

Material & Labour Variance Sums:

Q1. Standard material cost for a normal mix of one ton of chemical X is based on:

Chemical	A	B	C
Standard usage(kgs)	240	400	640
Price per kg (Rs)	6	12	10
During a month 6.25 tons of X were produced from:			
Chemical	A	B	C
Consumption in tons	1.6	2.4	4.5
Cost (Rs)	11200	30000	47250

Calculate the relevant variance.

Q2. In order to produce 20 kgs of F.G, raw material of 50 kgs is required at Rs.2.10 per unit. During an accounting period 20 units are manufactured by employing 57 kgs of raw material @ Rs. 1.80. Calculate the relevant variance.

Q3. Calculate the relevant variance.

Material	Standard kgs	Standard rate	Actual kgs	Actual rate
X	8000	1.05	7500	1.20
Y	3000	2.15	3300	2.30
Z	2000	3.3	2400	3.5

Q4) Calculate the relevant variance.

Material	Standard kgs	Standard rate	Actual kgs	Actual rate
X	40	50	50	45
Y	60	40	60	55

Q5. Following data is given for 10 units of F.G X 50 units @ Rs.2, Y 80 units @ Rs.4, Z 70 units @ Rs.3. During the particular accounting period 65 units of F.G are manufactured & actual data is: X 350 units @ Rs 1.95, Y 500 units @ Rs.3.95, Z 450 units @ Rs.3.35. Calculate the relevant variance.

Q6. Calculate the relevant variance.

Standard :182 units				Actual: 182 units			
Material	Units	Rate	Amt	Material	Units	Rate	Amt
A	121	10	1210	A	140	9.5	1330
B	81	8.5	688.5	B	60	9	540
Total	202		41898.5	Total	200		1870
Less: loss	20			Less : loss	18		
	182				182		

Q7. Following data is available from the records of a manufacturing Company:

Standard per unit:

Materials 6 kgs @ Rs. 4, Labour 4 hours @ Rs. 4.

Standard production for the month 12000 units, Actual production for the month 12500 units.

Actual material price per kg Rs.4.50, Material consumed during the month 7800 kgs

Direct labour hours worked 48000 hours, Actual wage rate per hour Rs. 3.50.

Calculate the relevant variance.

Q8. Standard cost per unit:

Material 50 kgs @ Rs. 40, labour 400 hours @ Rs. 1.00

Actual cost for an output of 10 units)

Material 500 kgs @ Rs. 42, Labour 3960 hours @ Rs. 1.10

Calculate the relevant variance. (Oct 2006)

Q9. Standards have been set for a product. (OCT 2007)

Particulars	Rs	Rs
Direct material:		
4 units of X @ Rs.4	16	
6 units of Y @ Rs. 2.70	18	
Standard material cost		34
Direct labour:		
3 hours @ Rs.2		06
Standard cost per unit		40

The Company manufactured & sold 6000 units of the product during the year

Particulars	Rs	Rs
Direct material:		
25000 units off X @ Rs.4.20	105000	
36000 units of Y @ Rs.2.70	97200	
		202200
Direct labour:		
17000 hours @ Rs.2.20		37400

Calculate the relevant variance.

Q10. Calculate the relevant variance.

Standard material	Rs
2 kgs of S @ Rs.2	4
1 kg of L @ Rs.6	6
Direct labour 3 hours @ Rs.6	18

Actual for 9000 units (MAY 2007)

Actual material & labour	Rs
19000 kgs of S @ Rs.2.20	41800
10000 kgs of L @ Rs.5.60	56000
28500 hours @ Rs.6.40	182400

Q11. Calculate the relevant variance for 100 articles:

Standard material & labour:
60 kgs of A @ Rs.10
50 kgs of B @ Rs.12
20 hours operation 1 @ Rs9
30 hours operation 2 @ Rs12
40 hours operation 3 @ Rs16

Actual material & labour:
70 kgs of A @ Rs.10.50
48 kgs of B @ Rs.13
25 hours operation 1 @ Rs8
28 hours operation 2 @ Rs12
40 hours operation 3 @ Rs15.50

Q12. Calculate the relevant variance.

Standards for a product

Material cost	2 kgs @ Rs.2.50
Wages	2 hours @ 50 p

Actual for 8000 units

Material consumed	16500kgs @ Rs.2.40
Wages paid	18000 hrs @ 40 p

(MAY 2008)

Q13. Calculate the relevant variance.
Standard cost card for a product

Material cost	2 kgs @ Rs.20
Wages	2 hours @ Rs.25

(OCT 2008)

Material consumed for actual 10000 units	18500kgs for Rs.407000
Wages paid for actual 10000 units	20500 hrs for Rs.492000

Q14. Standard cost per unit:

Material: 10 kgs of A @ Rs.5, 15 kgs of B @ Rs.7, Labour : 20 hrs @ Rs.10

Actual data for 500 units:

Actual Material: 4800kgs of A @ Rs.4.80, 7650 kgs of B @ Rs.7.20, Labour 9800 hours @ Rs.9.50

Calculate the relevant variance.

Q15. Standard material cost for a normal mix of ten kgs of chemical X is based on:

Chemical	A	B
Standard usage(kgs)	8	6
Price per kg (Rs)	6	4
During a month 1000 kgs of X were produced from:		
Chemical	A	B
Consumption in kgs	750	500
Rate per kg (Rs)	7	5

Calculate the relevant variance.

Q16. Standard material for 70 kgs, Finished products, 100 kgs. Standard price for material Rs 1 per kg. Actual output 210000 kgs. Actual material used 280000 kgs. Cost of material Rs.252000. Calculate the relevant variance.

Q17. For producing 80 units of a product 30 kgs of material X & 20 kgs of material Y is the standard requirement. Standard price is Rs. 6 per kg of X & Rs.10 per kg of Y, 80 units were actually produced using 50 kgs of X for Rs.200 & 10 kgs of Y @ RS 8. Calculate the relevant variance.

Q18. Calculate the relevant variance.

Standard :180 units				Actual: 182 units			
Material	Units	Rate		Material	Units	Rate	
A	120	10		A	140	9.5	
B	80	7.5		B	60	9	
Total	200			Total	200		
Less: loss	20			Less : loss	18		
	180				182		

Q19. Standard cost for a certain chemical mixture is:

40% material A @ Rs. 200, 60% material B @ Rs. 300.

A std loss of 103 is expected in production.

During the period material used:

90 tons of A @ RS. 180, 110 tons of B @ Rs. 340. The weight produced is 182 tons of good production.

Calculate the relevant variance.

Q20. Calculate the relevant variance.

Material	Standard mix	Standard price
X	40%	Rs.4
Y	60%	Rs.3

Standard loss in processing is 15%. During December 2015 the company produced 1700 kgs of Finished output. The actual position of inputs were as under:

Material	Purchases in kgs	Rate
X	830	Rs.4.25 per kg
Y	1190	Rs.2.50 per kg

Q21. Calculate variances from following information gathered from the labour records of ABC LTD.

(a) Payroll allocation for direct labour Rs.20000.

(b) Time card analysis shows that 8000 hours were worked on production lines.

(c) Production reports for the period shows that 4000 units have been completed each having Std labour time 1 ½ hour & Std labour rate Rs.2 per hour.

Q22. Calculate the relevant variance.

Grade of workers	Hrs per unit of Output	Rate per hr
X	15	2
Y	10	3
Z	12	4

1000 units were actually produced

Grade of workers	Hrs	Rate per hr
X	16000	1.5
Y	9500	4
Z	11000	3.5

Q23. Calculate the relevant variance.

Category of labour	Standard 30weeks		Actual 32 weeks	
	Skilled	75 laborers'	Rs 60 weekly wage per labourer	70 laborers'
Semi-skilled	45 laborers	Rs 40 weekly wage per labourer	30 laborers'	Rs 50 weekly wage per labourer
Unskilled	60 laborers	Rs 30 weekly wage per labourer	80 laborers'	Rs 40 weekly wage per labourer

Q24. For making 10 kgs of GEMCO std material requirement is:

Material	Qty (kgs)	Rate per kg (Rs)
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A	8	6
B	4	4

During April 2015 1000 kgs of GEMCO were produced, the actual consumption is:

Material	Qty (kgs)	Rate per kg (Rs)
A	750	7
B	500	5

Calculate the relevant variance.

(April 2015)

Q25. Calculate the relevant variance.

(APRIL 2014)

Material	Std 100 units		Actual 1000 units	
	Qty 120 kgs	@ Rs 10 per kg	Qty 1250 kgs	@ Rs 9.5 per kg
lab	90 hrs	@ Rs 15 per hr	875hrs	@ Rs 10 per hr

Q26. 100 skilled workmen, 40 semi skilled workmen & 60 unskilled workmen were to work for 30 weeks to get a contract job completed. The std. weekly wages were Rs. 60, Rs. 36 & Rs. 24 respectively. The job was actually completed in 320 weeks by 80 skilled, 50 semi skilled & 70 unskilled workmen who were paid Rs. 65, Rs. 40 & Rs. 20 respectively as weekly wages. Calculate the relevant variance.

Q27. Calculate the relevant variance.

Grade of workers	Hrs per unit of output	Rate per hr	Amt
A	30	2	60
B	20	3	60
Total	50		120

Actual units produced 100 units

Grade of workers	Hrs per unit of output	Rate per hr	Amt
A	3200	1.5	4800
B	1900	4	7600
Total	5100		12400

Q28. Calculate Material & labour variances: (Nov 2017)

For 5 units of product X the std data is: material 80 kgs @ Rs. 50p/kg, labour 200 hours @ Rs. 5p/hr. Actual data: production 5000 units, material 79800kgs @ Rs. 52 p/kg, labour 200100 hours @ Rs. 4.90 p/hr.

Q29. The std cost of certain chemical mixture is: 35% material A @ Rs. 25 p/kg, 65% material B @ Rs. 36 p/kg.

A std loss of 5% is expected in production.

During the period there is used: 125 kg of material A @ Rs. 27 p/kg, 275 kgs of material B @ Rs. 34 p/kg, the actual output was 365 kgs.

Calculate the relevant variance. (Nov 2017)

Q30. Information for a week ended 28th September for an article A is:

Std data for an article A is as follows:

	Hours	Per hour (Rs)	Total (Rs)
Skilled	10	3	30

Unskilled	08	1.5	12
Semiskilled	16	1	16
total			58

Actual data for 1000 units of A is as follows:

	Hours	Per hour (Rs)	Total (Rs)
Skilled	9000	4	36000
Unskilled	8400	1.5	12600
Semiskilled	20000	0.90	18000
total	37400		66600

Calculate the relevant variance. (April 2017)

Fixed & variable OHs variance Sums:

Q31. Calculate the relevant variance. (April 2014)

	Budget	Actual
Fixed OHs for april 2013	Rs. 20000	Rs. 24000
Production in units, april 2013	4000	4200
Std time p.u (hours)	10	-
Actual hours in april 2013	-	44000

Q32. Calculate the relevant variance. (Oct 2008)

	Budget	Actual
Fixed OHs	Rs. 13000	Rs. 12375
Variable OHs (Rs)	10000	8910
hours	10000	9900
Output	5000	4500

Q33. Calculate the relevant variance. (April 2008 & April 2006)

	Budget	Actual
Fixed OHs	Rs. 30000	Rs. 30500
Variable OHs (Rs)	45000	47000
No. of working days	25	28
Output	15000	16000

Q34. Calculate the relevant variance. (Oct 2007)

	Budget	Actual
Fixed OHs	Rs. 40000	Rs. 47300
Variable OHs (Rs)	64000	73100
hours	8000	8600
Output	400	425

Q35. Calculate the relevant variance. (Oct 2006)

	Budget	Actual
Fixed OHs	Rs. 45000	Rs. 50000
Variable OHs (Rs)	60000	68000
hours	30000	33000
Output	30000	32500
No. of working days	25	26

Q36. Calculate the relevant variance. (April 2006)

	Budget	Actual
Fixed OHs for april	Rs. 10000	Rs. 12000
Production in units, april	2000	2100
Std time p.u (hours)	10	-
Actual hours in april	-	22000

Q37. Calculate the relevant variance. (April 2007)

	Budget	Actual
Fixed OHs	Rs. 160000	Rs. 168000
Output per man hours in units	1.0	0.9
Man hours per day	8000	8400
No. of working days	20	22

Q38. Calculate the relevant variance. (April 2007)

	Budget	Actual
Variable OHs	Rs. 10000	Rs. 9150
Production in units	400	360
Man hours to produce above	8000	7000

Std time to produce one unit of the product is 20 hours.

Q39. Calculate the relevant variance. (Oct 2006)

	Budget	Actual
Variable OHs	Rs. 10000	Rs. 8910
Output	5000	4500
hours	10000	9900
No. of working days	20	22

Q40. Calculate the relevant variance. (nov 2017)

	Budget	Actual
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Fixed OHs	Rs. 480000	Rs. 567000
Variable OHs (Rs)	768000	877200
hours	96000	103200
Output	4800	2100

Sales variance sums:**Q41. Budgeted figures**

Product	Quantity	Price	Value
A	1000	5	5000
B	750	10	7500
C	500	15	7500
	2250		20000

Actual figures

Product	Quantity	Price	Value
A	1200	6	7200
B	700	9	6300
C	600	14	8400
	2500		21900

Calculate the sales variance. (April 2015)

Q42. Information for a particular period is available. Calculate the relevant variance.

Product	Budgeted sales			Actual sales		
	Qty	Price	Amt	Qty	Price	Amt
A	1000	2	2000	1800	2.5	4500
B	3000	3	9000	4200	2.75	11550
	4000		11000	6000		16050

Q43. Information for the month of April is as follows. Calculate relevant variance.

Product	Sales Qty	Selling price per unit
Budgeted sales: A	1200	15
B	800	20
C	2000	40
Actual sales :A	880	18
B	880	20
C	2640	38

Q44. Information for a particular period is available. Calculate the relevant variance.

Product	Budgeted sales		Actual sales	
	Qty	Price	Qty	Price
A	500	5	635	5.4

B	700	8	865	8.2

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