# Annual Survey of Industries, 2001 – 2002 Flow Chart for Tabulation Program

## <u>Volume − I( Table − 1 & 2)</u>

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Srl.	ne - I( Table - I & 2)  Description	Formula
$ \begin{array}{c} 3 \text{ Fixed Capital} & \sum_{i=1}^{5} C_i . 13 + C9.13 \\ 4 \text{ Physical Working Capital} & \sum_{i=1}^{5} D_i . 4 \text{ For } i\#4 \\ 5 \text{ Working Capital} & 4 + D8.4 + D9.4 + D10.4 - (D12.4 + D13.4 + D14.4) \\ 6 \text{ Invested Capital} & 3 + 4 \\ 7 \text{ Gross Value of additions to fixed capital} & \sum_{i=1}^{5} C_i . 5 \text{ For } i\#8 \\ 8 \text{ Rent paid} & F6.3 + F8.3 + F9.3 \\ 9 \text{ Outstanding Loan} & D17.4 \\ 10 \text{ Interest paid} & F10.3 \\ 11 \text{ Rent received} & G6.3 + G8.3 + G9.3 \\ 12 \text{ Interest Received} & G10.3 \\ 13 \text{ Gross Value of P&M} & C3.3 + C3.5 - C3.6 \\ 14 \text{ Value of Products & By-products} & \sum_{i=1}^{5} I_{i,1} 3 + G2.3 + G4.3 \\ 15 \text{ Total Output} & 14 + G1.3 + G3.3 + G11.3 \\ 16 \text{ Fuels consumed} & H11.6 + H12.6 + H13.6 + H14.6 \\ 17 \text{ Materials consumed} & \sum_{i=1}^{5} H_{i,6} + H8.6 + H9.6 + H15.6 + \sum_{i=1}^{5} I_{i,6} \\ 18 \text{ Total Input} & 16 + 17 + F1.3 + F2(i).3 + F2(ii).3 + F2(iii).3 + F2($	1	No. of factories	A11
	2	Factories in operation	A11, forA12#2
$ \sum_{i=1}^{n} D_i A \ For \ i\#4 $ 5   Working Capital   4 + D8,4 + D9,4 + D10,4 - (D12,4 + D13,4 + D14,4)   3 + 4   3 + 4   7   Gross Value of additions to fixed capital   7   Gross Value of additions to fixed capital   8   Rent paid   F6,3 + F8,3 + F9,3   9   Outstanding Loan   D17,4   10   Interest paid   F10,3   11   Rent received   G6,3 + G8,3 + G9,3   12   Interest Received   G10,3   13   Gross Value of P8M   C3,3 + C3,4 + C3,5 - C3,6   14   Value of Products & By-products   15   Total Output   14 + G1,3 + G3,3 + G11,3   16   Fuels consumed   H11,6 + H12,6 + H13,6 + H14,6   17   Materials consumed   $\frac{1}{10} + \frac{1}{10} + $	3	Fixed Capital	$\sum_{i=1}^{7} Ci,13 + C9,13$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	Physical Working Capital	$\sum_{i=1}^{6} Di$ ,4 For i#4
7 Gross Value of additions to fixed capital $\sum_{i=1}^{9} Ci, 5 \ For \ i\#8$ 8 Rent paid $F6, 3 + F8, 3 + F9, 3$ 9 Outstanding Loan $D17, 4$ 110 Interest paid $F10, 3$ 11 Rent received $G6, 3 + G8, 3 + G9, 3$ 12 Interest Received $G10, 3$ 13 Gross Value of P&M $C3, 3 + C3, 4 + C3, 5 - C3, 6$ 14 Value of Products & By-products $\sum_{i=1}^{11} I_i, 13 + G2, 3 + G4, 3$ 15 Total Output $14 + G1, 3 + G3, 3 + G11, 3$ 16 Fuels consumed $H11, 6 + H12, 6 + H13, 6 + H14, 6$ 17 Materials consumed $\sum_{i=1}^{6} Hi, 6 + H8, 6 + H9, 6 + H15, 6 + \sum_{i=1}^{6} Ii, 6$ 18 Total Input $16 + 17 + F1, 3 + F2(ii), 3 + F2(iii), 3 + F2(iiii), 3 + F2(iii), 3 + F2$	5	Working Capital	4 + D8,4 + D9,4 + D10,4 - (D12,4 + D13,4 + D14,4)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	Invested Capital	3+4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	Gross Value of additions to fixed capital	
10   Interest paid	8	Rent paid	
11 Rent received $G6,3+G8,3+G9,3$ 12 Interest Received $G10,3$ 13 Gross Value of P&M $C3,3+C3,4+C3,5-C3,6$ 14 Value of Products & By-products $\sum_{i=1}^{1} Ji,13+G2,3+G4,3$ 15 Total Output $14+G1,3+G3,3+G11,3$ 16 Fuels consumed $H11,6+H12,6+H13,6+H14,6$ 17 Materials consumed $\sum_{i=1}^{6} Hi,6+H8,6+H9,6+H15,6+\sum_{i=1}^{6} Ii,6$ 18 Total Input $16+17+F1,3+F2(i),3+F2(ii),3+F2(ii),3+F2(iii$	9	Outstanding Loan	D17,4
12 Interest Received $G10,3$ 13 Gross Value of P&M $C3,3+C3,4+C3,5-C3,6$ 14 Value of Products & By-products $\sum_{i=1}^{11} J_i, 13 + G2, 3 + G4, 3$ 15 Total Output $14+G1,3+G3,3+G11,3$ 16 Fuels consumed $H11,6+H12,6+H13,6+H14,6$ 17 Materials consumed $\sum_{i=1}^{6} Hi,6+H8,6+H9,6+H15,6+\sum_{i=1}^{6} Ii,6$ 18 Total Input $16+17+F1,3+F2(i),3+F2(ii),3+F2(iii),3+F2(iii),3+F2(iii),3+F2(iii),3+F2(iii),3+F2(iii),3+F3,3+F4,3+F5,3+F11,3$ 19 GVA $15-18$ 20 Depreciation $\sum_{i=1}^{7} Ci,9+C9,9$ 21 NVA $19-20$ 22 Net Fixed Capital Formation (NFCF) $\sum_{i=1}^{9} (Ci,13-Ci,12-Ci,4) \text{ For } i\#8$ 23 Gross Fixed Capital Formation (GFCF) $22+20$ 24 Addition in stock of: $\sum_{i=1}^{3} (Di,4-Di,3)$ (a) Materials, Fuels Etc. $\sum_{i=1}^{3} (Di,4-Di,3)$ (b) Semi-Finished Goods $(D5,4-D5,3)$ (c) Finished Goods $(D6,4-D6,3)$ (d) Total $(a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{8} (Ei,7+Ei,8) - \sum_{i=1}^{8} (Ei,9+Ei,10)$	10	Interest paid	F10,3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	Rent received	G6,3+G8,3+G9,3
	12	Interest Received	G10,3
$ \sum_{i=1}^{5} Ji, 13 + G2, 3 + G4, 3 $ 15 Total Output	13	Gross Value of P&M	C3,3+C3,4+C3,5-C3,6
$ \begin{array}{c} 16 \text{ Fuels consumed} \\ 17 \text{ Materials consumed} \\ \hline                                  $	14	Value of Products & By-products	
17   Materials consumed   $\sum_{i=1}^{6} Hi, 6 + H8, 6 + H9, 6 + H15, 6 + \sum_{i=1}^{6} Ii, 6$   18   Total Input   $16 + 17 + F1, 3 + F2(i), 3 + F2(iii), 3 + F2($	15	Total Output	14+G1,3+G3,3+G11,3
$ \sum_{i=1}^{n} Hi, 6 + H8, 6 + H9, 6 + H15, 6 + \sum_{i=1}^{n} Ii, 6 $ $ 18 \frac{\textbf{Total Input}}{\textbf{Total Input}} \qquad 16 + 17 + F1, 3 + F2(i), 3 + F2(ii), 3 + F2(iii), 4 + F2(iii), 4 + F2(iii), 4 + F2(iii), 4 + F2(iii), 5 + F2(iii), 7 + F2(iiii), 7 + F2(ii$	16	Fuels consumed	H11,6+H12,6+H13,6+H14,6
$F2(iv), 3 + F3, 3 + F4, 3 + F5, 3 + F11, 3$ $19 \text{ GVA}$ $15 - 18$ $20 \text{ Depreciation}$ $\sum_{i=1}^{7} Ci, 9 + C9, 9$ $21 \text{ NVA}$ $19 - 20$ $22 \text{ Net Fixed Capital Formation (NFCF)}$ $\sum_{i=1}^{9} (Ci, 13 - Ci, 12 - Ci, 4) \text{ For } i \# 8$ $23 \text{ Gross Fixed Capital Formation (GFCF)}$ $22 + 20$ $24 \text{ Addition in stock of:}$ $(a) \text{ Materials, Fuels Etc.}$ $\sum_{i=1}^{3} (Di, 4 - Di, 3)$ $(b) \text{ Semi-Finished Goods}$ $(D5, 4 - D5, 3)$ $(c) \text{ Finished Goods}$ $(d) \text{ Total}$ $(a) + (b) + (c)$ $25 \text{ Gross Capital Formation}$ $23 + 24(d)$ $26 \text{ Net income}$ $21 - (8 + 10)$ $27 \text{ Profit}$ $26 - \sum_{i=1}^{8} (Ei, 7 + Ei, 8) - \sum_{i=1}^{8} (Ei, 9 + Ei, 10)$	17	Materials consumed	$\sum_{i=1}^{6} Hi,6 + H8,6 + H9,6 + H15,6 + \sum_{i=1}^{6} Ii,6$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	Total Input	16+17+F1,3+F2(i),3+F2(ii),3+F2(iii),3+
20 Depreciation $\sum_{i=1}^{7} Ci,9 + C9,9$ 21 NVA $19-20$ 22 Net Fixed Capital Formation (NFCF) $\sum_{i=1}^{9} (Ci,13 - Ci,12 - Ci,4) \text{ For } i\#8$ 23 Gross Fixed Capital Formation (GFCF) $22 + 20$ 24 Addition in stock of: $\sum_{i=1}^{3} (Di,4 - Di,3)$ (a) Materials, Fuels Etc. $\sum_{i=1}^{3} (Di,4 - Di,3)$ (b) Semi-Finished Goods $(D5,4 - D5,3)$ (c) Finished Goods $(D6,4 - D6,3)$ (d) Total $(a) + (b) + (c)$ 25 Gross Capital Formation $23 + 24(d)$ 26 Net income $21 - (8 + 10)$ 27 Profit $26 - \sum_{i=1}^{8} (Ei,7 + Ei,8) - \sum_{i=1}^{8} (Ei,9 + Ei,10)$			F2(iv), 3 + F3, 3 + F4, 3 + F5, 3 + F11, 3
$ \sum_{i=1}^{1} Ci, 9 + C9, 9 $ 21 NVA 22 Net Fixed Capital Formation (NFCF) $ \sum_{i=1}^{9} (Ci, 13 - Ci, 12 - Ci, 4) \text{ For } i \# 8 $ 23 Gross Fixed Capital Formation (GFCF) $ 22 + 20 $ 24 Addition in stock of: $ (a) \text{ Materials, Fuels Etc.} $ $ \sum_{i=1}^{3} (Di, 4 - Di, 3) $ $ (b) \text{ Semi-Finished Goods} $ $ (D5, 4 - D5, 3) $ $ (c) \text{ Finished Goods} $ $ (D6, 4 - D6, 3) $ $ (d) \text{ Total} $ $ (a) + (b) + (c) $ 25 Gross Capital Formation $ 23 + 24(d) $ 26 Net income $ 21 - (8 + 10) $ 27 Profit $ 26 - \sum_{i=1}^{8} (Ei, 7 + Ei, 8) - \sum_{i=1}^{8} (Ei, 9 + Ei, 10) $	19	GVA	15-18
Net Fixed Capital Formation (NFCF) $\sum_{i=1}^{9} (Ci,13-Ci,12-Ci,4) \text{ For } i\#8$ 23 Gross Fixed Capital Formation (GFCF) $22+20$ 24 Addition in stock of: $(a) \text{ Materials, Fuels Etc.} \qquad \sum_{i=1}^{3} (Di,4-Di,3)$ $(b) \text{ Semi-Finished Goods} \qquad (D5,4-D5,3)$ $(c) \text{ Finished Goods} \qquad (D6,4-D6,3)$ $(d) \text{ Total} \qquad (a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{8} (Ei,7+Ei,8)-\sum_{i=1}^{8} (Ei,9+Ei,10)$	20	Depreciation	<u>'</u>
	21	NVA	19-20
24 Addition in stock of:  (a) Materials, Fuels Etc. $\sum_{i=1}^{3} (Di,4-Di,3)$ (b) Semi-Finished Goods $(D5,4-D5,3)$ (c) Finished Goods $(D6,4-D6,3)$ (d) Total $(a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{3} (Di,4-Di,3)$ $(D6,4-D6,3)$ $(a)+(b)+(c)$ $23+24(d)$ $26-\sum_{i=1}^{3} (Ei,7+Ei,8) - \sum_{i=1}^{3} (Ei,9+Ei,10)$	22	Net Fixed Capital Formation (NFCF)	$\sum_{i=1}^{9} (Ci,13-Ci,12-Ci,4) For i\#8$
(a) Materials, Fuels Etc. $ \sum_{i=1}^{3} (Di, 4 - Di, 3) $ (b) Semi-Finished Goods $ (D5, 4 - D5, 3) $ (c) Finished Goods $ (D6, 4 - D6, 3) $ (d) Total $ (a) + (b) + (c) $ 25 Gross Capital Formation $ 23 + 24(d) $ 26 Net income $ 21 - (8 + 10) $ 27 Profit $ 26 - \sum_{i=1}^{8} (Ei, 7 + Ei, 8) - \sum_{i=1}^{8} (Ei, 9 + Ei, 10) $	23	Gross Fixed Capital Formation (GFCF)	22 + 20
$\sum_{i=1}^{n} (Di,4-Di,3)$ (b) Semi-Finished Goods $(D5,4-D5,3)$ (c) Finished Goods $(D6,4-D6,3)$ (d) Total $(a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{8} (Ei,7+Ei,8)-\sum_{i=1}^{8} (Ei,9+Ei,10)$	24	Addition in stock of:	
(c) Finished Goods $(D6,4-D6,3)$ (d) Total $(a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{8}(Ei,7+Ei,8)-\sum_{i=1}^{8}(Ei,9+Ei,10)$		(a) Materials, Fuels Etc.	$\sum_{i=1}^{3} (Di, 4-Di, 3)$
(c) Finished Goods $(D6,4-D6,3)$ (d) Total $(a)+(b)+(c)$ 25 Gross Capital Formation $23+24(d)$ 26 Net income $21-(8+10)$ 27 Profit $26-\sum_{i=1}^{8}(Ei,7+Ei,8)-\sum_{i=1}^{8}(Ei,9+Ei,10)$		(b) Semi-Finished Goods	(D5,4-D5,3)
25 Gross Capital Formation 23 + 24( $d$ ) 26 Net income 21 - (8+10)  27 Profit 26 - $\sum_{i=1}^{8} (Ei,7 + Ei,8) - \sum_{i=1}^{8} (Ei,9 + Ei,10)$		(c) Finished Goods	1 1 1
25 Gross Capital Formation $23 + 24(d)$ 26 Net income $21 - (8+10)$ 27 Profit $26 - \sum_{i=1}^{8} (Ei, 7 + Ei, 8) - \sum_{i=1}^{8} (Ei, 9 + Ei, 10)$		(d) Total	
27 Profit $26 - \sum_{i=0}^{8} (Ei, 7 + Ei, 8) - \sum_{i=0}^{8} (Ei, 9 + Ei, 10)$	25	Gross Capital Formation	
$26 - \sum (Ei, 7 + Ei, 8) - \sum (Ei, 9 + Ei, 10)$	26	Net income	21-(8+10)
$\iota = \iota_* \iota_* \iota_* \tau_* \cup \iota = \iota_* \iota_* \tau_* \cup \iota_* = \iota_* \iota_* \tau_* \cup \iota_* = \iota_* \tau_* \cup \iota_* = \iota_* \tau_* \cup \iota_* = \iota_* \cup \iota_* \iota_* \cup \iota_$	27	Profit	$26 - \sum_{i=1,i\#4,6}^{8} (Ei,7 + Ei,8) - \sum_{i=1,i\#4,6}^{8} (Ei,9 + Ei,10)$

#### Annual Survey of Industries, 2001 – 2002 Flow Chart for Tabulation Program

#### Volume - I(Table - 3 & 4)

Srl.	Description	Formula
A	Average no. of persons engaged	9
		$\sum Ei,6$
1	XX 1	<i>i</i> =1, <i>i</i> #4,6
1	Workers	E1,6+E2,6+E3,6+E5,6
1.1	Directly employed	E1,6+E2,6+E3,6
1.1.1	Men	E1,6
1.1.2	Women	E2,6
1.1.3	Children	E3,6
1.2	Employed through Contractors	E5,6
2	Employees other than worker	E7,6+E8,6+E9,6
2.1	Supervisory & Managerial Staff	E7,6
2.2	Other employees	E8,6
3	Unpaid family members/proprietor etc.	E9,6
В	Man-days employed, Total	$\sum_{i=1,i\#4,6}^{8} Ei,5$
С	Wages & Salaries, Employer's Contribution	1+2 (As defined below)
1	Wages & Salaries including Bonus	1.1+1.2 (As defined below)
1.1	Wages & Salaries	1.1.1+1.1.2+1.1.3 (As defined below)
1.1.1	Workers	E1,7 + E2,7 + E3,7 + E5,7
1.1.2	Supervisory & Managerial Staff	E7,7
1.1.3	Other Employees	E8,7
1.2	Bonus to all Staff	$\sum_{i=1,i\#4,6}^{8} Ei,8$
2	Employer's Contribution etc.	E10,9 + E10,10
Volume – I (Table – 5 & 6) Fuels Consumed		
1	Coal Consumed	H13, 6
2	Electricity Purchased	H11, 6
3	Petroleum Products	H12, 6
4	Other Fuels	H14, 6

### Remarks:

- a) Alphabets in italics under the 'Formula' column represent the block codes used in the schedule
- b) Unless otherwise mentioned, the symbols are of the form < Block Row, Column>. For example E8,7 represents Row with serial number 8 and column number 7 of Block E.
- c) 'No. of factories' in Volume I(Table 1&2) are calculated for A12 = 1, 2, 17, 18, 19, 20 where codes 17 to 20 indicate extracted data from the previous year.
- d) 'Factories in operation' in Volume I are calculated for A12 = 1, 17, 18, 19, 20 where codes 17 to 20 indicate extracted data from the previous year.
- e) For calculation of closing values 'Addition due to revaluation' (Column 4 of Block C) has not been considered.
- f) All other parameters in volume I are calculated for A12< 7 or A12>= 17.
- g) For calculating 'Gross Value of Plant & Machinery' in Volume I (Table 1&2) C3,7 has been used in place of C3,3+C3,4+C3,5-C3,6 because of non-availability of information in the schedule.
- h) For calculating 'Profit' in Volume I (Table 1&2), E10.9 + E10.10 has been used in place of  $\sum_{i=1}^{8} (Ei.9 + Ei.10)$  because of non-availability of constituent items in the schedule
- For calculating 'Man-days employed, Total' in Volume I (Table 3&4), E10.5 has been used in place of  $\sum_{i=1,i\#4.6}^8 Ei.5$  because of non-availability of constituent items in the schedule
- j) For calculating 'Bonus to all Staff' in Volume I (Table 3&4), E10.8 has been used in place of  $\sum_{i=1,i\#4.6}^{8} Ei.8$  because of non-availability of constituent items in the schedule