INTER CA – MAY 2018

PAPER 3 : COST AND MANAGEMENT ACCOUTING

Branch: Multiple Date:

Note: Question 1 is compulsory. Attempt any five from the rest.

Question 1

A) (1/2 mark for each point)

1. Actual hours worked last year	8,84,000 hours
2. Unproductive Training Hours = 40% of 60,000	24,000 hours
3. Actual Productive Hours worked last year	8,60,000 hours
4. Sales per productive hour worked = $\frac{1,66,06,600}{8,60,000}$	` 19.31 per hour
5. Gross Profit (or Contribution) per productive hour = 20% of Sales `19.31	` 3.862 per hour
6. Total Labour Hours lost due to Labour Turnover = 2,00,000 (given) + 24,000 (unproductive	2,24,000 hours
7. Gross Profit foregone due to Labour Turnover = ` 3.862 x 1,24,000 hours	`8,65,088
8. Additional Expenses incurred due to Labour Turnover (Settlement Cost 87,640 + Recruitment Cost 53,480 + Selection Cost 32,812 + Training Cost 60,980)	` 2,34,912
9. Total Profit foregone due to Labour Turnover (7 + 8)	` 11,00,000

Note: Alternatively, GP foregone can be calculated for potentially productive hours of 2,00,000 hours only.

B) (2.5 marks for each product)

Product	P	Q	Total
Production / Sale Quantity	8,000 units	6,000 units	
Sales Values	8,000 x 13.75 = 1,10,000	6,000 x 8.75 = 52,500	` 1,62,500
Less: Profit at 25/125 of Sale Price	` 22,000	` 10,500	` 32,500
Total Cost = Sales Less Profit	` 88,000	` 42,000	` 1,30,000
Less: Further Processing Costs	8,000 x 5 = 40,000	6,000 x 4 24,000	` 64,000
Estimated NRV at split-off	` 48,000	` 18,000	` 66,000
Joints Costs apportioned in NRV ratio	` 64,000	` 24,000	` 88,000
So, Joint Cost Per Unit	64,000 ÷ 8,000 = ` 8.00	24,000 ÷ 6,000 = ` 4.00	

C)

1. Absolute Tonne-Km (2.5 marks)	2. Commercial Tonne-Km (2.5 marks)
= A to B + B to C + C to A = (24 MT x 270 km) + (14 MT x 150 km) + (18 MT x 325 km) = 6,480 + 2,100 + 5,850 = 14,430 Tonne – Kilometers.	= Average Load x Total distance travelled = [$\frac{(24+14+18)}{3}$ Tonnes] x (270 + 150 + 325) Kms = 18.67 Tonnes x 745 Kms = 13,907 Tonne – Kilometers.

D) (1 – 3 marks, 2 & 3 – 1 mark each)

Solution: **1. Marginal Cost Statement (for last year, at 80% capacity)**

Particulars	A	B	C	Total
Sales Quantity	10,000 units	15,000 units	5,000 units	
Selling Price p.u.	₹ 10	₹ 12	₹ 20	
Sales Value	1,00,000	1,80,000	1,00,000	3,80,000
Less: Variable Costs (balancing figure)	**35,000**	**75,000**	**55,000**	**1,65,000**
Contribution (Fixed Cost + Profit)	65,000	1,05,000	45,000	2,15,000
Less: Fixed Costs (given)	40,000	45,000	25,000	1,10,000
Profit (as % of Sale Price, given)	25,000	60,000	20,000	1,05,000
Individual PV Ratio	**65%**	**58.33%**	**45%**	
Overall PV Ratio = $\frac{\text{Total Contribution}}{\text{Total Sales Value}} \times 100 = \frac{₹\,2,15,000}{₹\,3,80,000} =$				**56.58%**
Overall BEP = = $\frac{\text{Total Fixed Costs}}{\text{Overall PV Ratio}} = \frac{₹\,1,10,000}{56.58\%} =$				**1,94,415**
Overall MOS = Total Sales – Overall BES = ₹ 3,80,000 – ₹ 1,94,415				**1,85,585**

Note: Profit and Fixed Costs are written first in this statement. Contribution is worked back as Fixed Costs + Profit.

2. Evaluation of Product–wise Profitability next year

Particulars	A	B	C
(a) Selling Price p.u. (as per last year)	₹ 10.00	₹ 12.00	₹ 20.00
(b) Variable Costs p.u. (as per last year) (Total VC ÷ Quantity)	₹ 3.50	₹ 5.00	₹ 11.00
(c) Variable Costs p.u. for next year (b + 10%)	₹ 3.85	₹ 5.50	₹ 12.10
(d) Revised Contribution p.u. for next year (a – c)	₹ 6.15	₹ 6.50	₹ 7.90

Since machine time for the 3 products are the same, the product yielding the highest contribution per unit should be preferred. Hence, Product C should be produced additionally next year, so as to reach full capacity.

Present Total Output = 10,000 + 15,000 + 5,000 = 30,000 units at 80% capacity. Hence, Total Capacity = $\frac{30,000}{80\%}$ = 37,500 units. Hence, additional 7,500 units of Product C will be produced next year.

3. Marginal Cost Statement (for next year, at full capacity)

Particulars	A	B	C	Total
Sales Quantity	10,000 units	15,000 units	12,500 units	
Contribution p.u. for next year (as per **WN 2**)	₹ 6.15	₹ 6.50	₹ 7.90	
Contribution	61,500	97,500	98,750	2,57,750
Less: Fixed Costs (given)	40,000	45,000	25,000	1,10,000
Profit	**21,500**	**52,500**	**73,750**	**1,47,750**

Question 2

A) Let Present Cost be ` C and Profit be ` P. The breakup of Materials, Labour & OH are as below – (4 marks)

Particulars	Existing		Proposed	
	Working	`	Working	`
Direct Materials	0.5C	15,000	0.5C + 15% = 0.575C	17,250
Direct Wages	0.2C	6,000	0.2C + 25% = 0.250C	7,500
Overheads	0.3C	9,000	Same as existing = 0.300C	9,000
TOTAL COST	C	30,000	1.125C	33,750
Add: Profit	P	15,000	P Less 25% = 0.75P	`
SELLING PRICE	45,000	45,000	(based on Old Price) 45,000	`

Note: Amount Column is filled up after the following computations. (4 marks)

Comparing Present situation: C + P = 45,000 (Equation 1)

Comparing Proposed situation: 1.125C + 0.75P = 45,000 (Equations 2)

Multiplying Equation 1 by 0.75, 0.750C + 0.75P = 33,750

Subtracting, we have 0.375C = 11,250

Therefore C = $\frac{11,250}{0.375}$ = ` 30,000. Substituting in Equation 1, we have, P = 45,000 - 80,000 = ` 15,000.

Present Percentage of Profit to Sales = $\frac{`15,000}{`45,000}$ = 33.33% on sales. [1/3rd on Sales = ½ on Cost.]

New Cost = 1.125C = 1.125 x 30,000 = ` 33,750

Hence, New Selling Price = New Cost + Profit Margin = ` 33,750 + 50% on Cost, i.e. ` 16,875 = ` 50,625.

B) 1. Effective Machine Operating Hours = 200 hours x 75% = 150 hours per month. (1 marks)

2. Statement of Machine Hour Rate

Particulars (4 marks)				`	Per *Hour*
A. Machine related Overheads				2,700	18.00
a) Depreciation	Fixed	(` 3,24,000 x 10%) ÷ 12 months		15,000	100.00
b) Power	Variable	Given		3,000	20.00
c) Supervision	Fixed	Given		7,500	50.00
d) Elec. & Lighting	Variable	Given		17,500	116.67
e) Repairs and Maint.	Variable	Given		1,354	9.03
f) Insurance	Fixed	` 16,250 ÷	12 months	2,292	15.28
g) Other Gen.Exps	Fixed	` 27,500 ÷	12 months		
Total Machine Related OH (3 marks)				49,346	328.98
B. Wages Basic: Machineman ` 125 x 200/8 = 3,125					
Attendant ` 75 x 200/8 = 1,875					
Dearness Allowance ` 1.575 x 2 workers = 3.150					
Sub-Total (Basic + DA) = 8,150					
Add: Production Bonus at 1/3rd of above = 2,717					
Add: Leave Wages and Holiday Pay at 10% = 815				11,682	77.88
Total Overheads (including Labour Cost element)				61,028	406.86

Question 3 (2 marks each)

A) A = Annual Requirement of Raw Materials = 40,000 packs.
B = Buying Cost per order = ` 8 per order(given)

1. EOQ = $\sqrt{\frac{2AB}{C}}$, where C = carrying Cost per unit per annum = ` 40 x 10% = ` 4 p.u. p.a.

On substitution, EOQ = 400 packs.

2. Number of Orders p.a. = $\frac{Annual\ Requirement\ (A)}{Quantity\ Ordered\ (Q)}$ = $\frac{40,000}{400}$ = 100 orders per annum.

3. Associated Cost p.a. = Buying Cost per annum + Carrying Cost per annum
= (No. of Orders x Cost per Order) + (Avg. Inventory x Carrying Cost p.u. p.a.)
= [100 x ` 8] + [ $\frac{400}{2}$ x ` 4 p.u] = ` 800 + ` 800 = ` 1,600

4. Timing of next purchase order:
- Annual Requirement = 40,000 units over 360 days, (given).
- Hence, Present Stock of 333 packets will be sufficient for $\frac{360}{40,000}$ x 333 = 3 days only.
- Since Lead-Time is 3 days and Present Stock Quantity can meet only the Lead Time Consumption (since there is no Buffer Stock), the next order should be placed immediately.

Note: If Lead Time were 2 days, the order can be placed even on the following day. However, if Lead Time were 4 days, emergency purchases should be made.

B) (2 marks for each)

Activity	Cost Driver Rates	Checking Accounts	Personal Loans	Gold Visa
Providing ATM Service	$\frac{`1,00,000}{2,00,000}$ = 0.50 per Transactions	1,80,000 x 0.50 = 90,000	—	20,000 x 0.50 = 10,000
Computer Processing	$\frac{`10,00,000}{25,00,000}$ = 0.40 per Transactions	20,00,000 x 0.40 = 8,00,000	2,00,000 x 0.40 = 80,000	3,00,000 x 0.40 = 1,20,000
Issuing Statements	$\frac{`8,00,000}{5,00,000}$ = 1.60 per Statements	3,00,000 x 1.60 = 4,80,000	50,000 x 1.60 = 80,000	1,50,000 x 1.60 = 2,40,000
Customer Services	$\frac{`3,60,000}{6,00,000}$ = 0.60 per Tel. Minute	3,50,000 x 0.60 = 2,10,000	90,000 x 0.6 = 54,000	1,60,000 x 0.60 = 96,000
Total Cost		15,80,000	2,14,000	4,66,000
Units of Product		30,000	5,000	10,000
Cost per unit		52.67	42.80	46.60

Questions 4

A) 1. Creditors Account (1 mark)

	Particulars	`		Particulars	`
Mar	To Bank (Payments made, given)	1,05,000	1 Mar	By balance b/d (Opg. Bal, given)	30,000
31 Mar	To balance c/d (Closing Bal, given)	15,000	Mar	By Purchases - (bal. figure)	90,000
	Total	1,20,000		Total	1,20,000

2. Finished Goods Control Account (1 mark)

	Particulars	`		Particulars	`
1 Mar	To balance b/d (Opg FG, given)	75,000	Mar	By COS A/c (COGS, given)	1,95,000
Mar	To WIP Ctrl (goods completed) (b/f)	1,86,000	31 Mar	By balance c/d (Clg.Bal, given)	66,000
	Total	2,61,000		Total	2,61,000

3. Factory OH Control Account (1 mark)

	Particulars	`		Particulars	`
Mar	Various Expenses (Total Debits, given)	45,000	Mar	By WIP Control (absorbed, Note)	42,300
			31 Mar	By bal.c/d (under-absorbed)(b/f)	2,700
	Total	45,000		Total	45,000

Note: Factory OH Recovery Rate = $\frac{Budgeted\ Factory\ Overheads}{budgeted\ direct\ Labour\ Hours}$ = $\frac{` 6,75,000}{` 4,50,000}$ = ` 1.50 per Direct Labour Hour

So, Factory OH applied to Production = Actual DLH x FOH Recovery Rate = 28,200 hours x ` 1.50 = ` 42,300

The difference in the Factory OH Control A/c represents under-absorption (as computed in the Ledger A/c above), which is carried forward pending identification of reasons for difference into Normal and Abnormal Reasons. Alternatively, such under-absorption Qiay be fully transferred to Costing P&L Account. (1 mark)

4. WIP Control Account (3 marks)

_	Particulars			Particulars	
1 Mar	To balance b/d (Opg WIP, given)	6,000	Mar	By WIP Control A/c (from WN 2)	1,86,000
Mar	To Stores Ledger Control A/c (b/f) - being Direct Materials Consumed	78,000		(FG tfr to Warehouse)	
Mar	To Wages Control (Direct Wages) 28,200 hours x ? 2.50 (Note b)	70,500			
Mar	To POH Control (Absorbed) (WN 3)	42,300	31 Mar	By bal.c/d (Clg.Bal, Note (a))	10,800
	Total	1,96,800		Total	1,96,800

Notes: (1 mark)

(a) Value of Closing WIP = Direct Material Cost + Direct Labour Cost + Applied POH
= given ` 6,000 + given ` 3,000 + (1,200 hrs x ` 1.50 ph) = ` 10,800

(b) Wage Rate Direct Labour Hour (based on information given for Closing WIP)

Direct Labour Cost of WIP (on 31st March) = ` 3,000, and Direct Labour Hours of WIP = 1,200 hours

So, Direct Wage Rate per hour = $\frac{` 3,000}{1,200\ hours}$ = ` 2.50 per DLH.

B) (2 marks for each process account, 2 marks for the working)

Solution:

1. Process "A" Account

Particulars	Qtty	₹	Particulars	Qtty	₹
To Basic Raw Material at ₹ 1.10 p.u.	10,000	11,000	By Process B – Production transfer	9,500	25,075
To Direct Materials		1,500	By Normal Loss (5% of 10,000)	500	125
To Direct Labour		4,500			
To Direct Expenses		1,000			
To POH (160% of Labour)		7,200			
Total	**10,000**	**25,200**	**Total**	**10,000**	**25,200**

2. Process "B" Account

Particulars	Qtty	₹	Particulars	Qtty	₹
To Process – A Transfer	9,500	25,075	By Process C – Production transfer	9,120	48,185
To Direct Materials		1,500	By Normal Loss (4% of 9,500)	380	190
To Direct Labour		8,000			
To Direct Expenses		1,000			
To POH (160% of Labour)		12,800			
Total	**9,500**	**48,375**	**Total**	**9,500**	**48,375**

Process C Account

Particulars	Qtty	₹	Particulars	Qtty	₹
To Process B Transfer	9,120	48,185	By Finished Goods A/c– transfer	Y	?
To Direct Materials		500	By Normal Loss	X	?
To Direct Labour		6,500			
To Direct Expenses		991			
To POH (160% of Labour)		10,400			
Total	**9,120**	**66,576**	**Total**	**9,120**	**66,576**

- Let Normal Loss be X units and Finished Output be Y units.
- Since Selling Price = ₹ 10 and Profit is 20% on Sale Price, Cost per unit = ₹ 10 **less** 20% = ₹ 8 per unit.
- Hence, Value of Output transferred to Finished Goods Control Account = Y units × ₹ 8 = 8Y
  Value of Normal Loss = X units × ₹ 1 = X
- Simultaneous Equations are derived as under –
  Comparing Amount (₹) Columns, we have: $X + 8Y = 66,576$ (Equation 1)
  Comparing Quantity Columns, we have: $X + Y = 9,120$ (Equation 2)
  Subtracting the equations, we have $7Y = 57,456$ So, **Y = 8,208**
  If Y = 8,208, then X = 9,120 – 8,208 = 912. So, Percentage of Loss in Process C = $\frac{912}{9,120}$ = **10%.**

Question 5

A. (VARIANCES – 4 marks, escalation claim – 2 marks, contract account – 2 marks)

Solution: **1. Computation of Material Cost Variances**

Material	Col. (1): SQ × SP	Col. (2): RAQ × SP	Col. (3): AQ × SP	Col. (4): AQ × AP
A	3,000 tonnes × ₹ 1,000 = ₹ 30,00,000	3,195 tonnes × ₹ 1,000 = ₹ 31,95,000	3,400 tonnes × ₹ 1,000 = ₹ 34,00,000	3,400 tonnes × ₹ 1,100 = ₹ 37,40,000
B	2,400 tonnes × ₹ 800 = ₹ 19,20,000	2,556 tonnes × ₹ 800 = ₹ 20,44,800	2,300 tonnes × ₹ 800 = ₹ 18,40,000	2,300 tonnes × ₹ 700 = ₹ 16,10,000
C	500 tonnes × ₹ 4,000 = ₹ 20,00,000	532.5 tonnes × ₹ 4,000 = ₹ 21,30,000	600 tonnes × ₹ 4,000 = ₹ 24,00,000	600 tonnes × ₹ 3,900 = ₹ 23,40,000
D	100 tonnes × ₹ 30,000 = ₹ 30,00,000	106.5 tonnes × ₹ 30,000 = ₹ 31,95,000	90 tonnes × ₹ 30,000 = ₹ 27,00,000	90 tonnes × ₹ 31,500 = ₹ 28,35,000
Total	**₹ 99,20,000**	**₹ 1,05,64,800**	**₹ 1,03,40,000**	**₹ 1,05,25,000**

Material **Yield** Variance = ₹ 99,20,000 – ₹ 1,05,64,800 = ₹ 6,44,800 A + Material **Mix** Variance = ₹ 1,05,64,800 – ₹ 1,03,40,000 = ₹ 2,24,800 F + Material **Price** Variance = ₹ 1,03,40,000 – ₹ 1,05,25,000 = ₹ 1,85,000 A

Material **Usage** Variance = ₹ 99,20,000 – ₹ 1,03,40,000 = ₹ 4,20,000 A + Material **Price** Variance b/fd as above = ₹ 1,85,000 A

Total Material Cost Variance = ₹ 99,20,000 – ₹ 1,05,25,000 = ₹ 6,05,000 A

Note: **RAQ** (Revised Actual Quantity) = Total AQ re-written in standard proportion, i.e. 3,400 + 2,300 + 600 + 90 = 6,390 tonnes, re-apportioned in the ratio 30 : 24 : 5 : 1. So, RAQ = 3,195, 2,556, 532.5, 106.5 tonnes.

RAQ is **not** specifically required to be computed in the question, it is shown here only for students' learning.

Verification: Material Price Variance + Material Usage Variance = Material Cost Variance.
So, ₹ 1,85,000 A + ₹ 4,20,000 A = ₹ 6,05,000 A

2. Computation of Labour Cost Variances

Labour	Col. (1): SH × SR	Col. (2): RAH × SR	Col. (3): AH × SR	Col. (4): AH × AR
L1	60,000 hrs× ₹ 15 = ₹ 9,00,000	56,400 hrs× ₹ 15 = ₹ 8,46,000	56,000 hrs× ₹ 15 = ₹ 8,40,000	56,000 hrs× ₹ 18 = ₹ 10,08,000
L2	40,000 hrs× ₹ 30 = ₹ 12,00,000	37,600 hrs× ₹ 30 = ₹ 11,28,000	38,000 hrs× ₹ 30 = ₹ 11,40,000	38,000 hrs× ₹ 35 = ₹ 13,30,000
Total	**₹ 21,00,000**	**₹ 19,74,000**	**₹ 19,80,000**	**₹ 23,38,000**

Labour **Sub-Efficiency** Variance = ₹ 21,00,000 – ₹ 19,74,000 = ₹ 1,26,000 F + Labour **Mix** Variance = ₹ 19,74,000 – ₹ 19,80,000 = ₹ 6,000 A + Labour **Rate** Variance = ₹ 19,80,000 – ₹ 23,38,000 = ₹ 3,58,000 A

Labour **Efficiency** Variance = ₹ 21,00,000 – ₹ 19,80,000 = ₹ 1,20,000 F + Labour **Rate** Variance b/fd as above = ₹ 3,58,000 A

Total Labour Cost Variance = ₹ 21,00,000 – ₹ 23,38,000 = ₹ 2,38,000 A

Note: **RAH** (Revised Actual Hours) = Total AH re-written in standard proportion, i.e. 56,000 + 38,000 = 94,000 hours, re-apportioned in the ratio 60 : 40. So, RAH = 56,400 hours, 37,600 hours.

RAH is **not** specifically required to be computed in the question, it is shown here only for students' learning.

Verification: Labour Rate Variance + Labour Efficiency Variance = Labour Cost Variance.
So, ₹ 3,58,000 A + ₹ 1,20,000 F = ₹ 2,38,000 A

3. Contract Account for the year ended .....

Particulars	₹	Particulars	₹
To Materials (Actual Cost WN 1 Column 2)	1,05,25,000	By Contractee's A/c – Contract Completed	1,50,00,000
To Labour (Actual Cost WN 2 Column 2)	23,38,000	By Contractee's A/c – Escalation Claim	13,18,000
To Other Expenses (given)	13,45,000	(Refer **WN 4** below)	
To Notional Profit – balancing figure	**21,10,000**		
Total	**1,63,18,000**	**Total**	**1,63,18,000**
To P & L A/c – Profit transfer – **See Note b**	**21,10,000**	By Notional Profit b/d	21,10,000
Total	**21,10,000**	**Total**	**21,10,000**

Note: It is assumed that Contract is 100% complete, and Cash is received (including Escalation Claim) at 100%.

4. Computation of Escalation Claim

Note: The following assumptions are made –

- Escalation Clause is applicable for the entire increase in cost, i.e. due to Quantity / Hours Variances, and also due to Price / Rate Variances.
- Escalation Claim is applied for every item of Materials and Labour on Total Cost independently, i.e. set-off of savings in one item with increase in another item is not permissible.

Item	Standard Cost	Actual Cost	Difference	Escalation Claim due to
Material A	3,000 tons × ₹ 1,000 = ₹ 30,00,000	3,400 tons × ₹ 1,100 = ₹ 37,40,000	₹ 7,40,000 Excessive Cost	Price: 3,400× (1,100–1,000)= ₹ 3,40,000 Qtty: 1,000× (3,000–3,400)=₹ 4,00,000
Material B	2,400 tons × ₹ 800 = ₹ 19,20,000	2,300 tons × ₹ 700 = ₹ 16,10,000	₹ 3,10,000 Cost Savings	₹ Nil
Material C	500 tons × ₹ 4,000 = ₹ 20,00,000	600 tons × ₹ 3,900 = ₹ 23,40,000	₹ 3,40,000 Excessive Cost	Price: 600× (4,000–3,900)= (₹ 60,000) Qtty: 4,000× (500 – 600)=₹ 4,00,000
Material D	100 tons × ₹ 30,000 = ₹ 30,00,000	90 tons × ₹ 31,500 = ₹ 28,35,000	₹ 1,65,000 Cost Savings	₹ Nil
				₹ 10,80,000
Labour L1	60,000 hrs× ₹ 15 = ₹ 9,00,000	56,000 hrs× ₹ 18 = ₹ 10,08,000	₹ 1,08,000 Excessive Cost	Rate: 56,000× (15 – 18)= ₹ 1,68,000 Hrs: 15×(60,000–56,000)= (₹ 60,000)
Labour L2	40,000 hrs× ₹ 30 = ₹ 12,00,000	38,000 hrs× ₹ 35 = ₹ 13,30,000	₹ 1,30,000 Excessive Cost	Rate: 38,000× (30 – 35)= ₹ 1,90,000 Hrs: 30×(40,000–38,000)= (₹ 60,000)
				₹ 2,38,000
Total Escalation Claim for Materials and Labour				**₹ 13,18,000**

Final Contract Price payable = Contract Price given ₹ 1,50,00,000 + Escalation Claim ₹ 13,18,000 = **₹ 1,63,18,000**

Alternatively, Escalation Claim can be made only for Price increase after setting off Cost savings, wherever applicable.

Item	Standard Qty/ Hrs	Rate Change	Escalation Claim
Material A	3,000 tons	₹ 1,000 – ₹ 1,100 = ₹ 100 (excess)	+ ₹ 3,00,000 (increase)
Material B	2,400 tons	₹ 800 – ₹ 700 = ₹ 100 (saved)	– ₹ 2,40,000 (decrease)
Material C	500 tons	₹ 4,000 – ₹ 3,900 = ₹ 100 (saved)	– ₹ 50,000 (decrease)
Material D	100 tons	₹ 30,000 – ₹ 31,500 = ₹ 1,500 (excess)	+ ₹ 1,50,000 (increase)
		Sub–Total	**₹ 1,60,000 (increase)**
Labour L1	60,000 hours	₹ 15 – ₹ 18 = 3	₹ 1,80,000
Labour L2	40,000 hours	₹ 30 – ₹ 35 = 5	₹ 2,00,000
		Sub–Total	**₹ 3,80,000 (increase)**
		Total Escalation Claim for Materials and Labour	**₹ 5,40,000 (increase)**

B.

(i) Name the method of costing and unit of costing (1 mark each)

Sr. no.	Industry	Method of costing	Cost unit
1	Sugar company having own sugarcane fields	Process	Per tonne or per quintal
2	Engineering works	Contract	Per contract
3	Chemicals	Process	Per litre, per galloon,

			kilogram, tonne etc
4	Breweries	Process	Per barrel

(ii) (2 marks for each)

Particulars	Explicit costs	Implicit costs
Meaning	Costs which involve some cash payments or outflow of resources	Cost which do not involve any cash payment at all
Also known as	Out of pocket costs	Economic/ notional/ imputed cost
Measurements	These are actually incurred and can be aeasily and objectively measured	They are not incurred. They cannot be easily measured and involve subjective estimation
Recording in books of accounts	Recorded in books of accounts	Not recorded in books of accounts
Purposes	Accounting, reporting, cost control and decision making	Decision – making like asset replacement, make or buy
Examples	Salaries, wages	Interest on own capital , rent of owm premises

Question 6

A. (3 Marks for each product)

Solution: **1. Basic Computations**

Particulars	A	B
1. Sale Price p.u	₹ 20	₹ 20
2. Variable Cost p.u	₹ 12	₹ 14
3. Contribution p.u	₹ 8	₹ 6
4. Fixed Costs p.a	₹ 30,00,000	₹ 21,00,000
5. BEQ = **[4 ÷ 3]**	3,75,000 Units	3,50,000 Units
6. Anticipated Sales Quantity (given)	4,00,000 Units	4,00,000 Units
7. MOS Quantity **(6–5)**	25,000 Units	50,000 Units
8. Anticipated Profit **(7×3)**	₹ 2,00,000	₹ 3,00,000

Analysis & Conclusion:

1. Indifference Point = $\frac{\text{Change in Fixed Costs}}{\text{Change in Contribution pu}} = \frac{30,00,000-21,00,000}{8-6} = \frac{9,00,000}{2}$ = **4,50,000 units.**
2. Since Anticipated Sales (4,00,000 units) is below the Indifference Point (4,50,000 units), the option with the Lower Fixed Cost is preferable. Hence, Process B is preferable. (as reflected by higher anticipated profit)
3. No change in answer even if capacity of Process A increases, since Anticipated Sales is only 4,00,000 units.

[**Note:** However, if it assumed that Capacity as per Qn.2 represents **Anticipated Sales**, then, both Processes have anticipated Sales above the Indifference Point of 4,50,000 units. In case of output above the Indifference Point, the option with Higher PVR (lower VC pu) should be chosen. Hence, Process is preferable in this case.]

B.

	1. Job Evaluation (2.5 marks)	2. Merit Rating (2.5 marks)
Meaning	It is a process by which the following aspects of a job are analysed & evaluated- a) Nature and importance of tasks to be performed. b) Skill Requirements of Job Holde3r like technical background, experience, etc. c) Importance of the job in relation to other jobs.	Merit Rating is the systematic evaluation of the performance of each employee. Performance Evaluation, i.e. Merit Rating, may be done by the supervisor of other qualified person.

Objectives	a) To assess the importance of each job. b) To determine the skill requirements of the job holder and fit the right person in the right job. c) To provide a basis for determining wage and salary structure for various job positions in the firm. d) To provide a basis for superior-subordinate relationships, i.e. managerial hierarcy	a) To identify efficient workers and reward them suitable. b) TO determine training and development needs. c) To provide a basis for promotion and trnasfers to Assess the worh of the worker to the Firm.

C.

Pariculars	Bin Card (2.5 marks)	Stores Ledger (2.5 marks)
1. Maintained by	Store-Keeper	Cost Accounting Department
2. Nature	Stores Recording Document	Accounting Record
3. Contents	Quantitative only	Quantitative cum Financial Reocrd
4. Time of recording	At the time of transaction	After the transaction takes place
5. Source Documents	Recorded at source. No separate source document required	Posted from Material Requisition slips, Goods received notes, etc.
6. Manner of Posting	Each transaction is recorded separately	Transactions may be posted on summary basis
7. Inter-Dept Tfrs	Inter-Deparment Transfers are not recorded in the Bin Card	Inter-Department Trnasfers are recorded in the stores Ledger, by direct adjustment in the respective Department WIP Control Accounts.

Question 7 (4 marks each for 75%, 100%)

Solution: **Flexible Budget (amounts in ₹ Lakhs)**

Particulars	50%	75%	100%
A. Sales	**NA**	**240.00**	**320.00**
B. Variable Expenses: (proportionate from 50%)			
Materials	48.00	72.00	96.00
Labour	51.20	76.80	102.40
Others	7.60	11.40	15.20
Sub–Total B.1	**106.80**	**160.20**	**213.60**
Semi Variable Expenses:		(50% level + 10%)	(50% level + 20%)
Maintenance and Repairs	5.00	5.50	6.00
Indirect Labour	19.80	21.78	23.76
Sales Department Salaries	5.80	6.38	6.96
Sundry Administrative Expenses	5.20	5.72	6.24
Sub–Total B.2	**35.80**	**39.38**	**42.96**
Fixed Expenses (same at all levels)			
Wages & Salaries	16.80	16.80	16.80
Rent, Rates and Taxes	11.20	11.20	11.20
Depreciation	14.00	14.00	14.00
Sundry Administrative Expenses	17.80	17.80	17.80
Sub–Total B.3	**59.80**	**59.80**	**59.80**
B. Total Expenses		**259.38**	**316.36**
C. Profit / (Loss) (A – B)		**(19.38)**	**3.64**

B (2 marks for each point)

SITUATION	ACCOUTING TREATMENT OF OVERTIME PREMIUM

1. Due to genuine labour shortage	Treated as regular cost of production, as directIbour, by inflating normal wage rate
2. At customers desire e.g. immediate delivery	Charged to the job directly. Such amount will be suitable recovered from the customers by charging at a higher rate
3. Irregular overtime to meet production requirement due to unexpected development	Charged to job – treated as factory overheads
4. Due to fault of a particular department. E.g. non – availability of a ram material	Charged to the department in fault, in order to fix responsibility and prevent recurrence
5. Due to abnormal conditions	Charged to costing profit and loss account