 17.15%	= 12.60%

NM – A₁ should be preferred

(iii)

<u>Particulars</u>	<u>NM – A₁</u>	<u>NM – A₂</u>
PV of Inflow (A)	5,71,500 × 3.605 = 20,60,258	6,57,500 × 3.605 = 23,70,288
PV of Outflow (B)	= 20,00,000	= 25,00,000
PI (A/B)	= 1.03	= .95

NM – A₁ should be preferred

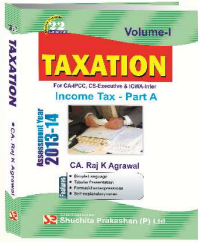
TAXATION

BY - CA RAJ K AGRAWAL

For CA-IPCC, CS-Executive & ICWA-Inter

First
A.Y. 2013-14
Book to
reach Market

India's
Best Selling Book
on Taxation



ISBN : 978-93-5034-497-2
Pages : 214
Price : Rs. 130/-

About The Book

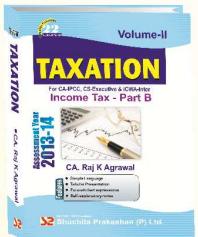
Tax is felt as one of the toughest concept to understand and work out in practical. An attempt has been made to make it simple in such a way that one understands it easily and works out practical problems with ease. In order to make it simple, flowcharts and tables have been used to explain intricate tax provisions.

The book also contains solved problems from key professional and academic examinations. These will help students to maintain a meaningful focus on examination requirements.

The book is intended to serve as a standard text for students pursuing their CA-IPCC, CS-Executive, ICWA-Inter, B.Com, B.Com (Hons) and many more Professional Courses.

The following are the main features of the book:

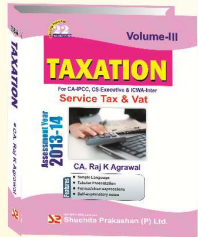
- Simple Language
- Tabular Presentation
- Format/ Chart expressions



ISBN : 978-93-5034-498-9
Pages : 200
Price : Rs. 120/-

About The Author

Raj K Agrawal, qualified Chartered Accountancy with **all India 27th rank in CA Final and all India 29th rank in CA PE-I**. He has been consistent school and college topper. He is endowed with the passion of winning as evinced through demonstrated excellence in Academics and Teaching Career. His distinguished teaching style to face the challenges of tough professional exams has made him famous and favourite amongst the students. He has authored several books for professional courses.



ISBN : 978-93-5034-499-6
Pages : 140
Price : Rs. 90/-

E-mail : mail@eliteconcepts.in
Website: www.eliteconcepts.in



Shuchita Prakashan (P) Ltd.

25/19, L.I.C. Colony, Tagore Town, Allahabad - 211002
Tel. : (0532) 2465947, 2467045, Fax : 2466348
Toll Free No. 1800-180-5301
E-mail : sppl@shuchita.com, visit us : www.shuchita.com

[Marks 4 × 4 = 16]

Q5(a). Briefly explain the essential features of a good cost accounting system.

Ans. 5(a) A good Costing System will consist of the following characteristics:

- (i) The Costing system adopted in a particular organization must suit its nature and size of business and its information needs.
- (ii) The Costing System must be economical to the organization and the benefits derived from the system should be more than its cost of installation and operation.
- (iii) The system should be more flexible enough to take care of changing business situations and information needs of the organization.
- (iv) The system should be simple to understand and easy to operate. The users of costing data should be convinced of the Costing System from which the data is derived.

- (v) The Costing System should be devised with the coordinated efforts of all the concerned departments and their staff. This will reduce the difficulty in implementation of Cost System.
- (vi) The Costing System should ensure proper accounting for materials, labour and overheads and proper classification of transactions should be done at the level of recording.
- (vii) Adoption of Activity Based Costing System will increase the accuracy in allocation, apportionment and absorption of overheads, which leads to correct ascertainment of cost per unit of product or service.
- (viii) Integration of Financial Accounting and Cost Accounting Systems will avoid duplication of work. The financial and cost accounts should be interlocked together and should be reconciled periodically.
- (ix) The Costing System should clearly mention the details of records to be maintained and the degree of accuracy of data required.
- (x) Before devising a Costing System, the need and objectives of the system should be identified.
- (xi) Since the Costing System is for internal control purpose, it should meet the requirements of management and its information needs.
- (xii) The Costing System should concentrate more on ascertaining the significant variables of the manufacturing unit which are amenable to control and affect the concern. For example, wages are amenable for control whereas marketing cost is situation oriented.

Q5(b). What is inter-process profit? State its advantages and disadvantages.

Ans5(b). Inter Process Profits

The output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. The difference between cost and the transfer price is known as inter-process profits.

Advantages:

- It helps in the computation of costs at shorter intervals, which is usually a week, a fortnight or a month.
- It ensures a closer control over production and costs.
- Controls can be exercised through standard costing technique and it is possible to evaluate the performance of every process.

Disadvantages:

- When costs are recorded at the end of the period, it is not possible to exercise control over costs.
- It is difficult to apportion total cost among joint products and by-products.
- There is also the difficulty of ascertaining the value of closing stock where output of one process is transferred to another process at market price.

Q5(c). What do you understand by operating costing? How are composite units computed?

Ans5(c). Operating Costing

Operating costing is also known as Service costing is used for establishing costs of services rendered or services offered for sale and no items are produced. Operating costing is used in services organization like transport companies, hotels, hospitals, power generation, college, boiler houses etc. The method of costing is similar to output costing.

Operating Cost Unit

All the costs incurred during a period are collected and analyzed and then expressed in terms of a cost per unit of service. The cost unit to be applied needs to be defined carefully and it is frequently a composite figure such as tonne-kilometer, kilowatt-hour, patient day etc.

The operating cost is usually collected under the following headings: (1) Standing charges (fixed costs), and (2) Running expenses (variable Costs). The cost per unit is calculated as follows:

$$\text{Cost per operating unit} = \frac{\text{Total Costs for the period}}{\text{Number of services units in the period}}$$

Price for the service is fixed by adding a markup to the cost per unit. The cost per unit of service is used for control of costs by comparing costs month by month or period by period etc. Any discrepancies over the normal is investigated for corrective action.

In practice, the cost units used by some services organization is given below:

Nature of Business	Cost Unit
Goods Transport	Ton-kilometer
Passenger Transport	Passenger-kilometer
Hotels	Room day
Canteens	Meals served, cups of tea sold
Educational Institutions	Full time student
Hospitals	Patient day
Electricity	Kilowatt-hours
Water Supply	Per 1,000 gallons
Boiler Houses	Kilograms of steam supplied
Road Maintenance	Kilometers of road maintained

Q5(d). List the fundamental principles governing capital structure.

Ans. 5(d) Principles governing capital structure is the following:

- Maximisation of profitability: Capital is borrowed at minimum cost.
- Flexibility: Structure should be flexible so that company may be able to raise fund or reduce fund whenever it is required.
- Control: It should reduce the risk of dilution of control. The decisions relating to capital structure are taken after keeping the control factor in mind. For e.g. when equity shares are issued the company automatically dilutes its controlling.
- Solvency: Excessive debt may threat the solvency of the company, as it is fixed commitment.

[Marks 8 × 2 = 16]

Q6(a). The following figures are related to LM Limited for the year ending 31st March, 2012:

Sales – 24,000 units @ ₹ 200 per unit;

You are required to calculate:

- Fixed cost for the year
- Profit earned for the year
- Units to be sold to earn a target net profit of ₹ 11,00,000 for a year.
- Number of units to be sold to earn a net income of 25% on cost.
- Selling price per unit if Break-even Point is to be brought down by 4,000 units.

Ans 6(a).

$$\begin{aligned}
 \text{(a) Sales} &= 24000 \text{ unit @ ₹ 200} \\
 &= ₹ 48,00,000 \\
 \text{BEP} &= 50\% \times \text{Sales} \\
 &= 50\% \times ₹ 48,00,000 \\
 &= ₹ 24,00,000
 \end{aligned}$$

$$\text{(i) BEP} = \frac{\text{FC}}{\text{PV Ratio}}$$

$$\begin{aligned}
 24,00,000 &= \frac{\text{FC}}{25\%} \\
 \text{FC} &= 6,00,000
 \end{aligned}$$

- (ii) M/S Sale = Sales – BE Sale
 $= 48,00,000 - 24,00,000$
 $= ₹ 24,00,000$
Profit = M/S Sale × PV Ratio
 $= ₹ 24,00,000 \times 25\%$
 $= ₹ 6,00,000$
- (iii) Profit = M/S Sale × PV Ratio
 $11,00,000 = \text{M/S Sale} \times 25\%$
M/S Sale = $44,00,000$
Total Sale = BE Sale + M/S Sale
 $= 24,00,000 + 44,00,000$
 $= 68,00,000$
Sale unit = $\frac{68,00,000}{200} = 34,000$
- (iv) Let the Sale unit be x
Sale – VC – FC = Profit
 $200x - 150x - 6,00,000 = .25 (150x + 6,00,000)$
 $50x - 6,00,000 = 37.5x + 1,50,000$
 $50x - 37.5x = 7,50,000$
 $12.5x = 7,50,000$
 $x = 60,000$
- (v) New BEP = $12000 \text{ unit} - 4000 \text{ unit} = 8,000 \text{ unit}$
BEP = $\frac{\text{FC}}{\text{Contribution p.u.}}$
 $8000 = \frac{6,00,000}{\text{Contribution p.u.}}$
Contribution p.u. = 75
SP = VC p.u. + Cost. P.u.
 $= 150 + 75$
 $= ₹ 225$

Q6(b). R Limited showed a net loss of ₹ 35,400 as per their cost accounts for the year ended 31st March, 2012. However, the financial accounts disclosed a net profit of ₹ 67,800 for the same period. The following information were revealed as a result of scrutiny of the figures of cost accounts and financial accounts:

	₹
(i) Administrative overhead under recovered	25,500
(ii) Factory overhead over recovered	1,35,000
(iii) Depreciation under charged in Cost Accounts	26,000
(iv) Dividend received	20,000
(v) Loss due to obsolescence charged in Financial Accounts	16,800
(vi) Income tax provided	43,600
(vii) Bank interest credited in Financial Accounts	13,600
(viii) Value of opening stock:	
In Cost Accounts	1,65,000
In Financial Accounts	1,45,000
(ix) Value of closing stock:	
In Cost Accounts	1,25,500

	In Financial Accounts	1,32,000
(x)	Goodwill written-off in Financial Accounts	25,000
(xi)	Notional rent of own premises charged in Cost Accounts	60,000
(xii)	Provision for doubtful debts in Financial Accounts	15,000

Prepare a reconciliation statement by taking costing net loss as base.

Ans 6(b).

Reconciliation Statement	Amount (₹)	Amount (₹)
Profit as per Cost Books		(35,400)
Add: Over recovery of factory Overhead	1,35,000	
Dividend Received	20,000	
Bank Interest	13,600	
Overvaluation of opening stock in Cost Book	20,000	
Undervaluation of closing Stock in Cost Book	6,500	
Notional Rent charged in Cost A/c	<u>60,000</u>	2,55,100
Less: Under recovery of Administrative Overhead	25,500	
Depreciation undercharged in Cost Accounts	26,000	
Loss due to obsolescence charged in financial Accounts	16,800	
Income Tax Paid	43,600	
Goodwill written off	25,000	
Provision for Doubtful Debt	15,000	(1,51,900)
Net Profit as per Financial Books		67,800

Q7. Answer any four of the following:

[Marks 4 × 4 = 16]

(a) Discuss the conflicts in profit verses wealth maximization principle of the firm.

Ans7(a). Financial Management is basically concerned with procurement and use of funds. In the light of these, the main objectives of financial management are:

- Profit Maximisation.
- Wealth Maximisation.

Profit Maximisation

Profit Maximisation is the main objective of FM because:

- Profit acts as a measure of efficiency and
- It serves as a protection against risk.

Agreements in favour of profit maximization

- Future is uncertain, thus a firm should earn more and more profit to meet the future contingencies.
- The main source of finance for growth of a business is profit. Hence, profits maximization is required.
- Profit maximization is justified on the economic prosperity.

Arguments against profit maximization

- It leads to exploitation of workers and consumers.
- It ignores the risk factors associated with profit.
- It is narrow concept at the cost of social and moral obligations. Thus ethical values are violated.

Thus, profit maximization as an objective of financial management has been considered inadequate.

Wealth Maximisation

Wealth maximization is considered as the appropriate objective of an enterprise. When the firms maximizes the stock holder's wealth, the individual stockholder can use this wealth to maximize his individual utility. Wealth maximization is the single substitute for a stock holder's utility.

A stock holder's wealth is shown by :

Stock holder's wealth = No. of shares owned X Current stock price per share
Higher the stock price per share, the greater will be the stock holder's wealth.

Arguments in favour of wealth maximization

- (i) Due to wealth maximization, the short term money lenders get their payments in time.
- (ii) The long term lenders too get a fixed rate of interest on their investments.
- (iii) The various resources are put to economical and efficient use.

Argument against wealth maximisation

- (i) It is socially undesirable. Only stock holders wealth maximization does not lead to firm's wealth maximization.
- (ii) The objective of wealth maximization is endangered when ownership and management are separated.

In spite of the arguments against wealth maximization, it is the most appropriate objective of a firm.

Q7(b). State the considerations on which capital expenditure budget is prepared.

Ans7(b). Capital Expenditure Budget:

The Capital expenditure budget represents the planned outlay on fixed assets like land, building, plant and machinery, etc. during the budget period. This budget is subject to strict management control because it entails large amount of expenditure. The Budget is prepared to cover a long period of years and it projects the capital costs over the period in which the expenditure is to be incurred and the expected earnings.

The preparation of this budget is based on the following considerations:

- Overhead on production facilities of certain departments as indicated by the plant utilisation budget.
- Future development plans to increase output by expansion of plant facilities.
- Replacement requests from the concerned departments.
- Factors like sales potential to absorb the increased output, possibility of price reductions, increased costs of advertising and sales promotion to absorb increased output, etc.

Q7(c). Distinguish between business risk and financial risk.

Ans7(c).

Business Risk	Financial Risk
It refers to the risk associated with the firm's operations. It is uncertainty above the future operating income. It is due to presence of fixed cost involved in operation of business. It is measured by operating leverage.	It refers to the additional risk placed on firm's shareholders as a result of debt used in financing. Companies that issue more debt instruments would have higher financial risk than companies financed mostly by equity. Financial risk can be measured by ratios such as firm's financial leverage.

Q7(d). What are the forms of bank credit?

Ans7(d). The bank credit will generally be in the following forms:

- Cash Credit: This facility will be given by the banker to the customers by giving certain amount of credit facility on continuous basis. The borrower will not be allowed to exceed the limits sanctioned by the bank.
- Bank Overdraft: It is a short-term borrowing facility made available to the companies in case of urgent need of funds. The banks will impose limits on the amount they can lend. When the borrowed funds are no longer required they can quickly and easily be repaid. The banks issue overdrafts with a right to call them in at short notice.
- Bills Discounting: The company which sells goods on credit, will normally draw a bill on the buyer who will accept it and sends it to the seller of goods. The seller, in turn discounts the bill with his banker.
- Line of Credit: Line of credit is a commitment by a bank to lend a certain amount of funds on demand specifying the maximum amount.

- Letter of Credit: It is an arrangement by which the issuing bank on the instructions of a customer or on its own behalf undertakes to pay or accept or negotiate or authorizes another bank to do so against stipulated documents subject to compliance with specified terms and conditions.
- Bank Guarantees: Bank guarantee is one of the facilities that the commercial banks extend on behalf of their clients in favour of third parties who will be the beneficiaries of the guarantees.

Q7(e). “Financing a business through borrowing is cheaper than using equity”. Briefly explain.

Ans7(e). The capital structure of a firm normally includes the debt component also. Debt may be in the form of debentures, bonds, term loans from financial institutions and banks etc. The debt carries a fixed rate of interest payable to them, irrespective of the profitability of the company. Since the coupon rate is fixed, the firm increases its earnings through debt financing. Then, after payment of fixed interest charges more surplus is available for equity shareholders. Dividends payable to equity shareholders and preference shareholders is an appropriation of profit, whereas the interest payable on debt is a charge against profit. Therefore, any payment towards interest will reduce the profit and ultimately the company’s tax liability would decrease. This phenomenon is called ‘tax shield’. The tax shield is viewed as a benefit accrues to the company which is geared

IPCC Class Schedule

Subjects	Days	Timing	Date of Commencement
Group I			
Accounts	M W F	5:00 pm to 7:30 pm	November 21 st , 2012
Law, Ethics & Comm	T T	10:00 am to 12:30 pm	November 20 th , 2012
Costing & FM	M W F	7:00 am to 9:30 am	November 19 th , 2012
Taxation	T T S	7:00 am to 9:30 am	November 20 th , 2012
Group II			
Advanced Accounts	T T S	5:00 pm to 7:30 pm	November 27 th , 2012
Auditing	Sat, Sun	10:00 am to 12:30 pm	December 1 st , 2012
ITSM	M W F	10:00 am to 12:30 pm	December 3 rd , 2012

-----We are Here for You-----

Elite Concepts

2nd Floor, D 64/29 F Bank Colony

Near Hotel Padmini International

Sigra-Mahmoorganj Road, Varanasi

Contact:: 9792950555

Website:: www.eliteconcepts.in