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SUGGESTED SOLUTION

INTERMEDIATE MAY 2019 EXAM

SUBJECT- ACCOUNTS, COSTING AND ECONOMICS

Test Code - CIM 8112

BRANCH - () (Date :)

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Answer 1:

(a) **Saving Functions :** Income not spent on Consumption is saved. Thus, Saving Function denotes the balance after the impact of Consumption.

Saving is that part of Total Income that is not "spent". So, Saving Function is given by the relationship S = Y – C, where

S = Aggregate Saving,

Y = Total Disposable Income,

C = Aggregate Consumption Expenditure

Answer 1 :

(b) This leads to measurement of National Income, at two levels, viz. "Domestic" and "National, as under –

Item	"Domestic"	"National"
a. Value Added by a Country's Citizens working overseas, or Firms/ Corporations operating overseas	**Excluded**	**Included**
b. Value Added by Foreign Citizens / Residents, or Foreign Firms/ Corporations operating in a country	**Included**	**Excluded**

Answer : 1

(c) **Meaning :** Personal Income is the Total Income which is actually received by all Individuals or Households during a given year in a Country.

[Note: "Persons" for this purpose includes Individuals, Households and Not – for – Profit Entities that serve Households.]

❖ **Comparison :**

	National Income	Personal Income
(a)	Income "earned" by Factors of Production.	Current Income "received" by Persons from all sources.
(b)	It is a measure of Income earned from productive activities.	It is a measure of actual current Income Receipts, from both productive and non – productive activities.
(c)	It forms the basis of Overall Income in the economy.	It forms the basis for Consumption Expenditure.

Note : Personal Income is generally less than the National Income, unless Transfer Payments are very high.

Answer: 1

(d) **Operational/ Implementation Difficulties :**

a) Incomplete data, inadequacy of data, late availability of data,
b) Lack of reliability of data,
c) Omission of certain sectors/ units where – (i) Producing Units are not organized, (ii) Transactions are outside the Monetary / Banking System, including Barter, (iii) Data is not available / is difficult to collect,
d) Double Counting of Incomes / Payments in certain sectors,
e) Illiteracy, Ignorance, Reluctance to share data to compile National Accounts,
f) Lack of proper occupational classification in determining Factor Incomes,
g) Variation in methods of computing Depreciation Expense, i.e. towards Consumption of Fixed Capital.

Answer 2:

1. Adjustment for raising & writing off of Goodwill

Particulars	P	Q	R	Total

Goodwill of P & Co. (raised in 3:1) Goodwill of R & Co. (raised in 2:1)	90,000 -	30,000 40,000	- 20,000	1,20,000 60,000
Total(Cr.) Written off in New Ratio (3:2:1) (Dr.)	90,000 90,000	70,000 60,000	20,000 30,000	1,80,000 1,80,000
Difference	**-**	**Cr. 10,000**	**Dr. 10,000**	**-**

2. Revaluation A/c in the books of P & Co.

Particulars		**Rs.**	**Particulars**	**Rs.**
To Provision for Doubtful Debts (given)		15,000	By Building (1,50,000 - 50,000)	1,00,000
To Partners' Capital A/c (transfer in 3:1)			By Plant & Machinery (2,75,000 - 1,60,000)	1,15,000
P [2,24,000 x 3/4]	1,68,000		By Stock (1,20,000 x20%)	24,000
Q [2,24,000 x 1/4]	56,000	2,24,000		
Total...	**2,39,000**	**Total**		**2,39,000**

3. Partners' Capital A/c in the Books of P & Co.

Particulars	**P**	**Q**	**Particulars**	**P**	**Q**
To balance c/d	4,63,000	2,51,000	By balance b/d	2,50,000	1,80,000
			By Reserves(3:1)	45,000	15,000
			By Revaluation A/c(3:1)	1,68,000	56,000
Total	**4,63,000**	**2,51,000**	**Total**	**4,63,000**	**2,51,000**

4. Revaluation A/c in the books of R & Co.

Particulars	**Rs.**	**Particulars**	**Rs.**
To Provision for Doubtful Debts (given)	30,000	By Plant & Machinery (2,50,000 - 1,70,000)	80,000
To Partners' Capital A/c (transfer in 2:1) - Q[78,000 x 2/3] 52,000 - R[78,000 x 1/3] 26,000	78,000	By Stock (1,40,000 x20%)	28,000
Total	**1,08,000**	**Total**	**1,08,000**

5. Partners' Capital A/c in the books of R & Co.

Particulars	**Q**	**R**	**Particulars**	**Q**	**R**
To balance c/d	3,72,000	1,96,000	By balance b/d	2,20,000	1,20,000
			By Reserves(2:1)	1,00,000	50,000
			By Revaluation A/c(2:1)	52,000	26,000
Total	**3,72,000**	**1,96,000**	**Total**	**3,72,000**	**1,96,000**

6. Computation of Capital of the PQR & Co.

Particulars	P	Q	R
Transferred from P & Co.	4,63,000	2,51,000	-
Transferred from R & Co.	-	3,72,000	1,96,000
Total Capital Balance	4,63,000	6,23,000	1,96,000
(+)/(-):Adjustment for Goodwill (WN 1)	-	10,000	(10,000)
Sub Total [A]	4,63,000	6,33,000	1,86,000
Total Capital of the Firm [Total of above]	12,82,000		
Required Capital in new Profit Sharing Ratio i.e, 3:2:1 [B]	6,41,000	4,27,333	2,13,667
Capital to be brought in / withdrawn [B - A]	1,78,000 (brought in)	(2,05,667) (withdrawn)	27,667 (brought in)

7. Balance Sheet of M/s. PQR & Co.

Capital and Liabilities		**Rs.**	**Properties and Assets**		**Rs.**
Capital Account :			Non-current assets : Tangible Fixed Assets		
- P	6,41,000		Building (1,50,000 + 60,000)		2,10,000
- Q	4,27,333		Plant and Machinery (2,75,000 + 2,50,000)		5,25,000
- R	2,13,667	12,82,000	Office Equipments (50,000 + 46,000)		96,000
Current Liabilities			Current Assets :		
Sundry Creditors (1,30,000+ 1,36,000)		2,66,000	Stock in Trade (1,44,000 + 1,68,000)		3,12,000
Bank Overdraft		80,000	Debtors (1,60,000 + 2,00,000)	3,60,000	
			Less : Provision for Bad Debts	(45,000)	3,15,000
			Bank Balance		1,40,000
			Cash in Hand		30,000
			(20,000 + 10,000 + 1,78,000 – 2,05,667 +| 27,667)		
Total		**16,28,000**	**Total**		**16,28,000**

Note: Due to R & Co. and Due from R & Co. will be mutually cancelled on amalgamation.

Answer 3:

Joint Products	No. of units	S.P. per unit	Sales Value
A	500	Rs. 18	Rs. 9,000
B	900	8	7,200
C	400	4	1,600
D	200	11	2,200
Total Sales value			20,000
Less : Budgeted profit (10%)			2,000
Total Joint Costs			18,000

(a) Maximum price to be paid for R.M.

Total Joint Costs		Rs.18,000
Other costs:		
Carriage inwards	1,000	
Direct wages	3,000	
Manufacturing overhead	2,000	
Administration overhead	2,000	8,000
Maximum price to be paid to R.M.		10,000

(b) (i) Comprehensive Cost Statement (based on number of units)

	A	B	C	D	Total
Number of units	500	900	400	200	2,000
R.M. @Rs. 5	2,500	4,500	2,000	1,000	10,000
Carriage @ Re. 0.5	250	450	200	100	1,000
Direct wages @ Rs. 1.5	750	1,350	600	300	3,000
Mfg. Ohd. @ Re. 1	500	900	400	200	2,000
Admn. Ohd. @ Re. 1	500	900	400	200	2,000
Total cost	4,500	8,100	3,600	1,800	18,000

(ii) Comprehensive Cost based on Sales Value (Rs.)

	A	B	C	D	Total
Sales value	9,000	7,200	1,600	2,200	20,000
Raw material	4,500	3,600	800	1,100	10,000
Carriage	450	360	80	110	1,000
Direct wages	1,350	1,080	240	330	3,000
Mfg. overhead	900	720	160	220	2,000
Admin. overhead	900	720	160	220	2,000
Total cost	8,100	6,480	1,440	1,980	18,000

Answer 4:

1. Adjustment for raising & writing off of Goodwill

Particulars	A	B	C	D	Total
Goodwill of AB & Co. (2:1)	50,000	25,000	-	-	75,000
Goodwill of CD & Co. (3:2)	-	-	30,000	20,000	50,000
Total (Cr.)	50,000	25,000	30,000	20,000	1,25,000
Written off in New Ratio (2:1:3:2) (Dr.)	31,250	15,625	46,875	31,250	1,25,000
Difference	**Cr. 18,750**	**Cr. 9,375**	**Dr. 16,875**	**Dr. 11,250**	**-**

2. Journal Entries in the Books of AD & Co.

	Particulars		Dr. (Rs.)	Cr. (Rs.)
1.	Cash A/c	Dr.	4,000	
	Bank A/c	Dr.	18,000	
	CD & Co.	Dr.	47,000	
	Sundry Debtors A/c	Dr.	65,000	
	Stock A/c	Dr.	24,000	
	Furniture A/c	Dr.	15,000	
	Machinery A/c	Dr.	1,25,000	
	Building A/c	Dr.	1,00,000	
	To Provision for Doubtful Debts A/c			5,000
	To Sundry Creditors A/c			52,000
	To A's Capital A/c			2,10,667
	To B's Capital A/c			1,30,333
	(Being Sundry Assets and Liabilities of M/s AB & Co. taken over at the values stated as per agreement dated ___________)			
2.	Cash A/c	Dr.	5,000	
	Bank A/c	Dr.	15,000	
	Sundry Debtors A/c	Dr.	78,000	
	Stock A/c	Dr.	36,000	
	Furniture A/c	Dr.	12,000	
	Machinery A/c	Dr.	1,10,000	
	Building A/c	Dr.	1,25,000	
	To Provision for Doubtful Debts A/c			8,000
	To AB & Co.			47,000
	To Sundry Creditors A/c			35,000
	To C's Capital A/c			1,74,600
	To D's Capital A/c			1,16,400
	(Being Sundry Assets and Liabilities of M/s CD & Co. taken over at the values stated as per agreement dated__________)			

3.	C's Capital A/c	Dr.	16,875	
	D's Capital A/c	Dr.	11,250	
	To A's Capital Account			18,750
	To B's Capital Account			9,375
	(Being adjustment in Capital Accounts for raising Goodwill of AB & Co. for Rs. 75,000, CD & Co. for Rs. 50,000 and writing off the same in the new ratio between A, B, C & D as per agreement)			
4.	AB & Co.	Dr.	47,000	
	To CD & Co.			47,000
	(Being Mutual Owings of AB & Co. and CD & Co. cancelled on taking over of the two Firms)			
5.	A's Capital A/c	Dr.	1,24,267	
	To A's Current A/c			1,24,267
	(Being excess amount in A's Capital Account transferred to A's Current Account to reduce the balance in capital accounts in accordance with the new Profit Sharing ratio)			
6.	B's Capital A/c	Dr.	87,133	
	To B's Current A/c			87,133
	(Being excess amount in B's Capital Account transferred to B's Current Account to reduce the balance in Capital Accounts, in accordance with the new Profit Sharing ratio)			

Working Notes:

1. Balance of Capital Accounts at the time of amalgamation of Firms (a) AB & Co.

Particulars	A's Capital	B's Capital
As per Balance Sheet	1,50,000	1,00,000
Credit for Reserve	44,000	22,000
Profit on Revaluation (Building 25,000 + Machinery 5,000 - Provn. for Doubtful Debts 5,000)	16,667	8,333
Total	**2,10,667**	**1,30,333**

(b) CD & Co.

Particulars	C's Capital	D's Capital
As per Balance Sheet	1,20,000	80,000
Credit for Reserve	32,400	21,600
Profit on Revaluation (Building 35,000 + Mach. 10,000 - Provn. for Doubtful Debts 8,000)	22,200	14,800
Total	1,74,600	1,16,400

2. Balance of Capital Accounts in the Balance Sheet of New Firm as on 1st April

Particulars	A	B	C	D
Balance as taken over	2,10,667	1,30,333	1,74,600	1,16,400
Adjustment for Goodwill	18,750	9,375	(16,875)	(11,250)
Total Capital after Adjustment for Goodwill	2,29,419	1,39,708	1,57,725	1,05,150
Less: Total Capital, Rs. 4,20,600 (See Note) in new PSR 2:1:3:2, taking D's Capital as the base	1,05,150	52,575	1,57,725	1,05,150
Transfer to Current Account	(Cr.)1,24,267	(Cr.)87,133	-	-

Note: D's Capital is Rs. 1,05,150 and it is 2/8th of Total Capital. So, the Total Capital will be Rs.4,20,600.

Answer 5:

Statement showing the apportionment of Joint Costs to the three Joint Products and their Profitability

Particulars	Caustic soda (Rs.)	Chlorine(Rs.)	Hydrogen(Rs.)	Total(Rs.)
Realisation from sale	3,75,000	2,50,000	60,000	6,85,000
Less : expected profit (15%, 10% and 5% on realisation)	56,250	25,000	3,000	84,250
Less : Selling exp. (5% on realisation)	18,750	12,500	3,000	34,250
Estimated cost of production	3,00,000	2,12,500	54,000	5,66,500
Less : After separation costs	1,60,000	75,000	10,000	2,45,000
Estimated joint costs	1,40,000	1,37,500	44,000	3,21,500
Percentages	43.5%	42.8%	13.7%	100%
Actual joint cost apportioned in the ratio of estimated joint costs (43.5 : 42.8 : 13.7)	1,52,250	1,49,800	47,950	3,50,boo
Add : After separation cost	1,60,000	75,000	10,000	2,45,000
Actual cost of production	3,12,250	2,24,800	57,950	5,95,000
Add : Selling expenses	18,750	12,500	3,000	34,250
Profit realised (balancing figure)	44,000	12,700	(950)	55,750
Realisation from sale	3,75,000	2,50,000	60,000	6,85,000

Answer : 6

(a)

1. In a Two – Sector Economy at Equilibrium Level, Y = C + I. Also Saving (S) = Investment (I) = 6,000.
   So, Y = 1,000 + 0.6Y + 6,000.
   On solving, Y – 0.6Y = 7,000. So, Y = $\frac{7,000}{0.40}$ = **17,500**.
2. At this Equilibrium Level, Since Investment (I) = 6,000(same as Savings), Consumption (C) = Y – I = **11,500.**
3. Also, at Equilibrium Level, Saving (S) = Investment (I) = 6,000. Hence, ΔI = 10% of 6,000 = **600**.
4. Investment Multiplier = $\frac{1}{1-MPC}$ = $\frac{1}{1-0.60}$ = 2.5 times. Since, ΔI = 600, ΔY = 2.5 times × 600 = **1,500**.

   So, Revised Equilibrium Level of National Income = 17,500 + 1,500 = **19,000**

(b)

Particulars	Industry A	Industry B	Industry C
Sale Price of Output	400 + 200 + 1,000 = 1,600	500 + 800 = 1,300	600 + 500 = 1,100
Less : Cost of Intermediate Consumption	100	400	200 + 500 = 700
Value Added by Industry	1,500	900	400

GDP at Market Prices = **GNP at Market Prices** (no Net Factor Income from abroad)	**2,800**
Less : Indirect Taxes	(100)
Add : Subsidies	50
Gross National Product at Factor Cost	**2,750**
Less : Depreciation	(100)
Net National Product at Factor Cost	**2,650**
Less : Subsidies	(50)
Add: Indirect Taxes	100
Net National Product at Market Prices	**2,700**

(c) Based on the concepts of "Domestic" and "National" measurements, as well as the concepts of "Market Prices" and "Factor Cost" given above, the following concepts of measurements arise –

	GDP at Factor Cost	**GNP at Factor Cost**
1. Meaning	GDP_{FC} is the Total of Incomes of Factors of Production, i.e. Land, Labour, Capital and Entrepreneurship.	GNP_{FC} is the Total of Incomes of Factors of Production, i.e. Land, Labour, Capital and Entrepreneurship, adjusted for Net Factor Incomes from Abroad.
2. Formula		
a) MP vs FC Route	GDP_{FC} =GDP_{MP}(–)Net Indirect Taxes	GNP_{FC} = GNP_{MP}(–) Net Indirect Taxes
b) Total Factor Cost Route	Compensation of Employees + Operating Surplus + Mixed Income of Self – Employed + Depreciation	Compensation of Employees + Operating Surplus + Mixed Income of Self - Employed

		+ Depreciation + Net Factor Incomes from Abroad

Note : Net Indirect Taxes = Indirect Taxes (–) Subsidies.

Operating Surplus = Rent + Interest + Profits.