CHAPTER-13 STANDARD COSTING

Ans.1.

	Given Std. 15 kg.			Revised Std. 700 kg.			Actual 700 kg.		
	Q	**R**	**A**	**Q**	**R**	**A**	**Q**	**R**	**A**
X	10	10	100						
Y	10	20	200						
	20		**300**	**933.33**			**1000**		

Material yield variance = (933.33 – 1000) x $\frac{300}{20}$ = 1000 A

Ans.2.

	Revised Std. 400 units of Finished Goods			Actual 400 units of Finished Goods		
	Q	**R**	**A**	**Q**	**R**	**A**
A	800	10	8000	700	15	10500
B	1200	20	2400	600	15	9000
	2000		**32000**	**1300**		**19500**

1. **Total Material Cost Variance** = 3200 – 19500 = 12500 F

2. **Material Price Variance**

   A (10 – 15) x 700 = 3500 A

   B (20 – 15) x 600 = 3000 F 500 A

3. **Material Usage Variance**

   A (800 – 700) x 10 = 1,000 F

   B (1200 – 600) x 20 = 12,000 E 13,000 F

4. **Material Mix Variance**

   A (520 - 700) x 10 = 1,800 A

   B (780 – 600) x 20 = 3,600 F 1,800 F

5. Material Yield Variance = (2,000 – 1,300) x $\frac{32}{2}$ = 11,200 F

Ans.3

	Revised Standard 100 unit of FG			Actual 100 unit of FG		
	H	**R**	**A**	**H**	**R**	**A**
SK	250	40	10,000	400	35	14,000
USK	500	60	30,000	800	70	56,000
	750		**40,000**	**1,200**		**70,000**

1. Total Labour Cost Variance = 40,000-70,000=30,000 A
2. Labour Rate Variance
   SK = (40 – 35) x 400 = 2,000 F
   USK = (60 – 70) x 800 = 8,000 A
   6,000 A
3. Labour Time Variance
   SK = (250 – 400) x 40 = 6,000 A
   USK = (500 – 800) x 60 = 18,000 A
   24,000 A
4. Labour Idle Time Variance
   SK 20 x 40 = 800 A
   USK 40 x 60 = 2,400 A
   3,200 A
5. Labour Mix Variance = Nil
6. Labour Efficiency Variance = (750 – 1,140) x $\frac{40,000}{750}$
   = 20,800

Ans.4. 1. Total Fixed Overheads Cost Variance = (252 x 40) – 10,200
= 120 A

2. Fixed Overheads Expenses Variance = 10,000 – 10,200 = 200 A
3. Fixed Overheads Volume Variance = (250 – 252) x 40 = 80 F
4. Fixed Overheads Capacity Utilization Variance = (500 – 580) x 20
= 1,600 F
5. Fixed Overheads Idle Time Variance = 20 x 20 = 400 A
6. Fixed Overheads Efficiency Variance = (280 – 252) x 40
= 1,120 A

Ans.5. Fixed Overheads Efficiency Variance = 200 x ₹ 5 = ₹ 10,000

Ans.6. Net Present Value Due to Change in Sale

1. Selling Price Variance =

   A (10 – 9) x 400 = 400 F

   B (12 – 13) x 400 = 400 A Nil

2. Profit Volume Variance =

   A (300 – 400) x 5 = 500 F

   B (500 – 400) x 6 = 600 A

   100 A

Sales Variance

Standard			Actual		
Q	**R**	**A**	**Q**	**R**	**A**
300	10	3,000	400	9	3,600
500	12	6,000	400	13	5,200
800		**9,000**	**800**		**8800**

1. Total Sales Value Variance = 9,000 – 8,800 = 200 A

2. Sale Price Variance = Nil

3. Sales Volume Variance

   A (300 – 400) x 10 = 1,000 F

   B (500 – 400) x 12 = 1,200 A 200 A

4. Sales Mix Variance

   A (300 – 400) X 10 = 1,000 F

   B (500 – 400) X 12 = 1,200 A 200 A

5. Sales Quantity Variance = Nil