Standard Costing Assignment

| | 8 | | | | | |
|-----------|---|---|--------------------------------|--|--|--|
| Q. No. | Quest | ion / Answers | | | | |
| 1. | XYZ Ltd. Has furnished you the following inf | ormation for the month of August | 20X1: - | | | |
| | Particulars | Budget | Actual | | | |
| | Output (units) | 30,0 | 00 32,500 | | | |
| | Hours | 30,0 | 00 33,000 | | | |
| | Fixed overhead | ₹ 45,0 | 00 50,000 | | | |
| | Variable overhead | ₹ 60,0 | 00 68,000 | | | |
| | Working days | | 25 26 | | | |
| | Calculate overhead variances. (ICAI SM modified, Modified in May.20 |)17, Nov.2018, May 2014 RTP, N | 1TP May 2020, RTP May 2014) | | | |
| Ans. | Calculation of variances: - | | | | | |
| | Fixed everband variances | | | | | |
| | i) Fixed Overhead Cost Variance - Pocov | arad Overhead Actual Overhead | | | | |
| | - 49.750 | a = 50.000 | | | | |
| | — ₹0,730 — ₹1.25 | | | | | |
| | ii) Fixed Overhead Expenditure Variance | = Budgeted Overhead – Actual Ov | erhead | | | |
| | = | = 45.000 - 50.000 | criticuu | | | |
| | - | = ₹ 5.000 (A) | | | | |
| | iii) Fixed Overhead Volume Variance = Red | covered Overhead – Budgeted Ov | erhead | | | |
| | = 48, | 750 – 45,000 | | | | |
| | Creaming ⊏∓.₹3 | ,750 (F) | | | | |
| | iv) Fixed Overhead Efficiency variance = R | ecovered Overhead – Standard O | verhead | | | |
| | = 4 | 8,750 — 49,500 | | | | |
| | = ₹ | 750 (A) | | | | |
| | v) Fixed Overhead Capacity Variance = St | andard Overhead – Revised Budg | eted Overhead | | | |
| | = 49,500 - 46,800 | | | | | |
| | = ₹ : | 2, 700 (F) | | | | |
| | vi) Calendar variance = (Actual Days – Budget Days) × Standard rate per day | | | | | |
| | $= (26 - 25) \times 1,800$ | = ₹ 1,800 (F) | | | | |
| | ×57 | | | | | |
| | Variable Overhead Variances: - | | | | | |
| | i) Variable Overhead Cost variance = Rec | overed Overhead – Actual Overhe | ad | | | |
| | | 000 - 68,000 = ₹ 3,000(A) | | | | |
| | ii) Variable Overhead Expenditure Variand | ce = Standard Overhead – Actual = 66 000 – 68 000 = ₹ 2 000 (/ | Overhead | | | |
| | iii) Variable Overhead Efficiency Variance | | -) | | | |
| 0.25 | = Recovered Overh | ead — Standard Overhead | | | | |
| ~2 | = 65,000 - 66,000 | = ₹ 1,000 (A) | | | | |
| | , | · · · · · · · · · · · · · · · · · · · | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | Working Notes: | | | | |
|----|----------|---|--------------------------------------|---|--|--|
| | | Basic Calculations: - | | | | |
| | | Standard hours per unit | | $=\frac{\text{Budgeted hours}}{\text{Budgeted units}}=\frac{30,000}{30,000}=1$ hour | | |
| | | Standard hours for actual outpu | ıt | $= 32,500 \text{ units} \times 1 \text{ hr} = 32,500$ | | |
| | | Standard overhead rate per hou | ır | $=\frac{\text{Budgeted overh}}{\text{Budgeted overh}}$ | head | |
| | | For fixed overhead | | $=\frac{45,000}{=}$ = ₹1.5 | 50 per hour | |
| | | For Variable overhead | | 30,000 - <u>60,000</u> - ₹2 n | oer hour | |
| | | Standard Fived Overhead rate n | or day | -30,000 - (2 p) | $2E daya = \mp 1.900$ | |
| | | Recovered overhead | er uay | $=$ $(43,000 \div 2)$ = Standard ho | urs for actual output x | |
| | | | | Standard ra | ite | |
| | | For fixed overhead | | = 32,500 hrs.> | < ₹1.50 = ₹ 48,750 | |
| | | For Variable overhead | | = 32,500 hrs.> | < ₹2 = ₹ 65,000 | |
| | | Standard overhead | | = Actual hours | s × Std. rate | |
| | | For fixed overhead | | $= 33,000 \times 1.5$ | 50 = ₹49,500 | |
| | | Por variable overhead | | = 33,000 × 2 = Budgeted hours | = 186,000 | |
| | | Keviseu buuget noui s | | = Budgeted days | - × Actual days | |
| | | | | $=\frac{30,000}{25} \times 26 =$ | = 31,200 hours | |
| | | *Deviced Dudgeted everyband (for | fined and head) | | F 4(000 | |
| | 2 | For making 10 kg of CEMCO the | standard materia | = 31,200 × 1.50 l requirements i | = 140,800 | |
| | 4. | Material | Ouan | tity | | |
| | | A | Sk Rk | σ | 6 00 | |
| | | В | 4 k | g | 4.00 | |
| | | Groom | | cademy | | |
| | | During April, 1,000 kg of CEMCO | were produced. T | The actual consul | mption of materials is as under:- | |
| | | Material | Quantity | y (kg.) | Rate per kg. (₹) | |
| | | A B | 50 | 0 | 7.00 | |
| | | 63 | | • | 0100 | |
| | | Calculate: - | | | | |
| | | a) Material Cost Variance; | | | | |
| | | b) Material Price Variance; | | | | |
| | | c) Material usage Variance. | | | 040 IN 2040 N 2047 | |
| | | (Modified in | i icai sm, may 20 | Modified MT | 013 and May 2018, Nov. 2017, P May 2022 & MTP May 2019) | |
| | Ans. | Calculation of Variances: - | | | | |
| | æ. | a) Material Cost Variance = Star | ndard cost – Actu | ial cost | | |
| 8 | <i>9</i> | = 6.4 | 00 - 7,750 = ₹ 1, | 350(A) | | |
| 18 | | b) Material Price Variance = (St | tandard Price – A | $ctual Price) \times Ac$ | ctual Quantity | |
| 5 | | $A = (6 - 7) \times 750 = 3$ | 750 (A) | | | |
| | | $B = (4 - 5) \times 500 = \frac{1}{2}$ | <u>500 (A)</u> 1 250 (A) | | | |
| | | Material Price Variance $\equiv \chi$ | <u>1,250 (A)</u> Standard Overtit | ··· Actual Oscar | titu) v Standard Drias | |
| | | C) Material Usages variance = $($ | Stanuaru Quantit | y – Actual Quali | (uty) × Standard Price | |
| | | $A = (800 - 750) \times 0 = 1000$ | ₹ 400(A) | | | |
| | | $D = (400 - 500) \times 4 = -$ | $\frac{400(A)}{100(A)}$ | | | |
| | | material Usages variable $= 3$ | | | | |

| | Wo | rkings: - | | | |
|------|---|--|----------------------|-----|--|
| | i) Standard cost for 1,000 kg | | | | |
| | A = 800 kg (8 ÷ 10 × 1000) × ₹6 = 4,800 | | | | |
| | | B = $400 \text{ kg} (4 \div 10 \times 1000) \times ₹4 = 1,600$ | | | |
| | 1,200 6,400 | | | | |
| | ii) Actual cost for 1,000 kg. | | | | |
| | $A = 750 \text{ kg} \times ₹7 = 5,250$ | | | | |
| | | $B = 500 \text{ kg} \times 35 = 2.500$ | | | |
| | | 1 250 7 750 | | | |
| 3 | LM | Limited produces a product $(S \times 4)$ which is sold in a 10 kg packet. The Sta | andard Cost card n | her | |
| 5. | nac | ket of 'Sx 4' is as follows: - | | | |
| | pac | Particulars | (₹) | | |
| | Di | rect materials 10 kg @ ₹ 90 per kg | 900 | | |
| | | $root labour 0 hours @ \neq 00 hours$ | 640 | | |
| | | | 040 | | |
| | va | riable Overnead 8 nours @ < 20 per nour | 160 | | |
| | FD | ked Uverhead | 250 | | |
| | | | 1,950 | | |
| | | | | | |
| | Bud | lgeted output for a quarter of a year was 10,000 kg. Actual output is 9,000 |) kg. Actual costs f | or | |
| | this | quarter are as follows: - | | | |
| | | Particulars | (₹) | | |
| | Di | rect Materials 8,900 kg @ ₹ 92 per kg. | 8,18,000 | | |
| | Di | rect Labour 7,000 hours @ ₹ 84 per hour | 5,88,000 | | |
| | Va | ariable Overhead incurred | 1,40,000 | | |
| | Fi | xed Overhead incurred | 2,60,000 | | |
| | | | | | |
| | You | are required to Calculate: - | | | |
| | a) | Material Usage Variance | | | |
| | b) | Material Price Variance | | | |
| | c) | Material Cost Variance. 💦 🚽 | | | |
| | d) | Labour Efficiency Variance | | | |
| | e) | Labour Rate Variance | | | |
| | f) | Labour Cost Variance | | | |
| | g) | Variable Overhead Cost Variance | | | |
| | h) | Fixed Overhead Cost Variance | | | |
| | (M | lay 2021 RTP, Nov. 2020 RTP, Modified Nov 2013, Modified RTP Nov 2 | 2019, Modified IC | AI | |
| | | SM, Modifi | ied MTP May 201 | .9) | |
| Ans. | a) | Material Usage Variance = Standard Price (Std. Quantity – Actual Quantit | ty) | | |
| | | = ₹ 90 (9,000 kg – 8,900 kg.) | | | |
| | | = ₹ 9,000 (Favourable) | | | |
| | b) | Material Price Variance – Actual Quantity (Standard Price – Actual Price |) | | |
| | 1 | = 8,900 kg. (₹ 90 - ₹ 92) = ₹ 17,800 (Adverse) | | | |
| | | | | | |
| | c) | Material Cost Variance = Standard Material Cost – Actual Material Cost | | | |
| | , | = (Standard Quantity × Standard Price) – (Actual | l Ouantitv × | | |
| | | Actual Price) | <u> </u> | | |
| | | = (9 000 kg × ₹ 90) – (8 900 kg × ₹ 92) | | | |
| | | = ₹ 8 10 000 – ₹ 8 18 800 | | | |
| | | - ₹ 8 800 (Advarca) | | | |
| | | - (0,000 (Auverse) | | | |

| | d) Labour Efficiency V | /ariance = Standard Rate | (Standard Hours – Actua | ll Hours) | | |
|--------|---|--|---|-------------------------------------|--|--|
| | | $=$ ₹ 80 $\left(\frac{9,000}{10} \times 8\right)$ | 1000 hours – 7,000 hours. | | | |
| | = ₹ 80(7,200 hours - 7,000 hours.) | | | | | |
| | = ₹ 16,000 (Favourable) | | | | | |
| | | | | | | |
| | e) Labour Rate Variar | nce = Actual Hours (Stand | ard Rate – Actual Rate) | | | |
| | | = 7,000 hours (₹ 80 - | ₹84) | | | |
| | | = ₹ 28, 000 (Adverse |) | | | |
| | | | | | | |
| | f) Labour Cost Variar | ce = Standard Labour Cos | st – Actual Labour Cost | TT | | |
| | | $=$ (Standard Hours \times S | tandard Rate) – (Actual | Hours × | | |
| | | Actual Rate) $= (7.200 \text{ hours } \times \neq 90)$ | $(7.000 \text{ hours } \times \overline{7}04)$ | | | |
| | | $= (7,200 \text{ Hours} \times 3.00)$ = 3.576 000 = 3.5880 | $(7,000 \text{ fiburs } \times 104)$ | | | |
| | | = ₹ 12,000 (Adverse |) | | | |
| | | (12)000 (114)0100 |) | | | |
| | g) Variable Cost Varia | nce = Standard Variable (| Cost – Actual Variance Co | ost | | |
| | | = (7,200 hours × ₹ 20 | 0) – ₹ 1,40,000 | | | |
| | | = ₹ 4, 000 (Favoura) | ble) | | | |
| | | | 20 | | | |
| | h) Fixed Overhead Co | st Variance = Absorbed Fi | xed Overhead — Actual F | ixed Overhead | | |
| | | $=\frac{x^{250}}{10 \text{ kgs}} \times 9,00$ | 0 kgs — ₹ 2,60,000 | | | |
| | | = ₹ 2,25,000 - | - ₹ 2,60,000 = ₹ 35 , 000 | (Adverse) | | |
| 4. | Following data is extrac | ted from the books of XYZ | Ltd. For the month of Jar | nuary, 20X1: - | | |
| | i) Estimation: - | | | | | |
| | 1) Estimation: - | | | | | |
| | 1) Estimation: - Particulars | Quantity (kg.) | Price (₹) | Amount (₹) | | |
| | Particulars Material-A | Quantity (kg.) | Price (₹) Academy ? | Amount (₹) | | |
| | Particulars Material-A Material-B | Quantity (kg.) Groom 800 cation 600 | Price (₹) Academy ? 30.00 | Amount (₹) 18,000 | | |
| | Particulars Material-A Material-B | Quantity (kg.) Groomin 800 up ation 600 | Price (₹) Academy ? 30.00 | Amount (₹) 18,000 | | |
| | 1) Estimation: - Particulars Material-A Material-B | Quantity (kg.) 800 600 | Price (₹) Academy ? 30.00 | Amount (₹) 18,000 | | |
| | Particulars Material-A Material-B Normal loss was expect ii) Actuals: - | Quantity (kg.) 800 600 ed to be 10% of total input | Price (₹) Academy ? 30.00 | Amount (₹) 18,000 | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p | Quantity (kg.) 800 600 ed to be 10% of total input | Price (₹) Academy ? 30.00 | Amount (₹) 18,000 | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars | Quantity (kg.) 800 600 ed to be 10% of total input produced: - Quantity (kg.) | Price (₹) Academy ? 30.00 materials. | Amount (₹) 18,000 Amount (₹) | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 | Price (₹) Academy ? 30.00 a materials. Price (₹) ? | Amount (₹) 18,000 Amount (₹) | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 ? | Price (₹) Academy ? 30.00 amaterials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 ? | Price (₹) Academy ? 30.00 c materials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 ? | Price (₹) Academy ? Septs 30.00 c materials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 ? | Price (₹) Academy ? 30.00 c materials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| 11200 | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - Material Cost Varia | Quantity (kg.) 800 600 600 ed to be 10% of total input produced: - Quantity (kg.) 900 ? nce = ₹3,625 (F) | Price (₹) Academy ? 30.00 amaterials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| 312311 | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - Material Cost Varia Material Price Varia | Quantity (kg.) 600 000 7 900 7 900 7 7 100 7 100 100 100 100 100 100 100 100 100 100 100 100 | Price (₹) Academy ? 30.00 c materials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| Shall | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - Material Cost Varia Material Price Varia You are required to Ca | Quantity (kg.)800600600ed to be 10% of total inputproduced: -Quantity (kg.)900?900?ance = ₹3,625 (F)ance = ₹175 (F)alculate: -atomic 4. | Price (₹) Academy ? 30.00 cmaterials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| 317211 | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - Material Cost Varia Material Price Varia You are required to Ca a) Standard Price of M b) Actual Quantity of M | Quantity (kg.) 600 000 900 <trr< th=""><th>Price (₹) Academy ? 30.00 amaterials. Price (₹) ? 32.50</th><th>Amount (₹) 18,000 Amount (₹) 59,825</th></trr<> | Price (₹) Academy ? 30.00 amaterials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| 31200 | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-B Other Information: - Material Cost Varia Material Price Varia You are required to Ca a) Standard Price of Mate b) Actual Quantity of Material Price Price of Material Price Price of Material Price Price of Material Price Price | Quantity (kg.) 800 600 600 600 600 600 600 600 600 600 600 600 600 600 600 600 000 900 900 900 900 $?$ 900 $?$ 900 $?$ 900 $?$ 100 | Price (₹) Academy ? 30.00 cmaterials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| 317211 | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-A Material-B Other Information: - Material Cost Varia Material Price Varia You are required to Ca a) Standard Price of M b) Actual Quantity of M c) Actual Price of Material | Quantity (kg.) 800 600 900 <trr< th=""><th>Price (₹) Academy ? 30.00 materials. Price (₹) ? 32.50</th><th>Amount (₹) 18,000 Amount (₹) 59,825</th></trr<> | Price (₹) Academy ? 30.00 materials. Price (₹) ? 32.50 | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| Sham | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-A Material-B Other Information: - Material Cost Varia Material Price Varia Material Price Varia Material Price of M b) Actual Quantity of M c) Actual Price of Material d) Revised Standard Q e) Material Mix Varian | Quantity (kg.) 800 600 600 600 600 ed to be 10% of total input $oroduced: -$ Quantity (kg.) 900 $?$ 900 ? 900 ? 900 ? 900 ? 1000 1000 ? 1000 1000 ? 1000 <th>Price (₹) Academy ? 30.00 Tematerials. Price (₹) ? 32.50 Material-B;</th> <th>Amount (₹) 18,000 Amount (₹) 59,825</th> | Price (₹) Academy ? 30.00 Tematerials. Price (₹) ? 32.50 Material-B; | Amount (₹) 18,000 Amount (₹) 59,825 | | |
| Stram | I) Estimation: - Particulars Material-A Material-B Normal loss was expect ii) Actuals: - 1480 kg of output p Particulars Material-A Material-A Material-B Other Information: - Material Cost Varia Material Price Varia You are required to Ca a) Standard Price of M b) Actual Quantity of M c) Actual Price of Material d) Revised Standard Q e) Material Mix Varian (ICAI SM, Modified | Quantity (kg.) 600 600 600 600 600 600 600 600 600 600 600 600 600 600 600 000 000 900 <trr< th=""><th>Price (₹) Academy ? 30.00 materials. Price (₹) ? 32.50 Material-B; ed MTP May 2022, Mod</th><th>Amount (₹)</th></trr<> | Price (₹) Academy ? 30.00 materials. Price (₹) ? 32.50 Material-B; ed MTP May 2022, Mod | Amount (₹) | | |

630



| | | | 1.111 | variance | $(A + B) = \{$ | (Revised Stand | | , |
|------|--|--|--|---|---|--|--|-------------------------|
| | | | | | (Actual Qua | ntity × Standa | rd Price)} | |
| | | = {(Revised Standard Quantity _A × Standard Price _A) + (Revised Standard Qunatity _B × Standard Price _B) – 60,000} | | | | | $Qunatity_B \times$ | |
| | | = (886 kg) | g (from (| iv) above) > | × ₹45 (from (i |) above)) + (| 664 kg (from (iv |) above) × |
| | | ₹30) – ₹ | 60,000 | | - (- (| , | | , |
| | | = (39,87) |) + 19.92 | 20) – 60,00 | $0 = 3210 (\mathbf{A})$ | | | |
| 5. | OS L | imited has | furnish | ed the follo | owing inform | ation: - | | |
| | Sta | ndard over | head abs | sorption rate | e per unit | | | ₹20 |
| | Sta | ndard rate | per hour | | 1 | | | ₹4 |
| | Bue | dgeted proc | luction | | | | 12,000 | units |
| | Act | tual product | tion | | | | 15,560 | units |
| | Act | tual working | g hours | | | | 7 | 4,000 |
| | Actu the f | al overhead ollowing fle | ls amour xible bu | nted to ₹2,9! dget: - | 5,000, out of v | vhich ₹62,500 | are fixed. Overhe | eads are based on |
| | | <u>P</u> | roducti | on (units) | | Т | Sotal Overheads | ; (₹) |
| | | | 8,0 |)00 | | | 1,80,000 | |
| | | | 10, | 000 | | | 2,10,000 | |
| | | | 14, | 000 | | | 2,70,000 | |
| | | | | aa: | | | | |
| Ans | a) \ b) \ c) H d) H | Variable ove Variable Ove Fixed overh Fixed Overh | erhead E erhead e ead Effic ead Capa | fficiency Var xpenditure iency Varian acity Varian | riance. Variance. nce. .ce. | 10 Cateby | (May 2012, Ma | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable ove Variable Ove Fixed overh Fixed Overh <u>Variable O</u> | erhead E erhead e ead Effic ead Capa verhead | fficiency Var xpenditure iency Varian acity Varian 1 Efficiency | riance. Variance. nce. ce. Variance: - | Academy | (May 2012, Ma | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable over Variable Over Fixed overh Fixed Overh Variable O ✓ = Stan | erhead E erhead e ead Effic ead Capa verhead dard Rat | fficiency Var xpenditure iency Varian acity Varian 1 Efficiency Ploncer ac per hour (| riance. Variance. nce. Variance: (Standard Hou | cademy rs – Actual Ho | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) F d) F a) | Variable over Variable Over Fixed overh Fixed Overh Variable O $\checkmark = Standown of a s$ | erhead E erhead e ead Effic ead Capa verhead dard Rat 77,800 h , 400 (F) | fficiency Var xpenditure iency Varian acity Varian 1 Efficiency re per hour (nours – 74,0 | riance. Variance. nce. Variance: - (Standard Hou)00 hours) | Academy hrs – Actual Ho | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable over Variable Over Fixed Overh Fixed Overh Variable O $\checkmark = Stand\checkmark = ₹ 3 (\checkmark = ₹ 11Variable O$ | erhead E erhead e ead Effic ead Capa werhead dard Rat 77,800 h , 400 (F) | fficiency Var xpenditure diency Varian acity Varian I Efficiency re per hour (hours – 74,0) I Expenditu | riance. Variance. nce. ce. Variance: - (Standard Hou 000 hours) | rs – Actual Ho | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable over Variable Over Fixed overh Fixed Overh Variable O $\checkmark = Stan\checkmark = ₹ 3 (\checkmark = ₹ 11)Variable O\checkmark = Actu$ | erhead E erhead e ead Effic ead Capa verhead dard Rat 77,800 h , 400 (F) verhead al Hours | fficiency Var xpenditure iency Varian acity Varian <u>I Efficiency</u> e per hour (iours – 74,0) <u>I Expenditu</u> (Standard I | riance. Variance. nce. ce. Variance: - (Standard Hou 000 hours) ure Variance: Rate – Actual | - Rate) | (May 2012, Ma ours) | ıy 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable over Variable Over Fixed over Fixed Over \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11 Variable O \checkmark = Actu \checkmark = 74,00 | erhead E erhead e ead Effic ead Capa werhead dard Rat 77,800 h ,400 (F) werhead al Hours 00 hours | fficiency Varian xpenditure iency Varian acity Varian d Efficiency te per hour (hours – 74,0) d Expenditu (Standard 1 s (\mathfrak{T} 3 – \mathfrak{T} 3.2 | riance. Variance. nce. .ce. Variance: - (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) | - Rate) | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10) | erhead E erhead e ead Effic ead Capa verhead dard Rat 77,800 h , 400 (F) verhead al Hours 00 hours , 500 (A) | fficiency Varian xpenditure iency Varian acity Varian <u>1 Efficiency</u> e per hour (nours – 74,0) <u>1 Expenditu</u> (Standard I s (₹ 3 – ₹ 3.1) | riance. Variance. nce. .ce. Variance: (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) | - Rate) | (May 2012, Ma ours) | ıy 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11, Variable O \checkmark = Actu \checkmark = 74,0 \checkmark = ₹ 10, Fixed Over | erhead E erhead e ead Effic ead Capa verhead dard Rat 77,800 h , 400 (F) verhead al Hours 00 hours , 500 (A) | fficiency Varian xpenditure iency Varian acity Varian I Efficiency te per hour (nours $-74,C$) I Expenditu (Standard I s (₹ 3 $-$ ₹ 3.2) fficiency Va | riance. Variance. nce. .ce. Variance: - (Standard Hou (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) | - Rate) | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11 Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10 Fixed Over \checkmark = Stan | erhead E erhead e ead Effic ead Capa werhead dard Rat 77,800 h , 400 (F) werhead al Hours 00 hours , 500 (A) chead Ef dard Rat | fficiency Varian xpenditure iency Varian acity Varian 1 Efficiency te per hour (nours – 74,0) 1 Expenditu (Standard I s ($3 - 3$, 3, 1) 1 ficiency Va te per Hour (| riance. Variance. nce. .ce. Variance: - (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) uriance: - (Standard Hou | - Rate) | <u>(May 2012, Ma</u> ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable 0 \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10 Fixed Over \checkmark = Stan \checkmark = ₹ 10 | erhead E erhead e ead Effic ead Capa everhead dard Rat 77,800 h , 400 (F) everhead al Hours 00 hours , 500 (A rhead Eff dard Rat 77,800 h | fficiency Varian xpenditure iency Varian acity Varian 1 Efficiency te per hour (iours – 74,0) 1 Expenditu (Standard I s (₹ 3 – ₹ 3.2)) fficiency Va te per Hour (ours – 74,0 | riance. Variance. nce. .ce. Variance: Variance: Standard Hou 000 hours) ure Variance: Rate – Actual 1419) uriance: - (Standard Hou 00 hours) | - Rate) | (May 2012, Ma ours) | ıy 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10) Fixed Over \checkmark = Stan \checkmark = ₹ 1(7) \checkmark = ₹ 3, | erhead E erhead e ead Effic ead Capa verhead dard Rat 77,800 h , 400 (F) verhead al Hours 00 hours , 500 (A) rhead Ef dard Rat 77,800 h 800 (F) | fficiency Varian xpenditure iency Varian acity Varian 1 Efficiency te per hour (nours – 74,0) 1 Expenditu (Standard I s ($3 - 3$.1) 1 ficiency Va ours – 74,0 | riance. Variance. nce. .ce. Variance: - (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) uriance: - (Standard Hou 00 hours) | - Rate) | <u>(May 2012, Ma</u> ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10) Fixed Over \checkmark = Stan \checkmark = ₹ 10) Fixed Over \checkmark = ₹ 3,1 \checkmark = ₹ 3,1 | erhead E erhead e ead Effic ead Capa everhead dard Rat 77,800 h , 400 (F) everhead al Hours 00 hours , 500 (A chead Ef dard Rat 77,800 h 800 (F) | fficiency Varian xpenditure iency Varian acity Varian I Efficiency te per hour (nours $-74,0$) I Expenditu (Standard I s (₹ 3 $-$ ₹ 3.1) fficiency Va te per Hour (ours $-74,0$) | riance. Variance. nce. .ce. Variance: - (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) riance: - (Standard Hou 00 hours) | - Rate) | (May 2012, Ma ours) | y 2015, ICAI SM) |
| Ans. | a) \ b) \ c) H d) H a) b) c) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10,00 \checkmark = ₹ 10,00 \checkmark = ₹ 10,00 \checkmark = ₹ 10,00 \checkmark = ₹ 3,00 \checkmark = ₹ 3,00 Fixed Over | erhead E erhead e ead Effic ead Capa werhead dard Rat 77,800 h , 400 (F) werhead al Hours 00 hours , 500 (A) rhead Ef dard Rat 77,800 h 800 (F) | fficiency Varian xpenditure iency Varian acity Varian 1 Efficiency the per hour (hours $-74,0$) 1 Expenditu (Standard I s (₹ 3 $-$ ₹ 3.1) 1 ficiency Va the per Hour (ours $-74,0$) 2 ficiency Va the per Hour (ours $-74,0$) | riance. Variance. nce. .ce. Variance:- (Standard Hou 000 hours) ure Variance: (Standard Hou 000 hours) uriance: - (Standard Hou 00 hours) | - Rate) | <u>(May 2012, Ma</u> ours) | <u>y 2015, ICAI SM)</u> |
| Ans. | a) \ b) \ c) H d) H a) b) c) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = ₹ 10) \checkmark = ₹ 10) Fixed Over \checkmark = Stan \checkmark = ₹ 3, \checkmark = ₹ 3, | erhead E erhead e ead Effic ead Capa everhead dard Rat 77,800 h , 400 (F) everhead al Hours 00 hours , 500 (A chead Ef dard Rat 77,800 h 800 (F) chead Ca dard Rat | fficiency Varian xpenditure iency Varian acity Varian 1 Efficiency the per hour (iours $-74,0$) 1 Expenditu (Standard I s (₹ 3 $-$ ₹ 3.2) 1 ficiency Va the per Hour (ours $-74,0$) 2 ficiency Va the per Hour (ours $-74,0$) | riance. Variance. nce. .ce. Variance:- (Standard Hou 000 hours) ure Variance: Rate – Actual 1419) uriance: - (Standard Hou 00 hours) iance: - (Actual Hours) | - Actual Ho rrs – Actual Ho rrs – Actual Ho urs – Actual Ho | <u>(May 2012, Ma</u> ours) | <u>y 2015, ICAI SM)</u> |
| Ans. | a) \ b) \ c) H a) b) c) d) | Variable over Variable Over Fixed overh Fixed Overh \checkmark = Stan \checkmark = ₹ 3 (\checkmark = ₹ 11) Variable O \checkmark = Actu \checkmark = 74,00 \checkmark = ₹ 10) Fixed Over \checkmark = \$tan \checkmark = ₹ 1(7) \checkmark = ₹ 3,7 Fixed Over \checkmark = Stan \checkmark = ₹ 1(7) \checkmark = ₹ 3,7 Fixed Over \checkmark = \$tan \checkmark = ₹ 1(7) | erhead E erhead e ead Effic ead Capa werhead dard Rat 77,800 h , 400 (F) werhead al Hours 00 hours , 500 (A) chead Ef dard Rat 77,800 h 800 (F) chead Ca dard Rat 74,000 H | fficiency Varian xpenditure iency Varian acity Varian I Efficiency ie per hour (nours – 74,0 I Expenditu (Standard I s ($₹$ 3 – $₹$ 3.2) fficiency Var ie per Hour (ours – 74,0 Apacity Var ie per Hour (ours – 74,0 Apacity Var ie per Hour (ours – 60,0 60,000 – $₹$ | riance. Variance. nce. .ce. Variance:- (Standard Hou 000 hours) ure Variance: (Standard Hou 000 hours) uriance:- (Standard Hou 00 hours) iance:- (Actual Hours) 14,000 (F) | - Actual Ho ars – Actual Ho ars – Actual Ho - Budgeted H | <u>(May 2012, Ma</u> ours) ours) | <u>y 2015, ICAI SM)</u> |





| | | The actual cost data for the month of August 20X1 are as follows: | | | | | |
|---------------|------|---|--|--|--|--|--|
| | | ✓ Material used 50,000 kg at a cost of ₹ 5,25,000. | | | | | |
| | | ✓ Labour paid ₹ 1 55 000 for 31 000 hc | Nurs worked | | | | |
| | | Variable overheads \neq 2 02 000 | Juis workeu. | | | | |
| | | • Variable overheads $₹ 4.70,000$. | | | | | |
| | | Fixed overheads < 4,70,000. | | | | | |
| | | Actual production 4,800 units. | | | | | |
| | | Calculate: | | | | | |
| | | i) Material Cost variance | | | | | |
| | | ii) Labour cost variance. | | | | | |
| | | iii) Fixed Overhead cost variance | | | | | |
| | | iv) Variable overhead cost variance. | | | | | |
| | | | (Nov. 2011, Modified Dec. 2021, MTP July 2021) | | | | |
| | Ans. | i) Material Cost Variance | = Total Standard Cost for Actual Output – Total | | | | |
| | | Actual Cost | | | | | |
| | | | = 4,800 × 10 × 10 - 5,25,000 | | | | |
| | | | = 4,80,000 - 5,25,000 | | | | |
| | | | = 45,000 (A) | | | | |
| | | ii) Labour Cost Variance | = Total Standard Cost of labour for Actual | | | | |
| | | | Output – Total Actual Cost of labour | | | | |
| | | | $= 4.800 \times 6.0 \times 5.50 - 1.55.000$ | | | | |
| | | | = 1.58.400 - 1.55.000 | | | | |
| | | | = 3400 (F) | | | | |
| | | iii) Fixed OH Cost Variance | = Recovered Fixed overhead – Actual Fixed | | | | |
| | | ing Tixed on cost variance | overhead | | | | |
| | | | $-90 \times 4800 - 470000$ | | | | |
| | | | - 20 000 (A) | | | | |
| | | iv) Variable OH Cost Variance | - Paceword Wariable overheads Actual Variables | | | | |
| | | ivj variable on cost variance ming Eq. | overheads | | | | |
| | | 00 | = [(4,000, x, (x, 10), 202000]] | | | | |
| | | | $= [(4,800 \times 6 \times 10) - 293000]$ | | | | |
| | | 202 | = 2,88,000 - 2,93,000 | | | | |
| | | - O'BIN | = 5,000 (A) | | | | |
| | | Working Notes: | | | | | |
| | | Budgeted Production 30,000/6 | = 5,000 units | | | | |
| | | Budgeted Fixed Overhead Rate | = 4,50,000/5,000 | | | | |
| | | = ₹90 per unit | | | | | |
| | 8. | The following information is available from | om the cost records of Vatika & Co. | | | | |
| | | For the month of August, 2009: | | | | | |
| | | Material purchased 24,000 kg ₹ 1,05,600 | | | | | |
| | 4 | Material consumed 22,800 kg | | | | | |
| | | Actual wages paid for 5,940 hours ₹ 29,7 | 00 | | | | |
| - | A. | Unit produced 2160 units | | | | | |
| | | Standard rates and prices are: | | | | | |
| 12 | | Direct material rate is ₹ 4.00 per kg. | | | | | |
| ~ <u>></u> | | Direct labour rate is ₹4.00 per hour | | | | | |
| | | Standard input is 10 kg. for one unit | | | | | |
| | | Standard requirement is 2.5 hours per un | nit | | | | |
| | | Calculate all material and labour variance | es for the month of August. 2009. | | | | |
| | | | Aodified ICAI SM, Nov. 2009. Modified MTP Nov. 2022) | | | | |
| | L | (i | · · · · · · · · · · · · · · · · · · · | | | | |

| Ans. | Material Variances |
|------|--|
| | i) Material Cost Variance |
| | = (Standard Quantity × Standard Price) – (Actual Quantity × Actual Price) |
| | $= (2 160 \times 4 \times 10) - (22 800 \times 4 40)$ |
| | = 396400 = 3100320 |
| | -12020(A) |
| | = 13,920 (A) |
| | |
| | ii) Material Price Variance |
| | = Actual Quantity (Standard Price – Actual Price) |
| | = 22,800 Kg (4 - 4.40) |
| | = 9,120 (A) |
| | |
| | iii) Material Usage Variance |
| | = Standard Price (Standard Quantity – Actual Quantity) |
| | = 4 (21,600 - 22,800) |
| | = 4,800 (A) |
| | |
| | Note: unit basis for direct material has been taken as kg. hence, direct material rate is ₹4 per kg. |
| | |
| | Verification |
| | MCV = MPV + MIIV |
| | $13920(\Delta) = 9120(\Delta) + 4800(\Delta)$ |
| | 13,520 (11) - 5,120 (11) + 1,000 (11) |
| | Labour Variances |
| | i) Labour Cost Varianco |
| | (Chan dend Hanne Chan dend Date) (Astro-Hussing Astro-Date) |
| | = (Standard Hour × Standard Rate) – (Actual Hour × Actual Rate) |
| | $= (2,160 \times 2.50 \times 4) - (29,700)$ |
| | = 21,600 - 29,700 = 8,100 (A)ing Education Academy |
| | Pioneer in Developing Concepts |
| | ii) Labour Rate Variance |
| | = Actual Hour (Standard Rate – Actual Rate) |
| | = 5,940 (4 – 5) = 5,940 (A) |
| | -01 |
| | iii) Labour Efficiency Variance |
| | = Standard Rate (Standard Hour – Actual Hour) |
| | = 4 (5,400 – 5,940) = 2,160 (A) |
| | -C ²⁶ |
| | Verification: |
| | LCV = LRV + LEV |
| | 8.100(A) = 5.940(A) + 2.160(A) |
| 9. | The standard cost of a chemical mixture is as follows: - |
| - | i) 40% Material A at ₹20 per kg |
| | ii) 60% Material B at ₹ 30 per kg |
| | iii) A Standard loss of 10% of input is expected in production. The cost records for a period showed |
| | the following usage: |
| | $\frac{1}{100} = \frac{1}{100} = \frac{1}$ |
| | IVJ 90 kg material A at a cost of ₹ 18 per kg |
| | v J 110 kg material B at a cost of ₹ 34 per kg |
| | vi) The quantity produced was 182 kg of good product. |
| | Calculate all material variances. |
| | (ICAI SM, Nov. 2019) |

Calculation of Variances: -Ans. **1)** Material Cost Variance = (Standard cost of Actual output – Actual cost) =(5,257.78-5,360) = ₹102.22 (A) 2) Material Price Variance = (Standard Price – Actual Price) × Actual Quantity Material A $= (20 - 18) \times 90 = 180.00$ (F) $= (30 - 34)) \times 110 = \mathbb{E} 440.00(A)$ Material B Material Price Variance = ₹ 260.00 (A) 3) Material Usage Variance = (Standard Quantity for Actual output – Actual Quantity) × **Standard Price** Material A = $\left(80 \times \frac{182}{180} - 90\right) \times 20$ = ₹ 182.22(A) Material B = $\left(120 \times \frac{182}{180} - 110\right) \times 30$ = ₹ 340.00 (F) Material Usage Variance = ₹ 157.78 (F) Workings: -Standard cost for 180 kg. output A = 80kg ×₹20 = 1600 B = <u>120</u>kg ×₹30 = <u>3600</u> 01863023001 200 20 Less: loss 180 5200 Actual cost for 182 kg. output $A = 90 \text{kg} \times 318 = 1620$ B = <u>110</u>kg × ₹34 = <u>3740</u> 200 coming Education Academy Less: loss 18 Pioneer in Developing 5360 182 Standard cost of actual output = ₹ 5,200 × $\frac{182}{180}$ = ₹5,257.78 10. In a manufacturing company the standard units of production for the year were fixed at 1,20,000 units and overhead expenditures were estimated to be as follows: Particulars Amount (₹) Fixed 12.00.000 Semi-variable (60% expenses are of fixed nature and 40% are of variable nature) 1,80,000 Variable 6,00,000 Actual production during the month of April, 20X1 was 8,000 units. Each month has 20 working days. During the month there was one public holiday. The actual overheads were as follows: **Particulars** Amount (₹) Fixed 1,10,000 Semi-variable (60% expenses are of fixed nature and 40% are of variable) 19,200 48,000 Variable You are required to calculate the following variances for the month of April 20X1: i) Overhead Cost variance ii) Fixed Overhead Cost variance iii) Variable Overhead Cost variance

| | iv) Fixed Overhead Volume variance | | | |
|------|---|-------------------------------|--|-------------------------------|
| | v) Fixed Overhead Expenditure Varia | nce | | |
| | vi) Calendar Variance | | | |
| | | | (Dec. 2021, Modified | MTP Nov. 2019) |
| Ans. | COMPUTATION OF VARIANCES | | | |
| | i) Overhead Cost Variance | = | Absorbed Overheads – Actual Over | heads |
| | | = | (₹87,200 + ₹44,800) - (₹1,21,520 | +₹55,680) |
| | | = | ₹ 45,200 (A) | |
| | ii) Fixed Overhead Cost Variance | = | Absorbed Fixed Overheads – Actua | l Fixed |
| | | | Overheads | |
| | | = | ₹87,200 – ₹1,21,520 | |
| | | = | ₹ 34,320 (A) | |
| | iii) Variable Overhead Cost Variance | = | Standard Variable Overheads for Pi | roduction– |
| | | | Actual Variable Overheads | |
| | | = | ₹ 44,800 – ₹ 55,680 | |
| | | = | ₹10,880 (A) | |
| | iv) Fixed Overhead Volume Variance | = | Absorbed Fixed Overheads – Budge | eted Fixed |
| | | | Uverf | ieads |
| | | = | 3 8/,200 - 31,09,000 | |
| | v) Fired Orierhand Fringenditure Varian | = | X 21,800 (A) Budgeted Fixed Overheads Ac | tual Fired |
| | V) Fixed Overhead Expenditure varian | ice | = Budgeted Fixed Overheads - Ad | de |
| | | | - ₹10.90 x 10.000 units ₹1.21 | us 520 |
| | | | - ₹12,520 (Δ) | 520 |
| | vi) Calendar Variance | = | Possible Fixed Overheads - Budget | ed Fixed |
| | ing Galendar Variance | | Overheads | cuimeu |
| | | = | ₹1.03.550 - ₹1.09.000 | |
| | Grooming Ed | lu c al | ₹ 5,450 (A) | |
| | Pioneer in Do | evelopi | ng ORpts | |
| | Calendar Variance = (Actual days – Bu | Idgete | ed days) x *Standard fixed overhead i | rate per day |
| | *Standard fixed overhead rate per day = | = 13,0 | 8,000/20*12 = ₹ 5450 | |
| | Fixed Overhead Calendar Variance = (19 | 9-20) | x 5450 = 5450(A) | |
| | | AN ^O | | |
| | Working Notes | 10 | | |
| | Fixed Overheads = $\frac{Budgeted Fixed Overhead}{Budgeted Output}$ | $\frac{1}{1}$ = $\frac{1}{1}$ | ₹ 12,00,000 | ₹10 |
| | Fixed Overheads element in Semi-Varia | able (| Overheads i.e. 60% of ₹1.80.000 | ₹1.08.000 |
| | Fixed Overheads - Budgeted Fixed Overhea | ads _ | ₹ 1,08,000 | ₹ 0.90 |
| | Budgeted Output | 1 | ,20,000 units | |
| | Standard Rate of Absorption of Fixed C |)verh | eads per unit $(10 + 0.90)$ | ₹ 10.90 |
| | Fixed Overheads Absorbed on 8,000 ui | nits @ | 0₹10.90 | ₹ 87,200 |
| | Budgeted Variable Overheads | 0 | | ₹ 6,00,000 |
| | Add: Variable element in Semi-Variable | e Ove | rneads 40% of ₹ 1,80,000 | <u>₹ /2,000</u> ₹ (72,000 |
| | I I UTAI BUUGETEO VARIADIE UVERNEADS | eted Va | riable Overheads ₹6.72.000 | ₹ 6,72,000 ₹ C0 |
| | Standard Variable Cost per unit = budge | Budge | $\frac{1}{1,20,000 \text{ units}} = \frac{100,2000}{1,20,000 \text{ units}}$ | ₹5.60 |
| | Standard Variable Overheads for 8,00 | 0 uni | ts @ ₹5.60 | ₹ 44,800 |
| 0 | Budgeted Annual Fixed Overheads (₹ | 12,00 | 0,000 + 60% of ₹ 1,80,000) | ₹13,08,000 |
| | Possible Fixed Overheads = $\frac{Budgeted F}{F}$ | Fixed C | verheads × Actual Davs = [<u>*₹1,09,000</u> × | ₹1,03,550 |
| | Budg | geted D | Days L 20 Days | |
| | 19 Days | | | |

| | *109000= (12,00,000/12)+(1,08,000/12) | | | | | |
|------|---|--|-------------------|--------------------|-----------------------|--|
| | Actual Fixed Overhead | ₹ 1,21,520 | | | | |
| | Actual Variable Overh | eads (₹48,000 + 40% of ₹ | 19,200) | | ₹ 55,680 | |
| 11. | NPX Ltd. Uses standard costing system for manufacturing of its product X, following is the budget | | | | | |
| | data given in relation to | labour hours for manufa | cture of 1 unit o | of Product X: - | | |
| | | Labour | | Hours | Rate (₹) | |
| | Skilled | | | 2 | 6 | |
| | Semi-Skilled | Semi-Skilled | | | 4 | |
| | Un-Skilled | | | 5 | 3 | |
| | Total | | | 10 | | |
| | In the month of January. | 20X1. total 10.000 units | were produced | l following are tl | ne details: | |
| | Labour | Hours | Rate (₹ | a | Amount (₹) | |
| | Skilled | 18.000 | 7 | | 1.26.000 | |
| | Semi-Skilled | 33.000 | 3.5 | | 1.15.500 | |
| | Un-Skilled | 58.000 | 4 | | 2.32.000 | |
| | Total | 1,09,000 | | | 4,73,500 | |
| | | , , | | | , , | |
| | Actual idle hours (abn Skilled: - Semi-Skilled: - Unskilled: - Total Calculate: - | ormal) during the mont 500 700 800 2,000 | :h: - | | | |
| | a) Labour Variances. | | | 20 | | |
| | b) Also show the effect | t on Labour Rate Varianc | e if 5,000 hours | s of Skilled Labo | ur are paid @ ₹5.5 | |
| | per hour and balan | ce were paid @ ₹ 7 per h | ourademy | 35 | | |
| | | Fioneer in Developing Co | icepts | ۵ ۲ (IC | AI SM, May 2019) | |
| Ans. | a) i) Labour Cost Var | riance = (Standard Hou | r × Standard R | ate – Actual Ho | ur × Actual Rate) | |
| | Skilled | 20,000 × 6 – | - 18,000 × 7 | : | = ₹ 6,000(A) | |
| | Semi-Skilled | 30,000 × 4 – | 33,000 × 3.5 | | = ₹ 4,500 (F) | |
| | Unskilled | 50,000 × 3 - | - 58,000 × 4 | = | = ₹ 82,000 (A) | |
| | Total | . ` | | = | <u>= ₹ 83, 500(A)</u> | |
| | <u> </u> | 3 | | | | |
| | ii) Labour Rate Va | riance = (Standard Rat | e – Actual Rate | e) × Actual Hou | r Paid | |
| | Skilled | .6- | - 7) × 18,000 | = | = ₹ 18,000 (A) | |
| | Semi-Skilled | 9 (4 – | 3.5) × 33,000 | = | = ₹ 16,500 (F) | |
| | Unskilled | (3 - | - 4) × 58,000 | = | = ₹ 58,000 (A) | |
| | Total | 9 | | = | ₹ 59, 500 (A) | |
| | iii) Labour Efficier | y cy Variance = (Standar | d Hour – Actua | l Hour worked |) x Standard Rate | |
| | Skilled | $(20\ 0.00\ -17\ 50)$ | $0) \times 6$ | | 15.000 (F) | |
| | Semi-Skilled | (30.000 - 32.30 | $0) \times 4$ | = ₹ | 9.200 (A) | |
| | Unskilled | (50,000 - 57,20 | $0) \times 3$ | = ₹ | 21.600 (A) | |
| | Unskilled (50,000 – 57,200) × 3 = | | | — v | | |
| | Total 🔊 | | | =₹ | 15.800 (A) | |
| | Total | | | <u>=₹</u> | 15,800 (<u>A)</u> | |



| | workers. The actual wages paid were at the rate of ₹ 75, ₹ 60 and ₹ 52 per hour respectively. Four | | | | | |
|------|--|---------------------------------|-------------------------|-----------------------------------|-----------------------|--|
| | hours were lost due | to machine breakd | own and 1,600 units | s were produced. | | |
| | Calculate the follow | ing variances showi | ng clearly adverse (| A) or favourable (F) | | |
| | i) Labour Cost Var | riance | | | | |
| | ii) Labour Rate Variance | | | | | |
| | iii) Labour Efficiency Variance | | | | | |
| | iv) Labour Idle Tim | ie Variance | | | | |
| | v) Labour Mix Var | iance | | | | |
| | | | | (Modified in ICA | I SM & Nov. 2012) | |
| Ans. | Labour Cost Vari | ance = (SH × SR) – (| AH × AR) | | | |
| | | = (1,14,400 - | 1,54,400) | | | |
| | | = ₹40,000 (A) | | | | |
| | ii) | | | | | |
| | La | abour Rate Variance | e = AH (SR – AR) or (| $(AH \times SR) - (AH \times AF)$ | R) | |
| | Skilled | | ₹1,12,000 - ₹1,20 | 0,000 | ₹8,000 (A) | |
| | Semi-skilled | | ₹26,000 – ₹24 | 4,000 | ₹2,000 (F) | |
| | Unskilled | | ₹10,000 – ₹10 | 0,400 | ₹400 (A) | |
| | | | | | ₹6,400 (A) | |
| | | | | | | |
| | iii) | | | | | |
| | Labo | our Efficiently Varia | nce = SH (SH – AH) | or (SR × SH) – (SR × | AH) | |
| | Skilled | | ₹67,200 - ₹1,12 | 2,000 | ₹44,800 (A) | |
| | Semi-skilled | | ₹31,200 – ₹2 | 6,000 | ₹5,200 (F) | |
| | Unskilled | | ₹16,000 – ₹10 | 0,000 | ₹6,000 (F) | |
| | | | | -35 | ₹33,600 (A) | |
| | | | | 201 | | |
| | iv) Labour Mix Va | riance | | 20 | | |
| | = Total Actual T | ime Worked (hours |) × (Average Standa | rd Rate per hour of | Standard Gang Less | |
| | Average Standa | rd Rate per hour of | Actual Gang) | ~ | | |
| | on the basis of h | 10urs worked | ×₹70+260 hrs ×₹6E+190 | $brs \lor F = 0$ | | |
| | = 1,980 hour × (| $\frac{1,440 hrs.}{1,760 hrs.}$ | 1,980 hrs. |) | | |
| | = ₹4,500 (A) | | | | | |
| | v) | | - Office | | | |
| | | Labour Idle ti | me variance = Idle ti | ime × Std. rate | | |
| | Skilled | | 6 (40 – 36) × 40 |) × 70 | ₹11,200 (A) | |
| | Semi-skilled | | 💉 (40 – 36) × 10 |) × 65 | ₹2,600 (A) | |
| | Unskilled | | (40 – 36) × 5 | 5 × 50 | ₹1,000 (A) | |
| | | | | | ₹14,800 (A) | |
| | | ×S | | | | |
| | Working Notes: | | | | | |
| | Category of | SH* × SR | AH@ × SR | AH@ × AR | RSH [#] × SR | |
| | workers | 8 | | | | |
| | Skilled 🔊 | 960 × ₹ 70 = | 1,600 × ₹70 = | 1,600 × ₹75 = | 1,200 × ₹70 = | |
| | 25 | ₹67,200 | ₹1,12,000 | ₹1,20,000 | ₹84,000 | |
| | Semi-skilled | 480 × ₹65 = | 400 × ₹65 = | 400 × ₹60 = | 600 × ₹65 = | |
| | 54 | ₹31,200 | ₹26,000 | ₹24,000 | ₹39,000 | |
| | Unskilled | 320 × ₹50 = | 200 × ₹50 = | 200 × ₹52 = | 400 × ₹50 = | |
| | | ₹16,000 | ₹10,000 | ₹10,400 | ₹20,000 | |
| | Total | 1,14,400 | 1,48,000 | 1,54,400 | 1,43,000 | |

| | *Actual hours produced × | |
|------|---|---------------------------------|
| | Total Std.labour hours | |
| | sta. hrs. for actual output are calculated as follows: | |
| | Skilled = $1,200 X \frac{2,000}{2,000} = 960 hours$ | |
| | Semi-skilled = $600 X \frac{1,600}{2,000} = 480 hours$ | |
| | Unskilled = $400 X \frac{1,600}{2,000} = 320 hours$ | |
| | @ Actual No. of workers × 40 hours | |
| | # Actual hrs. worked $\times \frac{Std.hrs}{Total hrs (Std.)}$ | |
| 13. | Premier Industries has a small factory where 52 workers are emplo | oyed on an average for 25 days |
| | a month and they work 8 hours per day. The normal down time is | 15%. The firm has introduced |
| | standard costing for cost control. Its monthly budget for November, | 20X1 shows that the budgeted |
| | variable and fixed overhead are ₹ 1,06,080 and ₹ 2,21,000 respectiv | vely. |
| | | |
| | The firm reports the following details of actual performance for No | ovember, 20X1, after the end of |
| | the month: - | |
| | Actual hours worked | 8,100 hrs. |
| | Actual production expressed in standard hours | 8,800 hrs. |
| | Actual Variable Overheads | ₹ 1,02,000 |
| | Actual Fixed Overheads | ₹ 2,00,000 |
| | You are required to Calculate: - | |
| | a) Variable Overhead Variances: - | |
| | i) Variable Overhead expenditure variance. | |
| | ii) Variable overhead efficiency variance. | |
| | Our anning Education Assol | |
| | b) Fixed Overhead Variances: J Education Academy | |
| | i) Fixed overhead budget variance. | 1 |
| | ii) Fixed overhead capacity variance. | Cor. |
| | iii) Fixed overhead efficiency variance. | |
| | a) Control Paties: | |
| | i) Conscitutatio | |
| | i) Efficiency ratio | |
| | iii) Activity ratio | |
| | | (Ian 2021. May 2001) |
| Ans. | i) Computation of variable overhead Variances: - | 0 |
| | a) Variable overhead expenditure variance = Revised Standar | d variable overheads- |
| | ✓ Actual variable overheads | |
| | ✓ Variable overhead expenditure variance = 1,05,600 - 1 | 1,02,000 — |
| | ✓ Variable overhead expenditure variance = ₹3,600 (F) | |
| | NO. | |
| | b) Variable overhead efficiency variance = Revised standard | overheads – Actual recovered |
| | overheads | |
| | ✓ Variable overhead efficiency variance = $1,05,600 - 8$ | 3,100 × 12 |
| | Yariable overhead efficiency variance = ₹ 8,400 (A) | |
| | 1 Ser | |
| | | |

•

| | Working Notes: - | | | | |
|-----|---|--|--|--|--|
| | ✓ Variable overhead recovery rate = $\frac{Budgeted varia}{T}$ | ble overheads | | | |
| | Estimated pro | duction hours | | | |
| | = 10400 | hours | | | |
| | \checkmark Normal down time = 15% of 10.400 = 1.560 h | ours | | | |
| | ✓ Budgeted available hours = 10.400 hours - 15 | 60 hours = 8.840 hours | | | |
| | ✓ Variable overhead recovery rate = $\frac{1,06,080}{1}$ = ₹12 Per labour hour | | | | |
| | $\frac{106080}{8,840}$ | | | | |
| | ✓ Revised Variable standard overhead = $\frac{180,000}{8,840}$ > | < 8,800 = ₹ 1,05,600 | | | |
| | ii) Computation of fixed overhead variance: - | | | | |
| | a) Fixed overhead budgeted variance = Budgeted F | Fixed overhead— Actual Fixed overhead | | | |
| | ✓ Fixed overhead budgeted variance = $2,21,00$ | 00 - 2,00,000 | | | |
| | ✓ Fixed overhead budgeted variance = ₹21,00 | 0(F) | | | |
| | b) Fixed overhead capacity variance = (Actual hour | rs – Budgeted hours) $	imes$ Recoveryrate | | | |
| | ✓ Fixed overhead capacity variance = $(8100 > $ | (25) – (8,840 × 25) | | | |
| | ✓ Fixed overhead capacity variance = ₹ 18,50 | 0 (A) | | | |
| | c) Fixed overhead efficiency variance = (Standard | hours — Actual hours) × Recovery rate | | | |
| | ✓ Fixed overhead efficiency variance = $(8,80)$ | 0 – 8,100) × 25 | | | |
| | ✓ Fixed overhead efficiency variance = $₹ 17,5$ | 500 (F) | | | |
| | | | | | |
| | Working Notes: - | | | | |
| | $\checkmark \text{ Recovery rate} = \frac{\text{Budgeted fixed overheads}}{\text{Budgeted hours}}$ | | | | |
| | Pocovory rate $\frac{2,21,000}{2} = $ \neq 25 por hour | | | | |
| | • Recovery rate $-\frac{1}{8,840} = \sqrt{25}$ per nour | | | | |
| | Pioneer in Developing Concepts | -1 ⁴ | | | |
| | III) Computation of control ratios: - | 200 | | | |
| | a) Capacity Ratio = $\frac{1}{Budgeted Hours} \times 100$ | -51 | | | |
| | Capacity Ratio= $\frac{8,100}{8,840} \times 100 = 91.6289\%$ | 49 ³⁷ | | | |
| | b) Efficiency Ratio = $\frac{\text{Required time as per standard}}{\text{Actual hours worked}} \times 100$ | 9 ⁵ | | | |
| | Efficiency Ratio = $\frac{8800}{8100} \times 100 = 108.6419\%$ | offi | | | |
| | c) Activity Ratio= $\frac{\text{Standard Hours}}{\text{Budgeted Hours}} \times 100$ | | | | |
| | Activity= $\frac{8,800}{8,840} \times 100 = 99.5475\%$ | | | | |
| 14. | Following data is available for ABC Ltd.: | | | | |
| | Standard working hours | 8 hours per day of 5 days per Week | | | |
| | Maximum Capacity | 60 employees | | | |
| | Actual working | 50 employees | | | |
| | Actual nours expected to be worked per four week | 8,000 hours | | | |
| | Standard nours expected to be earned per four week | 9,600 hours | | | |
| | Actual nours worked in the four week period | /,500 nours | | | |
| | Standard nours earned in the four week period | 8,800 nours | | | |
| | The related period is of four weeks Calculate the following | g Batios · | | | |
| | i) Efficiency Ratio | 5 Natios . | | | |
| | | | | | |
| | N. | | | | |
| | Standard working hours Maximum Capacity Actual working Actual hours expected to be worked per four week Standard hours expected to be earned per four week Actual hours worked in the four week period Standard hours earned in the four week period The related period is of four weeks. Calculate the following i) Efficiency Ratio | 8 hours per day of 5 days per Week 60 employees 50 employees 8,000 hours 9,600 hours 7,500 hours 8,800 hours g Ratios : | | | |

| | ii) Activity Ratio | | | | | | | | |
|-----------------------|--|------------------------------|-----------------|--------------------|--|--|--|--|--|
| | iii) Standard Capacity Usage Ratio | | | | | | | | |
| | iv) Actual Capacity Usage Ratio | | | | | | | | |
| | v) Actual Usage of Budgeted Capacity Ratio | 0 | | | | | | | |
| | | (May 2 | 019, Modified | MTP Nov. 2019) | | | | | |
| Ans. | i) Efficiency Ratio: | | | - | | | | | |
| | $=\frac{\text{Standard Hours}}{100} \times 100$ | | | | | | | | |
| | Actual Hours | | | | | | | | |
| | $\frac{0.000 \text{ hours}}{7,500 \text{ hours}} \times 100 = 117.33\%$ | | | | | | | | |
| | ii) Activity Ratio: | | | | | | | | |
| | $-\frac{\text{Standard Hours}}{100} \times 100$ | | | | | | | | |
| | Budgeted Hours | | | | | | | | |
| | $\frac{8,800 \text{ hours}}{8,000 \text{ hours}} \times 100 = 110\%$ | | | | | | | | |
| | iii) Standard Capacity Usage Ratio: | | | | | | | | |
| | Budgeted Hours | 100 | | | | | | | |
| | Maximum possible Hours in the budgeted period | | | | | | | | |
| | $\frac{1}{9,600 \text{ hours}} \times 100 = 83.33\%$ | | | | | | | | |
| | iv) Actual Capacity Usage Ratio: | | | | | | | | |
| | Actual Hours Worked ×100 | | | | | | | | |
| | 7,500 hours 100 70 1250 | | | | | | | | |
| | $\frac{7,500 \text{ Hours}}{9,600 \text{ hours}} \times 100 = 78.125\%$ | | | | | | | | |
| | v) Actual Usage of Budgeted Capacity Ratio: | 200 | | | | | | | |
| | $\frac{\text{Actual working Hours}}{\text{Budgeted Hours}} \times 100$ | 301 | | | | | | | |
| | $\frac{7,500 \text{ hours}}{100} \times 100 = 93.75\%$ | tiehAcademy | | | | | | | |
| | 8,000 hours | a concepts | | | | | | | |
| | Working Notes: | | | | | | | | |
| | 1) Maximum Capacity in a budget period | | | | | | | | |
| | $= 60 \text{ Employees} \times 8 \text{ Hrs.} \times 5 \text{ Days} \times 4 \text{ We}$ | eeks = 9,600 Hrs. | | | | | | | |
| | 2) Budgeted Hours (Hrs) | -l 0.000 IL | | | | | | | |
| | = 50 Employees \times 8 Hrs. \times 5 Days \times 4 We | eeks = 8,000 Hrs. | | | | | | | |
| | 3) Actual Hrs. = $7,500$ Hrs. (given) | Ú | | | | | | | |
| 4 5 | 4) Standard Hrs. for Actual Output = 8,800 | HFS. | T | | | | | | |
| 15. | ABC Ltd. Had prepared the following estimat | Cuentity | January: - | (王) | | | | | |
| | Paruculars | | | (1) | | | | | |
| | Material-A | 800 kg. | 90.00 | 72,000 | | | | | |
| | Material-D Skilled Johour | 000 kg. | | 36,000 | | | | | |
| | Skilled labour | 1,000 hours 800 hours | 75.00 44.00 | 75,000 | | | | | |
| A | | 000 110415 | 11.00 | 55,200 | | | | | |
| and the second second | i) Normal loss was expected to be 10% of | f total input materials | and an idle lab | oour time of 5% of | | | | | |
| | expected labour hours was also estimation at the end of the month the following in | tea. Normation has been a | ollected from t | he cost accounting | | | | | |
| | department. | normation has been c | | | | | | | |
| | iii) The company has produced 1,480 kg. fi | inished product by us | ing the followi | ngs: - | | | | | |

| | Particulars | | Quantity | Rate (₹) | (₹) | | |
|----|-----------------|--|--|--------------------|---------------------|--|--|
| | Material-A | | 900 kg. | 86.00 | 77,400 | | |
| | | Material-B | 650 kg. | 65.00 | 42,250 | | |
| | | Skilled labour | 1,200 hours | 71.00 | 85,200 | | |
| | | Unskilled labour | 860 hours | 46.00 | 39,560 | | |
| | | You are required to Calculate: - | | | | | |
| | | a) Material Cost Variance; | | | | | |
| | | b) Material Price Variance; | | | | | |
| | | c) Material Mix Variance: | | | | | |
| | | d) Material Yield Variance: | | | | | |
| | | e) Labour Cost Variance; | | | | | |
| | | f Labour Efficiency Variance and | | | | | |
| | | g) Labour Yield Variance. | | | | | |
| | | | (May RT | P 2020, Modifi | ed RTP May 2023) | | |
| | Ans. | a) Material Cost Variance (A+B) = {(S | Standard Quantity × Sta | andard Price) – | (Actual Quantity × | | |
| | | Actual Price)} | | | | | |
| | | $= \{1, 2\}$ | ((4 stud) - 1, 19, 650) = 7 | ,250 (F) | (Astual Quantity) | | |
| | | b) Material Price Variance $(A+B) =$ | {(Actual Quantity × Sta | andard Price) – | (Actual Quantity × | | |
| | | Actual Price) | (1 20 000 1-10 (EO) | - 2EO (E) | | | |
| | | - 1 | [1,20,000 - 1,19,050] | – 550 (F) | | | |
| | | c) Material Mix Variance (A+ | +B) = {(Revised Standard Quantity × Standard Price) – | | | | |
| | | (Actual Quantity × Standard Price)} | } | | | | |
| | | 0 | = {1,19,580 - 1,2 | $0,000\} = 420(A)$ | () | | |
| | | d) Material Yield Variance | $(A+B) = \{(Stan)$ | dard Quantity > | < Standard Price) – | | |
| | | (Revised Standard Quantity × Stand | lard Price)}ademy | | | | |
| | | Deneer in Dev | $\frac{\text{Concepts}}{\text{Concepts}} = \{1, 26, 9\}$ | 00 - 1,19,580} | = 7,320 (F) | | |
| | | Working Notes | | | | | |
| | | Material Variances: - | | | | | |
| | | Computation of Standard Quantity (W | $(N1) \times Standard Prior$ | ce | | | |
| | | - Call | | | | | |
| | | A = 940 kg × ₹ 90 = 84,600 | | | | | |
| | | B = <u>705 kg</u> × ₹ 60 = <u>42,300</u> | | | | | |
| | | 1645 kg 1,26,900 | | | | | |
| | _ | Computation of Davised Standard Oue | ntity (WN 2) v Stan | dand Drico | | | |
| | 2 | Computation of Revised Standard Qua | inuty (w.n2) × Stand | uaru Price | | | |
| | S. | A = 886 kg × ₹ 90 = 79,740 | | | | | |
| .8 | 2 ¹¹ | B = <u>664 kg</u> × ₹ 60 = <u>39,840</u> | | | | | |
| 63 | | 1550 kg 1,19,580 | | | | | |
| ~ | | Computation of Actual Quantity × Star | ndard Price | | | | |
| | | A = 900 kg × ₹ 90 = 81.000 | | | | | |
| | | $B = 650 \text{ kg} \times ₹ 60 = 39.000$ | | | | | |
| | | 1550 kg 1.20.000 | | | | | |
| | | | | | | | |

Computation of Actual Quantity × Actual Price A = 900 kg × ₹ 86 = 77,400 $B = 650 \text{ kg} \times 365 = 42,250$ 1550 kg 1,19,650 W.N-1: -Computation of Standard Quantity : - $\left(\frac{800 \text{ kg}}{0.9 \times 1,400 \text{ kg}} \times 1,480 \text{ kg.}\right) = 939.68 \text{ or } 940 \text{ kg.}$ ✓ Material A - $\left(\frac{600 \text{ kg.}}{0.9 \times 1,400 \text{ kg.}} \times 1,480 \text{ kg}\right) = 704.76 \text{ or } 705 \text{ kg.}$ Material B -WN-2: -Computation of Revised Standard Quantity: -Material A - $\left(\frac{800 \text{ kg}}{1,400 \text{ kg}} \times 1,550 \text{ kg}\right) = 885.71 \text{ or } 886 \text{ kg.}$ ✓ Material B - $\left(\frac{600 \text{ kg}}{1,400 \text{ kg}} \times 1,550 \text{ kg}\right) = 664.28 \text{ or } 664 \text{ kg}.$ Please confirm this working note should be shifted above or not e) Labour Cost Variance (Skilled+ Unskilled) = {(Standard Hours \times Standard Rate) – (Actual Hours \times Actual Rate)} $= \{1,22,992 - 1,24,760\} = 1,768(A)$ **f)** Labour Efficiency Variance (Skilled + Unskilled) = {(Standard Hours × Standard Rate) – (Actual Hours × Standard Rate)} $= \{1,22,992 - 1,27,840\} = 4,848$ (A) **g)** Labour Yield Variance (Skilled + Unskilled) $= \{(\text{Standard Hours} \times \text{Standard Rate}) - (\text{Revised Standard Hours} \times \text{Standard Rate})\}$ $= \{1,22,992 - 1,26,104\} = 3,112$ (A) ation Academy Labour Variances: -**Computation of Standard Hours(W.N.-3) × Standard Rate** ŝ Skilled = $1116 \text{ hrs} \times 375 = 83,700$ Unskilled = 893 hrs $\times \mathbb{R}$ 44 = 39,292 1,22,992 2,009 hrs Computation of Revised Standard Hours (W.N.-4) × Standard Rate Skilled = 1144 hrs × ₹ 75 = 85,800 Unskilled = 916 hrs $\times \gtrless 44 = 40,304$ 2.060 hrs 1,26,104 **Computation of Actual Hours × Standard Rate** Skilled = 1200 hrs × ₹ 75 = 90,000 Unskilled = 860 hrs \times ₹44 = 37,840 1,27,840 2,060 hrs **Computation of Actual Hours × Actual Rate** Skilled = 1200 hrs × ₹ 71 = 85,200 Unskilled = 860 hrs × ₹ 46 = 39.5602,060 hrs 1,24,760

| \checkmark Skilled labour - $\left(\frac{0.55 + 3000 hours}{3000 hours} \times 1,480 kg.\right) = 1,115.87 or 1,116 hours\checkmark Unskilled labour - \left(\frac{0.500 + 3000 hours}{3000 hours} \times 1,480 kg.\right) = 892.69 or 893 hours.WX.4: Revised Standard Hours ::\checkmark Skilled labour - \left(\frac{1000 hours}{3000 hours} \times 2,060 hours) = 1,144.44 or 1,144 hours\checkmark Unskilled labour - \left(\frac{1000 hours}{1,200 hours} \times 2,060 hours) = 915.56 or 916 hours16. The following data has been collected from the cost records of a unit for computing the various fixedoverhead variances for a period: -Number of budgeted working days25Budgeted man-hours per day6,000Output (hudgeted) per man-hour (in units)1Fixed overhead to at a budgeted₹1,50,000Actual numher of working days27Actual numher of working days0.9Actual numher of working days0.9Actual numher of working days0.9Actual numher of working days0.9Actual numher variance,0.9O Fixed Overhead variances: -a)Bypenditure Variance,0.9O Fixed Overhead Volume Variance = Standard fixed overhead - Actual fixed overhead= ₹1,53,090 - ₹1,56,000 = ₹2,910 (A)Working Note:For Fixed Overhead Variance = $1,56,000Standard fixed overhead for the period = 1,50,000Standard fixed overhead for the period = 1,50,000$ | | WN-3: -Computation of Standard Hours: - | | | | | | | |
|---|--------|--|-------------------------------------|---|--------------------------|---------------------|---------------------------------|--|--|
| ✓ Unskilled labour - $\left(\frac{392,400 hours}{0.00x1,400 kg} \times 1,480 kg\right) = 892,69 or 893 hours. W.M.4: Revised Standard Hours:: ✓ Skilled labour - \left(\frac{300 hours}{1,400 hours} \times 2,060 hours\right) = 1,144.44 or 1,144 hours ✓ Unskilled labour - \left(\frac{300 hours}{1,400 hours} \times 2,060 hours\right) = 915.56 or 916 hours 16. The following data has been collected from the cost records of a unit for computing the various fixed overhead variances for a period: Number of budgeted working days 25 Budgeted man-hours per day 6,000 Output (budgeted) per man-hour (in units) 1 Fixed overhead cost as budgeted ₹ 1,50,000 Actual number of working days 27 Actual number of wariances: 0.9 Actual number of wariance 0.9 D' volume Variance 0.9 Actual fixed overhead variances: - 3 Pixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead = ₹1,55,000 € 6,000 (A) b Volume Variance Cl(CA1 SM, Modified MTP May 2022) Ans. a) Fixed Overhead Volume Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹1,50,000 = ₹3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹1,50,000 = ₹2,910 (A) Working Note: For Fixed Overhead Variance = Standard $ | | ✓ Skilled labour - $\left(\frac{0.95 \times 1,000 \text{ hours}}{0.90 \times 1,400 \text{ kg}} \times 1,480 \text{ kg.}\right) = 1,115.87 \text{ or } 1,116 \text{ hours}$ | | | | | | | |
| W.N.4: - Revised Standard Hours: - Skilled labour - $(\frac{1000}{1,000} hours) \times 2,060 hours) = 1,144.44 or 1,144 hours$Unskilled labour - $(\frac{1000}{1,000} hours) \times 2,060 hours) = 915.56 or 916 hours$ 16.The following data has been collected from the cost records of a unit for computing the various fixed overhead variances for a period: -Number of budgeted man-hours per day6,0000 utput (budgeted) per man-hour (in units)17.Number of budgeted working days25Budgeted man-hours per day6,3000 Actual number of working days27.Actual number of working days274 Actual number of working days276,3000 actual num-hours per day28.6,3000 Actual output per man-hour (in-units)0.94 Actual fixed overhead incurred₹ 1,56,00028.a) Expenditure Variance••••••••••••••••••••Nodified MTP May 2022)Ans.a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead= ₹1,55,000 = ₹ 0,000 (A)•9.Fixed Overhead Kapenditure Variance = Standard fixed overhead - Actual fixed overhead= ₹1,53,000 = ₹ 1,50,000 = ₹ 0,900 (F)•17.Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead= ₹1,53,000 = ₹ 1,50,000 = ₹ 0,900 (F)17.•Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead= ₹ 1,53,000 = ₹ 1,50,000 = ₹ 0,500018.Budgeted fixed overhead for production (Standard output for actual time × Standard FixedOverhead fixed overhead for production (Standard output for actual time × Standard FixedOverhead p | | 🗸 Unskil | led labour - | $\left(\frac{0.95\times800 \text{ hours}}{0.90\times1,400 \text{ kg}}\right)$ | × 1,480 kg |) = 892.69 or 893 | 3 hours. | | |
| | | W.N.4: -Revised Standard Hours: - | | | | | | | |
| \checkmark Unskilled labour - $\left(\frac{1000 hours}{1,000 hours} \times 2,060 hours\right) = 915.56 or 916 hours16.The following data has been collected from the cost records of a unit for computing the various fixed overhead variances for a period: -Number of budgeted working days25Budgeted man-hours per day6,000Output (budgeted) per man-hour (in units)1Fixed overhead cost as budgeted$1,50,000Actual number of working days27Actual number of working days27Actual output per man-hour (in-units)0.9Actual output per man-hour (in-units)0.9Actual fixed overhead variances: -a)a) Expenditure Variance[ICAI SM, Modified MTP May 2022]Ans.a) Fixed Overhead Variance = Budgeted fixed overhead - Actual fixed overhead= 31,50,000 - 31,56,000 = 30,000 (A)b) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead= 31,53,090 - 31,56,000 = 32,910 (A)Working Note:For Fixed Overhead for the period = 1,50,000Standard fixed overhead - Actual fixed overhead= 31,53,090 - 31,56,000 = 32,910 (A)Working Note:For Fixed Overhead for production (Standard output for actual time × Standard Fixed Overhead for period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead period = 1,50,000Standard fixed overhead and actual particulars for April, 20X1, are as follows: -Image: Standard fixed overhead and actual particulars for April, 20X1, are as follows: -Standard fixed overhead and actual particulars for April, 20X1, are as follows: -Image:$ | | ✓ Skilled | labour - $\left(\frac{1}{1}\right)$ | $\frac{000 \text{ hours}}{800 \text{ hours}} \times 2,060$ | 0 hours = | = 1,144.44 or 1,14 | 4 hours | | |
| 16. The following data has been collected from the cost records of a unit for computing the various fixed overhead variances for a period Number of budgeted working days 25 Budgeted man-hours per day 6,000 Output (budgeted) per man-hour (in units) 1 Fixed overhead cast a budgeted ₹ 1,50,000 Actual number of working days 27 Actual number of working days 27 Actual number of working days 27 Actual output per man-hour (in-units) 0.9 Actual output per man-hour (in-units) 0.9 Actual fixed overhead variances: - a) By penditure Variance (ICAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead ± 1,50,000 = 1,56,000 = 4 (5,000 (A) b) b) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = 1,53,090 - ₹ 1,50,000 = ₹ 3,090 (P) c) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹ 1,56,000 = ₹ 2,910 (A) Working Note: For Fixed Overhead for the period = 1,50,000 Budgeted fixed overhead or the period = 1,50,000 Standard fixed overhead for the period = 1,50,000 Standard fixed overhead for the period = 1,50,000 Sta | | ✓ Unskil | led labour - | $\left(\frac{800 \text{ hours}}{1,800 \text{ hours}} \times 2\right)$ | 060 hours | = 915.56 or 916 | 6 hours | | |
| overhead variances for a period: - Number of budgeted working days 25 Budgeted man-hours per day 6,000 Output (budgeted) per man-hour (in units) 1 Fixed overhead cost as budgeted \Re 1,50,000 Actual number of working days 27 Actual number of working days 27 Actual number of working days 0.9 Actual output per man-hour (in-units) 0.9 Actual fixed overhead incurred \Re 1,56,000 Calculate fixed overhead variances: a) Expenditure Variance b) Volume Variance, c) Fixed Cost Variance. (ICAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead = \Re ,50,000 - \Re ,56,000 = \Re ,6,000 (Å) b) Fixed Overhead Volume Variance = Standard fixed overhead - Actual fixed overhead = \Re ,53,090 - \Re ,15,0,000 = \Re ,2090 (F) c) Fixed Overhead Variance = Standard fixed overhead - Budgeted fixed overhead = \Re ,53,090 - \Re ,15,0,000 = \Re ,2900 (F) c) Fixed Overhead Variances: Actual fixed overhead for the period = 1,50,000 Budgeted fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × { \Re ,50,000 + 1,50,000 units} = \Re ,53,090 (F) 17. JK. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg of NXE, 125 kg, of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg, of NXE. The standard and actual particulars for April, 20X1, are as follows: - $\frac{Raw materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased \frac{Kg}{Raw Materials Mix} (%) \frac{Varice per kg}{Raw Materials Purchased} \frac{Kg}{Raw Materials Purchased} \frac{Kg}{Raw Materials Purchased} \frac{Rg}{Raw Materials Mix} (%) Price per kg. Raw Materials Purchased \frac{Raw Materials Mix}{Raw Materials} Mix} (%) Purce Purce Mix Price per kg. Raw Materials Purchased \frac{Raw}{Raw Materials} Mix} (%) Purce purce Mix Materials Purchased Mix Materials Purchased Mix Materials} Purchased Mix Materials} Purchased Mix Materials Purchased Mix Materials} Purcha$ | 16. | The following | data has be | en collected from | m the cost | records of a unit f | for computing the various fixed | | |
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| Actual man-hours per day6,300 Actual output per man-hour (in-units)0.9 Actual fixed overhead incurredActual fixed overhead variances: - a)Expenditure Variance $₹$ 1,56,000Calculate fixed overhead variances: - | | Actual numb | er of worki | ng days | | | 27 | | |
| Actual output per man-hour (in-units) 0.9 Actual fixed overhead incurred ₹ 1,56,000 Calculate fixed overhead variances: - a) B. Expenditure Variance b) Volume Variance, (CAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead – Actual fixed overhead = ₹1,50,000 = ₹ 0,000 (A) b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead = ₹1,53,090 - ₹ 1,56,000 = ₹ 3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = ₹1,53,090 - ₹ 1,56,000 = ₹2,910 (A) Working Note: For Fixed Overhead S Variances: Actual fixed overhead for production (Standard output for actual time × Standard Fixed Overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ± 1,50,000 unit5) = ₹1,53,090 17. JK. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Materials Mix (%) Price per Mix Raw Materials Purchased (kg.) Materials Mix (%) Price per kg. Raw Materials Purchased (kg.) A <td< th=""><th></th><th>Actual man-</th><th>hours per da</th><th>ay</th><th></th><th></th><th>6,300</th></td<> | | Actual man- | hours per da | ay | | | 6,300 | | |
| Actual fixed overhead incurred ₹ 1,56,000 Calculate fixed overhead variances: - a) Expenditure Variance b) Volume Variance, c) Fixed Cost Variance. (ICAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead = ₹1,50,000 = ₹ 6,000 (A) b) Fixed Overhead Volume Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹ 1,50,000 = ₹3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹ 1,56,000 = ₹2,910 (A) Working Note: For Fixed Overhead for the period = 1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 + 1,50,000 units) = ₹1,53,090 17. I.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Image: Standard Mix (%) kg. (*) (*) (kg.) (kg.) (*) (kg.) (kg.) (*) (kg.) (*) (kg.) (*) (*) <td< th=""><th></th><th>Actual outpu</th><th>it per man-h</th><th>iour (in-units)</th><th></th><th></th><th>0.9</th></td<> | | Actual outpu | it per man-h | iour (in-units) | | | 0.9 | | |
| Calculate fixed overhead variances: -a)Expenditure Varianceb)Volume Variance,c)Fixed Cost Variance.(ICAI SM, Modified MTP May 2022)Ans.a)Fixed Overhead Expenditure Variance = Budgeted fixed overhead – Actual fixed overhead= 1,50,000 = ₹ 6,000 (A)b)b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead= 1,53,090 = ₹ 1,50,000 = ₹ 3,090 (F)c)Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead= ₹1,53,090 = ₹ 1,56,000 = ₹3,090 (F)c)For Fixed Overheads Variances:Actual fixed overhead Variances:Actual fixed overhead for the period = 1,50,000Standard fixed overhead for the period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard FixedOverhead per unit)(6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09011.50, diamaterials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg of NXE. The standard and actual particulars for April, 20X1, are as follows: -Naterials Mix (%) Price per Mix Price per kg. Raw Materials PurchasedMix Young Colspan="2">QuantityMix Price per kg. Raw Materials PurchasedActual Standard Mix (%) Price per kg. Raw Materials Purchased< | | Actual fixed | overhead in | curred | | | ₹ 1,56,000 | | |
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| b) Volume Variance, c) Fixed Cost Variance. (ICAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead = ₹1,50,000 - ₹1,50,000 = ₹0,000 (A) b) Fixed Overhead Volume Variance = Standard fixed overhead - Budgeted fixed overhead = ₹1,53,090 - ₹1,50,000 = ₹3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹2,910 (A) Working Note: For Fixed Overhead incurred = ₹1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Image: Colored Standard Mix (%) Price per Mix Price per kg Raw Materials Purchased (%) (%) (%) (%) (%) (%) (%) (%) A 50 20 5 20 6 1,200 888 888 0402 support@escholars.in | | a) Expendit | ure Varianc | e | | | | | |
| c) Fixed Cost Variance. (ICAI SM, Modified MTP May 2022) Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead – Actual fixed overhead = ₹1,50,000 = ₹1,56,000 = ₹ 6,000 (A) b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹ 3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹2,910 (A) Working Note: For Fixed Overhead incurred = ₹1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Image: the standard and actual particulars for April, 20X1, are as follows: - Image: the standard and actual particulars for April, 20X1, are as follows: - Image: the standard and actual particulars for April, 20X00 B 30 10 20 8 A 50 20 6 1,200 Image: the standard support@escholars.in 21 | | b) Volume V | Variance, | | | | | | |
| (ICAI SM, Modified MTP May 2022)Ans.a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead – Actual fixed overhead $= \exists 1, 50, 000 = \exists 6, 000 (A)$ b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead $= \exists 1, 53, 090 = \exists 1, 50, 000 = \exists 3, 090 (F)$ c)c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead $= \exists 1, 53, 090 = \exists 1, 56, 000 = \exists 2, 910 (A)$ Working Note:For Fixed Overheads Variances:Actual fixed overhead for the period = 1, 50, 000Budgeted fixed overhead for the period = 1, 50, 000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit)(6,300 hrs × 27 days × 0.9) × (₹1,50,000 ± 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -RawStandardA 50206217.00B888 88 0402support@escholars.in | | c) Fixed Cos | st Variance. | | | | | | |
| Ans. a) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead = ₹1,50,000 - ₹1,56,000 = ₹6,000 (A) b) Fixed Overhead Volume Variance = Standard fixed overhead - Budgeted fixed overhead = ₹1,53,090 - ₹1,50,000 = ₹3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead - Actual fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹2,910 (A) Working Note: For Fixed Overheads Variances: Actual fixed overhead for the period = 1,50,000 Budgeted fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg, of NXE, 125 kg, of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg, of NXE. The standard and actual particulars for April, 20X1, are as follows: - Raw Standard Actual Quantity Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased A 50 20 60 21 5,000 8 2,000 B 30 10 20 8 2,000 1,200 1,200 1,200 888 888 0402 | | - | | | | (ICAI S | SM, Modified MTP May 2022) | | |
| $= \overline{1}, 50,000 - \overline{1}, 56,000 = \overline{1}, 60,00 (A)$ b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead = $\overline{1}, 53,090 - \overline{1}, 50,000 = \overline{3},090 (F)$ c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = $\overline{1}, 53,090 - \overline{1}, 1, 56,000 = \overline{3},2,910 (A)$ Working Note: For Fixed Overheads Variances: Actual fixed overhead incurred = $\overline{1}, 56,000$ Budgeted fixed overhead for the period = $1, 50,000$ Standard fixed overhead for the period = $1, 50,000$ Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) ($6,300 \text{ hrs } \times 27 \text{ days } \times 0.9$ × ($\overline{1}, 50,000 \pm 1, 50,000 \text{ units}$) = $\overline{1}, 53,090$ 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Raw Standard Mix (%) Price pet Mix Price per kg. Raw Materials Purchased (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 60 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 C 20 5 2 | Ans. | a) Fixed Ov | erhead Expe | enditure Varian | ce = Budg | eted fixed overhea | ad – Actual fixed overhead | | |
| b) Fixed Overhead Volume Variance = Standard fixed overhead – Budgeted fixed overhead = ₹1,53,090 - ₹1,50,000 = ₹3,090 (F) c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹2,910 (A) Working Note: For Fixed Overheads Variances: Actual fixed overhead incurred = ₹1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg of NXE, 125 kg of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Raw Standard Kg.(₹) (%) (₹) (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 888 888 0402 support@escholars.in $ 21$ | | = ₹1,50,0 | 00 – ₹1,56,0 |)00 = ₹ 6,000 (A | A) | | | | |
| $= \{1,53,090 - \{1,50,000 = \{3,090 (F) \text{ for the Concert} \\ c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = \{1,53,090 - \{1,56,000 = \{2,910 (A) \}Working Note:For Fixed Overhead s Variances:Actual fixed overhead incurred = \{1,56,000 \\ Budgeted fixed overhead for the period = 1,50,000 \\ Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (\{1,50,000 \div 1,50,000 \text{ units}) = \{1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -\frac{Raw Standard Actual Quantity}{Materials Mix (\%) Price per Mix Price per kg. Raw Materials Purchased (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B 30 10 20 8 3,000 C 20 5 20 6 1,200 B $ | | b) Fixed Ove | erhead Volu | me Variance = S | Standard f | ixed overhead – E | Budgeted fixed overhead | | |
| c) Fixed Overhead Variance = Standard fixed overhead – Actual fixed overhead = ₹1,53,090 - ₹1,56,000 = ₹2,910 (A) Working Note: For Fixed Overheads Variances: Actual fixed overhead incurred = ₹1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ± 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - $ \frac{Raw Standard Actual Quantity}{Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased kg. (₹) (%) (₹) (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 21 5,000 20 6 1,200 21 5,000 20 7 7 8 2,000 21 7,000 20 7 7 8 2,000 21 7,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 20 7 7 8 2,000 21 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 $ | | = ₹1,53,0 | 90 – ₹ 1,50, | 000 = ₹ 3,090 (1 | F) ^{oping Cone} | | | | |
| $= \overline{1}, 53,090 - \overline{1}, 56,000 = \overline{2},910 \text{ (A)}$ Working Note: For Fixed Overheads Variances: Actual fixed overhead incurred = $\overline{1}, 56,000$ Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ± 1,50,000 units) = ₹1,53,090 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg, of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - $\frac{Raw Standard Actual Quantity}{Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased kg. (₹) (%) (₹) (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 B 30 10 20 8 2,000 C 20 5 20 6 1,200 E888 888 0402 support@escholars.in 21$ | | c) Fixed Ov | erhead Varia | ance = Standarc | l fixed ove | erhead – Actual fix | ed overhead | | |
| Working Note: For Fixed Overheads Variances: Actual fixed overhead incurred = ₹1,56,000 Budgeted fixed overhead for the period = 1,50,000 Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) $(6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchasedkg. (₹) (%) (₹) (kg.)A 50 20 60 21 5,000C 20 5 20 6 1,200888 888 0402support@escholars.in$ | | = ₹1,53,0 | 90 – ₹ 1,56, | 000 = ₹2,910 (A | A) | | ~°°' | | |
| Working Note:For Fixed Overheads Variances:Actual fixed overhead incurred = ₹1,56,000Budgeted fixed overhead for the period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit)(6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -NRaw Standard Actual Quantity Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased kg. (₹) (%) (₹) (kg.)A502060215,000 1,200B30102082,0002,000C2052061,200888 888 0402 | | Working Not | | | | | SV | | |
| For Free Verticals variances.Actual fixed overhead incurred = ₹1,56,000Budgeted fixed overhead for the period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit)(6,300 hrs × 27 days × 0.9) × (₹1,50,000 ± 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -NE was standard Actual QuantityMaterialsMix (%)Price perMixPrice per kg.Raw Materials Purchasedkg. (₹)(%)(₹)(kg.)A502060215,000B3010202052061,200 | | For Fived Ov | e: orhoads Va | riancos | | | 23 | | |
| Return Net overhead for the period = 1,50,000Budgeted fixed overhead for the period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: - Maw Standard Actual QuantityMaterials Mix (%)Price perMix Price per kg.Raw Materials Purchased kg. (₹)(%)(₹)(kg.)A502061,200888 888 0402support@escholars.in | | Actual fixed o | vorboad inc | urrod – ₹1 56 0 | 00 | | .6 | | |
| Budgeted incervoer inclusion the period = 1,50,000Standard fixed overhead for production (Standard output for actual time × Standard Fixed Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -RawStandardActualQuantityMaterialsMix (%)Price perMixPrice per kg. (%)Raw Materials Purchased (kg.)A502060215,0005,000B30102082,0002,000C2052061,20021888 888 0402 | | Budgeted five | d overhead | for the period - | - 1 50 000 | 1 | 37 | | |
| Summary inclusion (standard output for detail time of standard rised Overhead per unit) (6,300 hrs × 27 days × 0.9) × (₹1,50,000 ÷ 1,50,000 units) = ₹1,53,09017.J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -RawStandardActualQuantityMaterialsMix (%)Price per kg. (₹) (%)Raw Materials Purchased (kg.)A50206021B30102082,000C2052061,200 | | Standard fixe | d overhead | for moduction | n (Stand | ard output for a | ctual time x Standard Fixed | | |
| Overhead per unity $(6,300 \text{ hrs } \times 27 \text{ days } \times 0.9) \times (₹1,50,000 \div 1,50,000 \text{ units}) = ₹1,53,090$ 17. J.K. Ltd. Manufactures NXE by mixing three raw materials. For every batch of 100 kg. of NXE, 125 kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -Raw Standard Actual QuantityMaterialsMix (%)Price per kg. (₹) (%)MixPrice per kg. (kg.)Raw Materials Purchased (kg.)A502060215,000B30102082,000C2052061,200888 888 0402 | | Overhead per | unit) | i ioi produceite | in (Stand | | ictual time ~ Standard Tixed | | |
| (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | | $(6.300 \text{ hrs} \times 2)$ | $27 \text{ days} \times 0.9$ | 9) × (₹1.50.000 | $\div 1.50.000$ |) units) = ₹1.53.09 | 90 | | |
| kg. of raw materials are used. In April, 20X1, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 20X1, are as follows: -RawStandardActualQuantityMaterialsMix (%)Price per Kg. (₹)MixPrice per kg. (%)Raw Materials Purchased (kg.)A502060215,000B30102082,000C2052061,200Support@escholars.in | 17. | I.K. Ltd. Manu | factures NX | E by mixing th | ree raw m | aterials. For ever | v batch of 100 kg. of NXE. 125 | | |
| Solution of NXE. The standard and actual particulars for April, 20X1, are as follows: - Raw Standard Actual Quantity Materials Mix (%) Price per Mix Price per kg. Raw Materials Purchased A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 888 888 0402 support@escholars.in | | kg. of raw ma | terials are | used. In April. 2 | 20X1. 60 l | patches were prei | pared to produce an output of | | |
| Raw Standard Actual Quantity Materials Mix (%) Price per kg. (₹) Mix Price per kg. Raw Materials Purchased (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 Support@escholars.in | | 5,600 kg. of N | XE. The star | ndard and actua | l particula | ars for April, 20X1 | , are as follows: - | | |
| Raw Standard Actual Quantity Materials Mix (%) Price per kg. (₹) Mix Price per kg. Raw Materials Purchased (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 | | | | | 1 all | | · | | |
| Materials Mix (%) Price per kg. Raw Materials Purchased (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 support@escholars.in | | Raw | Sta | indard | S. | Actual | Quantity | | |
| kg. (₹) (%) (₹) (kg.) A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 support@escholars.in | | Materials | Mix (%) | Price per | Mix | Price per kg. | Raw Materials Purchased | | |
| A 50 20 60 21 5,000 B 30 10 20 8 2,000 C 20 5 20 6 1,200 | | | | kg. (₹) | (%) | (₹) | (kg.) | | |
| B 30 10 20 8 2,000 C 20 5 20 6 1,200 support@escholars.in | | А | 50 | 20 | 60 | 21 | 5,000 | | |
| C 20 5 20 6 1,200 888 888 0402 support@escholars.in 21 | | В | 30 | 3 10 | 20 | 8 | 2,000 | | |
| 888 888 0402 support@escholars.in | | С | 20 🔨 | IN 5 | 20 | 6 | 1,200 | | |
| support@escholars.in | | | A | | | | | | |
| 888 888 0402 support@escholars.in 21 | | | .8 | | | | d T | | |
| | 888 88 | 8 0402 | 5 | support@ | escholars | s.in | 21 | | |
| | | 3 | | | | | | | |

| a) Ma b) Ma | terial Price variance | | | | | | | | |
|---|--|----------------|--|--|--|--|--|--|--|
| b) Ma | | | | | | | | | |
| | terial usage variance | | | | | | | | |
| + | | (ICAI | | | | | | | |
| Material Price Variance = Standard cost of actual material used – Actual cost of actual material used | | | | | | | | | |
| = ₹ 1,12 | ,,500 – ₹ 1,15,500 = ₹ 3,000 (A) | | | | | | | | |
| Materia | Material usage Variance= Standard cost of production- Standard cost of actual material use | | | | | | | | |
| ₹98,00 | J = ₹ 1,12,500 = ₹ 14,500 (A) | | | | | | | | |
| Actual r | haterial used = $125 \text{ kg} \times 60 = 7,500 \text{ kg}$. | | | | | | | | |
| Actual | cost of actual material used (Actual Quantity \times Actual Rate) | | | | | | | | |
| A | (60%) 4.500 kg × ₹21 = | 94.5 | | | | | | | |
| B | (20%)1.500 kg × ₹8 = | 12.0 | | | | | | | |
| C | (20%)1,500 kg × ₹6 = | 9.0 | | | | | | | |
| | 7 500 | 1.15.5 | | | | | | | |
| | <u>1,000</u> | 1,10,0 | | | | | | | |
| Standa | Standard cost of actual material used (Actual Quantity \times Standard Rate) | | | | | | | | |
| A | 4,500 kg × ₹20 = | 90.0 | | | | | | | |
| В | 1.500 kg × ₹10 = | 15.0 | | | | | | | |
| C | 1.500 kg × ₹5 = | 7.5 | | | | | | | |
| | 7.500 | 1.12.5 | | | | | | | |
| | | | | | | | | | |
| В | (30%) 2,250 kg × ₹10 = | 22,5 | | | | | | | |
| С | (20%) 1,500 kg ×₹5 = | 7,5 | | | | | | | |
| | Pieneer in D | <u>1,05,0</u> | | | | | | | |
| | | | | | | | | | |
| Standa | d Cost of Production (Standard Quantity for actual production × S | Standard Rate) | | | | | | | |
| Standa | 'd cost of output for 100 kg: - | | | | | | | | |
| A | 62.50 kg × ₹20 = | 1,250 | | | | | | | |
| B | 37.50 kg × ₹10 = | 375 | | | | | | | |
| 1 1 1 | 25.00 kg × ₹5 = | 107 | | | | | | | |
| | | 125 | | | | | | | |

| | Stan | dard cost of | material Purch | ased: - | | | |
|------|-----------|---|--|---|--|--|---------------------------------------|
| | Α | 5,0 | 00 kg × ₹ 20 = | | | | ₹ 1,00,000 |
| | В | 2,0 | 00 Kg × ₹ 10 = | | | | ₹ 20,000 |
| | С | 1,2 | 00 kg × ₹5 = | | | | ₹ 6,000 |
| | - | | | | | | <u>₹1,26,000</u> |
| | | | | | | | |
| | ✓ М | laterial Price V | /ariance (if calcu | ulated at the tim | ne of purchase) | | |
| | = | Standard cos | t of actual mater | rial used – Actu | al cost of actual m | naterial used | |
| | = | ₹1,26,000 - | ₹1,28,200 = ₹2 | ,200(A) | | | |
| 18. | Para | is Synthetics u | ises Standard co | sting system in | manufacturing of | its product 'Sta | ar 95 Mask'. The |
| | deta | ils are as follo | WS; | | | | |
| | Pa | rticulars | | 0 | | | (₹) |
| | Dir | ect Material 0 | .50 Meter @ ₹ 6 | 0 per meter | | | ₹30 |
| | Dir | ect Labour 1 h | 10ur @ ₹ 20 per | hour | | | ₹20 |
| | Vai | riable overhea | id 1 hour @ ₹ 10 | per hour | | | <u>₹ 10</u> ₹ (0 |
| | 10 | tai | | | | | <u>₹ 60</u> |
| | Duri | ng tho month | of August 20V1 | 10 000 units of | f 'Star 05 Macle' w | oro monufactur | ad |
| | Duil | nig the month als are as follo | lowe: - | 10,000 units of | Stal 75 Mask we | | eu. |
| | i) | Direct Materia | lows al Consumed 5 7 | 00 meters @ ₹ ! | 58 nor motor | | |
| | i) ii) | Direct labour | Hours @ | | ₹ 2 24 400 | | |
| | iii) | Variable overl | nead incurred | | ₹ 1.12.200 | | |
| | iv) | Variable over | head efficiency | variance is ₹ 2 | .000 A. Variable | overheads are | based on Direct |
| |] | Labour Hours | | | 1 | 3 | |
| | Van | | | | 1.11 1.1 1 | | |
| | rou | are required t | to Calculate the i | missing data and | d all the relevant v | variances. | |
| | rou | are required t | to Calculate the i | missing data and | d all the relevant v | variances. | (ICAI SM) |
| Ans. | i) | are required t Material Var | iances: - | missing data and | d all the relevant v | /ariances. | (ICAI SM) |
| Ans. | i) | Are required t Material Var ✓ Material (| iances: - Cost Variance = | missing data and = (Standard Qu | d all the relevant v nantity × Standr | variances. ad Price – Act | (ICAI SM) ual Quantity × |
| Ans. | i) | Material Var ✓ Material I Var Actual Pr | iances: - Cost Variance = rice) | missing data and = (Standard Q u | d all the relevant v nantity × Standr | variances. ad Price – Act | (ICAI SM) ual Quantity × |
| Ans. | i) | Are required t Material Var ✓ Material (Actual Pr 3,00,000 | iances: - Cost Variance = rice) - 3,30,600 | missing data and = (Standard Q t = ₹ 30,600 (A | d all the relevant v nantity × Standr A) | variances. ad Price – Act | (ICAI SM) ual Quantity × |
| Ans. | i) | Are required t Material Var ✓ Material (Actual Pr 3,00,000 ✓ Material (| iances: - Cost Variance = ice) - 3,30,600 Price Variance | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P | d all the relevant v nantity × Standr A) Price – Actual Pr | variances. ad Price – Act ice) Actual Ou | (ICAI SM) ual Quantity × |
| Ans. | i) | are required t Material Var ✓ Material 0 Actual Pr 3,00,000 ✓ Material 1 (60 - 58) | iances: - Cost Variance = ice) - 3,30,600 Price Variance | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11.400(F | d all the relevant v nantity × Standr A) Price – Actual Pr | variances. ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material 0 Actual Pr 3,00,000 ✓ Material 0 (60 - 58) | iances: - Cost Variance = rice) 3,30,600 Price Variance 3)5,700 | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F | d all the relevant v nantity × Standr A) Price – Actual Pr) | variances. ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material (Actual Pr 3,00,000 ✓ Material ((60 - 58) ✓ Material (| iances: - Cost Variance = Fice) - 3,30,600 Price Variance 3)5,700 Usage Variance | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F = = (Standard | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – | variances. ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Q ✓ Material 1 (60 - 58) ✓ Material 1 Actual Question | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance iantity) Standa | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F = = (Standard ard Price | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qu ✓ Material Qu ✓ Material Qu (5,00 | iances: - iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 - 5,700)60 | missing data and = (Standard Qu = $₹ 30,600 (A$ = (Standard P = $₹ 11,400(F$ = (Standard ard Price = $₹ 42,00$ | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – 10 (A) | variances. ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Q ✓ Material Q ✓ Material Q ✓ Material Q | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance 1antity) Standa 0 - 5,700)60 | missing data and = (Standard Qu = $₹ 30,600 (A$ = (Standard P = $₹ 11,400(F)$ = = (Standar ard Price = $₹ 42,00$ | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – 10 (A) | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qu | iances: - Cost Variance = rice) – 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 – 5,700)60 | missing data and = (Standard Qu = $₹ 30,600 (A$ = (Standard P = $₹ 11,400(F$ = (Standard ard Price = $₹ 42,00$ | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – 10 (A) | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Quired t Actual Pr 3,00,000 ✓ Material Quired t (60 - 58) ✓ Material Quired t (5,00) Workings: - Budget Material Quired t | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance 1antity) Standa 0 - 5,700)60 rial = 0.5 × 60 = | missing data and = (Standard Qu = $₹ 30,600 (A$ = (Standard P = $₹ 11,400(F$ = (Standard ard Price = $₹ 42,00$ 30 | d all the relevant v nantity × Standr A) Price – Actual Pr) rd Quantity – 10 (A) | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qar 3,00,000 ✓ Material Qar ✓ Material Qar | iances: - iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 - 5,700)60 rial = $0.5 \times 60 =$ Actual Material | missing data and = (Standard Qu = $\gtrless 30,600 (A$ = (Standard P = $\gtrless 11,400(F$ = $($ Standard ard Price = $\end{Bmatrix} 42,00$ 30 = $5,000 \times 60 = 3$ | d all the relevant v nantity × Standr A) rice – Actual Pr) rd Quantity – 10 (A) 3,00,000 | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Quired t Actual Pr 3,00,000 ✓ Material Quired t (60 - 58) ✓ Material Quired t (5,00) Workings: - Budget Material Standard for Actual Material | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 - 5,700)60 rial = 0.5×60 = Actual Material ial = $5,700 \times 58$ | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F = ₹ 11,400(F = ₹ 42,00 30 = 5,000 × 60 = 3 = 3,30,600 | d all the relevant v nantity × Standr A) Price – Actual Pr D d Quantity – 10 (A) 3,00,000 | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qar ✓ (5,00) ✓ Material Qar ✓ Material Qar | iances: - Cost Variance = rice) -3,30,600 Price Variance 3)5,700 Usage Variance 10 - 5,700)60 rial = $0.5 \times 60 =$ Actual Material ial = $5,700 \times 58$ erheads Varian | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F = = (Standard ard Price = ₹ 42,00 30 = 5,000 × 60 = 3 = 3,30,600 aces: - | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – 10 (A) 3,00,000 | ad Price – Act ice) Actual Qu | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qar ✓ Øariable Qar ✓ Variable | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 - 5,700)60 rial = 0.5×60 = Actual Material ial = $5,700 \times 58$ erheads Variance overhead | missing data and = (Standard Qu = \gtrless 30,600 (A = (Standard P = \gtrless 11,400(F = $\end{Bmatrix} (Standard rd Price = \end{Bmatrix} 42,0030= 5,000 × 60 = 3= 3,30,600hces: -cost$ | d all the relevant v nantity × Standr A) Price – Actual Pr) d Quantity – 0 (A) 3,00,000 Variance = | ad Price – Act ice) Actual Qu (Standard varia | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Var ✓ Material I (60 - 58 ✓ Material I Actual Question I (5,00 Workings: - Budget Material I Actual Material I Variable Ovestion I ✓ Variable Actual Variable | iances: - Cost Variance = rice) -3,30,600 Price Variance B)5,700 Usage Variance antity) Standa 0 - 5,700)60 rial = $0.5 \times 60 =$ Actual Material ial = $5,700 \times 58$ erheads Varianton overhead ariable overhead | missing data and = (Standard Qu = $\gtrless 30,600$ (A = (Standard P = $\gtrless 11,400$ (F = $\end{Bmatrix} (Standard P)$ = $\end{Bmatrix} 42,00$ 30 = $5,000 \times 60 = 3$ = $3,30,600$ aces: - cost d | d all the relevant v nantity × Standr A) rice – Actual Pr) d Quantity – 0 (A) 3,00,000 Variance = | ad Price – Act ice) Actual Qu (Standard varia | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qar ✓ Variable Qar ✓ Variable Qar ✓ Variable Qar ✓ Variable Qar ✓ Standard | iances: - Cost Variance = rice) - 3,30,600 Price Variance 3)5,700 Usage Variance antity) Standa 0 - 5,700)60 rial = 0.5 × 60 = Actual Material ial = 5,700 × 58 erheads Variance overhead ariable overhead d Variable Overhead | missing data and = (Standard Qu = \gtrless 30,600 (A = (Standard P = \gtrless 11,400(F = $\end{Bmatrix} (Standard P)$ = | d all the relevant v nantity × Standr A) Price – Actual Pr d Quantity – 0 (A) 3,00,000 Variance = nits × 10 = 1,00,0 | ad Price – Act ice) Actual Qua (Standard varia | (ICAI SM) ual Quantity × antity |
| Ans. | i) | Are required t Material Var ✓ Material Qar Actual Pr 3,00,000 ✓ Material Qar (60 - 58 ✓ Material Qar (5,00 Workings: - Budget Material Qar (5,00 Workings: - Standard for Ar ✓ Standard Qar ✓ (1,00,00 | iances: - Cost Variance = rice) -3,30,600 Price Variance 3)5,700 Usage Variance 3)5,700 Usage Variance 3)5,700 $(1) = 0.5 \times 60 =$ Actual Material $3) = 5,700 \times 58$ erheads Variance $3) = 0.5 \times 60 =$ Actual Material $3) = 1,700 \times 58$ erheads Variance 0 = 1,12,200 = | missing data and = (Standard Qu = ₹ 30,600 (A = (Standard P = ₹ 11,400(F = ₹ 11,400(F = ₹ 11,400(F = ₹ 42,00 30 = 5,000 × 60 = 3 = 3,30,600 aces: - cost d meads: 10,000 un = ₹ 12,200 (A) | d all the relevant v nantity × Standr A) rice – Actual Pr) d Quantity – 0 (A) 3,00,000 Variance = nits × 10 = 1,00,0 | ad Price – Act ice) Actual Qu (Standard varia | (ICAI SM) ual Quantity × antity |

| | 🗸 Variable overhead Efficiend | y Variance = (Standard Hours – Actual Hours) \times |
|-------|---|---|
| | Standard Rate per Hour | |
| | Let Actual Hours be 'X' | |
| | $(10,000 - X) \times 10$ | = 2,000(A) |
| | 1,00,000 - 10X | = -2,000 |
| | X | $= 1,02,000 \div 10$ |
| | Therefore, Actual Hours (X) | = 10,200 |
| | ✓ Variable overhead Expenditure | e Variance = (Variable overhead at Actual Hours – |
| | Actual Variable Overheads) | |
| | ✓ 10,200 × 10 - 1,12,200 = ₹ 10,00 | 00 (A) |
| | | |
| | iii) Labour Variances | |
| | ✓ Labour Cost Variance=(Standa | ard Hours × Standard Rate)- (Actual Hours × Actual |
| | Rate) | 7.0.4.400.41 |
| | $10,000 \times 20 - 10,200 \times 22$ | = ₹ 24,400 (A) |
| | $\checkmark Labour Rate Variance = (Stan)$ | dard Rate – Actual Rate) \times Actual Hours |
| | $(20 - 22) \times 10,200 =$ | T 20,400 (A) |
| | • Labour Enciency variance = $(10,000, 10,200) \times 20 = \mp 4.000$ | $Standard Hours - Actual Hours) \times Standard Rate$ |
| | $(10,000 - 10,200) \times 20^{\circ} = (4,00)$ | 00 (A) |
| | Workings: - | |
| | Budget Labour = $1 \times 20 = 20$ | |
| | Standard for Actual Labour = 10.000 | $\times 20 = 2.00.000$ |
| | Actual Labour = $10,200 \times 22 = 2,24.4$ | 00 100,000 |
| | Actual Rate = $₹ 2,24,400 \div 10,200$ ho | ours = ₹ 22 |
| 19. | ABC Ltd. Has furnished the following info | rmation regarding the overheads for the month of June |
| | 20X1: - | |
| | i) Fixed overhead Cost Variance 9 Educ | 2,800 (Adverse) |
| | ii) Fixed overhead volume variance | ₹2,000 (Adverse) |
| | iii) Budgeted Hours for June,20X1 | 2,400 Hours |
| | iv) Budgeted Overheads for June,20X1 | ₹12,000 🧬 |
| | v) Actual rate of recovery of overheads | ₹8 Per Hour |
| | | a da ba |
| | From the above given information. | addin . |
| | Calculate: - | 19 ² |
| | a) Fixed Overhead Expenditure Varianc | e |
| | b) Actual Overheads Incurred | |
| | c) Actual Hours for Actual Production | |
| | d) Fixed Overhead Capacity Variance | |
| | e) Standard hours for Actual Production | |
| | IJ Fixed Overnead Efficiency variance. | (New 2020) |
| Anc | a) Fixed Overhead Expenditure Varia | (NOV. 2020) |
| Alls. | - Budgeted Fixed Overheads - Actua | Fixed Overheads |
| | $=$ \exists 12 000 $=$ \exists 12 800 (as calculated) | pelow = ₹ 800(A) |
| | | |
| | b) Fixed Overhead Cost Variance = Abso | rbed Fixed Overheads – Actual Fixed Overheads |
| | 2,800 (A) | = ₹ 10.000 – Actual Overheads |
| | Actual Overheads | = ₹ 12.800 |
| | | , |

| tual Hoi xed Ove = F = ₹ andard = Ab = ₹ 1 xed Ove | urs for Actual Prod rhead capacity V Budgeted Fixed Ove $5 \times 1,600$ hrs. –₹1 Hours for Actual sorbed Overheads/ 0,000/₹5 = 2,000 | luction = ₹ ⁻ ariance: - erheads for 12,000 = ₹4 Productior /Std. Rate | ₹8 = 1 , 6 Actual Hour 4 , 000 (A) | 00 hrs. s – Budgeted | | | | | | | | | |
|---|---|--|--|--|---|---|--|--|--|--|--|--|--|
| xed Ove = H = ₹ andard = Ab = ₹ 1 xed Ove | erhead capacity V: Budgeted Fixed Ove $5 \times 1,600$ hrs. $-₹1$ Hours for Actual B sorbed Overheads, 0,000/₹5 = 2,000 | ariance: - erheads for 12,000 = ₹4 Productior /Std. Rate | Actual Hour 1, 000 (A) 1: - | s – Budgeted | | | | | | | | | |
| = H = ₹ andard = Ab: = ₹ 1 xed Ove: | Budgeted Fixed Ove $5 \times 1,600$ hrs. $-₹1$ Hours for Actual sorbed Overheads/ 0,000/₹5 = 2,000 | erheads for 12,000 = ₹4 Productior /Std. Rate | Actual Hour 4, 000(A) 1: - | s – Budgeted | d) Fixed Overhead capacity Variance: - | | | | | | | | |
| = ₹ andard = Ab: = ₹ 1 xed Ove: | $5 \times 1,600$ hrs. –₹ Hours for Actual sorbed Overheads/ 0,000/₹5 = 2,000 | 12,000 = ₹4 Productior /Std. Rate | 4, 000(A) n: - | = Budgeted Fixed Overheads for Actual Hours – Budgeted Fixed Overheads | | | | | | | | | |
| andard = Ab = ₹ 1 xed Ove : | Hours for Actual sorbed Overheads, 0,000/₹5 = 2,000 | Productio r /Std. Rate | 1: - | = ₹5 × 1,600 hrs₹ 12,000 = ₹ 4,000 (A) | | | | | | | | | |
| andard = Ab = ₹ 1 xed Ove | Hours for Actual sorbed Overheads, 0,000/₹5 = 2,000 | Productio r /Std. Rate | 1: - | e) Standard Hours for Actual Production: - | | | | | | | | | |
| = Ab = ₹ 1 xed Ove | sorbed Overheads, 0,000/₹5 = 2 , 000 | /Std. Rate | | | | | | | | | | | |
| = ₹ 1 | 0,000/₹5 = 2 , 000 |) brs | | | | | | | | | | | |
| ced Ove | , , , , , , , , , , , , , , , , , , , | 1 111 3 | | | | | | | | | | | |
| ed Ove | | - (10,000) (3 - 2,000 ms.) | | | | | | | | | | | |
| | rhead Efficiency V | Variance [,] - | | | | | | | | | | | |
| · Absort | ed Fixed Overhead | ds — Rudget | ed Fived Ov | erheads for A | ctual Hours | | | | | | | | |
| ₹ 10.00 | $0 = ₹5 \times 1600$ brs | as Duuget a – ₹2 000 | (F) | | ctual mours | | | | | | | | |
| (10,00 | 0 (3 × 1,000 m3 | 5. – (2,000 | (1) | | | | | | | | | | |
| ing Not | Q• - | | | | | | | | | | | | |
| ing Nou | 5 | ianaa Aha | anda a di Tima d | Owerkeede | Dudantad Ei | und Oranik and a | | | | | | | |
| | erneau volume var | Tance = Abs | orbeu Fixeu | Overneaus – | Dudgeled FD | xeu Overneaus | | | | | | | |
| ,000 (A) haarbaa | Fired Orenhanda | = ADSOI | ibeu Fixeu C | verneaus – x | 12,000 | | | | | | | | |
| usurbed | Pate /Uour | - ₹ 10,0 - ₹ (| 100 1000/04 | 0.0 hm | | | | | | | | | |
| | | F) (7 = 15 (7 | 12,000/2,4 | 00 III S. J | dala The Cult | | | | | | | | |
| pany pro | oduces a finished p | roduct by us | sing three ba | isic raw mater | lais. The follo | owing standards | | | | | | | |
| een set- | | ais: - | Chara Jara | J N#: : | Chan Jan J | Derive a sur la s | | | | | | | |
| | Material | | Standar | a-Mix in | Standard | Price per kg. | | | | | | | |
| | | | perce | itages | 1 | | | | | | | | |
| | A | | 2 | 5 | | 4 | | | | | | | |
| | В | | 3 | 5 | | 3 | | | | | | | |
| | С | | 4 | 0 | | 2 | | | | | | | |
| | | | | | | | | | | | | | |
| andard ! | The standard loss in process is 2004 of input During a particular's month the Company produced | | | | | | | | | | | | |
| lare Off | loss in process is 2 | 0% of inpu | t. During a p | articular's mo | onth, the Cor | npany produced | | | | | | | |
| кgs. Uf f | inished product. Th | 20% of input he details of | t. During a p f stock and p | oarticular's mo ourchases for t | onth, the Cor he month ar | npany produced e as under: - | | | | | | | |
| rial | inished product. Th | 0% of input he details of Closing St | t. During a p f stock and p tock Purc | oarticular's mo ourchases for (hase during | onth, the Con he month ar the month | npany produced e as under: - Cost in (₹) | | | | | | | |
| rial | inished product. Tl Opening Stock (Kgs.) | 0% of input he details of Closing St (Kgs.) | t. During a p f stock and p tock Purc | oarticular's mo ourchases for t hase during (Quantity in | onth, the Con the month ar the month kgs) | npany produced re as under: - Cost in (₹) | | | | | | | |
| kgs. Of f rial | inished product. Th Opening Stock (Kgs.) 200 | 20% of input he details of Closing St (Kgs.) 350 | t. During a p f stock and p tock Purc | articular's mo purchases for t hase during (Quantity in 800 | onth, the Con he month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 | | | | | | | |
| rial | inished product. Th Opening Stock (Kgs.) 200 150 | 0% of input he details of Closing St (Kgs.) 350 200 | t. During a p f stock and p tock Purc | articular's mo purchases for t hase during (Quantity in 800 1,000 | onth, the Cor he month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 | | | | | | | |
| rial | inished product. Tl Opening Stock (Kgs.) 200 150 300 | 0% of input he details of Closing St (Kgs.) 350 200 200 | t. During a p f stock and p tock Purc | articular's mo purchases for t hase during (Quantity in 800 1,000 1.100 | onth, the Cor he month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 1.980 | | | | | | | |
| rial | inished product. Tl Opening Stock (Kgs.) 200 150 300 | 0% of input he details of Closing St (Kgs.) 350 200 200 | t. During a p f stock and p tock Purc | articular's mo burchases for t hase during (Quantity in 800 1,000 1,100 | onth, the Con he month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
| rial | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at | 0% of input he details of Closing St (Kgs.) 350 200 200 standard c | t. During a p f stock and p tock Purc | articular's mo urchases for t hase during (Quantity in 800 1,000 1,100 te: - | onth, the Cor the month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
| pening s | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at | 20% of input he details of Closing St (Kgs.) 350 200 200 standard c | t. During a p f stock and p tock Purc | articular's mo burchases for t hase during (Quantity in 800 1,000 1,100 te: - | onth, the Cor he month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
| pening s aterial p | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at | 0% of input he details of Closing St (Kgs.) 350 200 200 standard c cost variance t the point of | t. During a p f stock and p tock Purc b cost. Compu- es, when: of issue of 'F | articular's mo purchases for t hase during (Quantity in 800 1,000 1,100 te: - | onth, the Cor the month ar the month kgs) | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
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| pening s aterial p Varia Varia | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at nce is Calculated at sage Variance | 20% of input he details of Closing St (Kgs.) 350 200 200 standard c cost variance t the point c t the point c | t. During a p f stock and p tock Purc cost. Compu- es, when: of issue of 'F of issue on 'I | articular's mo burchases for t hase during (Quantity in 800 1,000 1,100 te: - trst-in-First-on ast-in-First-on | onth, the Cor he month ar the month kgs) ut' basis. ut' basis. | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
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| pening s aterial p Varia Varia aterial U aterial N | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at nce is Calculated at sage Variance. lix Variance, and ield Variance | 0% of input he details of Closing St (Kgs.) 350 200 200 standard c cost variance t the point c | t. During a p f stock and p tock Purc b cost. Compu es, when: of issue of 'F of issue on 'I | articular's mo urchases for t hase during (Quantity in 800 1,000 1,100 te: - trst-in-First-on ast-in-First-O | onth, the Cor he month ar the month kgs) ut' basis. ut' basis. | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 | | | | | | | |
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| pening : aterial p Varia Varia aterial U aterial W aterial Y <u>nce: -</u> aterial j irst out" | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at rage Variance. Iix Variance, and ield Variance, and ield Variance. Drice and cost varia basis: - ial Price Variance | 20% of input he details of Closing St (Kgs.) 350 200 standard c cost variance t the point of t the point of | t. During a p f stock and p tock Purce cost. Compu- es, when: of issue of 'F of issue on 'I variance is o 8,295 – 7,8 | articular's mo purchases for the formation of the formati | onth, the Cor he month ar the month kgs) ut' basis. ut' basis. he point of is | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 (Nov.2000) ssue on "First in | | | | | | | |
| pening : aterial p Varia varia terial U aterial V aterial Y <u>nce: -</u> laterial J irst out") Mater | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at nce is Calculated at sage Variance. Iix Variance, and ield Variance, and ield Variance. Drice and cost varia basis: - ial Price Variance | 20% of input he details of Closing St (Kgs.) 350 200 standard c cost variance t the point of t the point of | t. During a p f stock and p tock Purce cost. Compu- es, when: of issue of 'F of issue on 'I variance is o 8,295 – 7,8 3,295 – 8,550 | articular's mo purchases for t hase during (Quantity in 800 1,000 1,100 te: - irst-in-First-on ast-in-First-on ast-in-First-O calculated at t 50 = 445 (A) =255 (F) | he point of is | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 (Nov.2000) ssue on "First in | | | | | | | |
| pening : aterial p Varia varia aterial V aterial V aterial Y <u>nce: -</u> [aterial J irst out") Mater [aterial] | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at nce is Calculated at sage Variance. Iix Variance, and ield Variance, and ield Variance. Drice and cost varia basis: - ial Price Variance Price and cost varia | 20% of input he details of Closing St (Kgs.) 350 200 standard c cost variance t the point of t the point of t the point of ance when $=M_1-M_2=$ $=M_1-M_4=$ fance when | t. During a p f stock and p tock Purce cost. Compu- es, when: of issue of 'F of issue of 'F of issue on 'I variance is a 8,295 – 7,8 3,295 – 8,550 variance is | articular's mo urchases for thase during (Quantity in 800 1,000 1,100 te: - trst-in-First-on ast-in-First-on ast-in-First-on 50 = 445 (A) 0=255 (F) calculated at the calculated at the calcu | onth, the Con he month an the month kgs) ut' basis. ut' basis. ut' basis. | npany produced te as under: - Cost in (₹) 3,600 3,500 1,980 (Nov.2000) ssue on "First in issue on "Last in | | | | | | | |
| pening : aterial p Varia varia U aterial U aterial Y <u>ice: -</u> | inished product. Tl Opening Stock (Kgs.) 200 150 300 stock is valued at rice and Material c nce is Calculated at nce is Calculated at sage Variance. lix Variance, and ield Variance. | 20% of input he details of Closing St (Kgs.) 350 200 standard c cost variance t the point of t the point of t the point of | t. During a p f stock and p tock Purc cost. Compu- es, when: of issue of 'F of issue on 'I | articular's mo purchases for t hase during (Quantity in 800 1,000 1,100 te: - trst-in-First-on ast-in-First-on ast-in-First-on | onth, the Con he month ar the month kgs) ut' basis. ut' basis. ut' basis. | npany produced re as under: - Cost in (₹) 3,600 3,500 1,980 (Nov.2000) ssue on "First in | | | | | | | |
| ria pen ater V ater ater ater ater | ing : ing : ial p varia: varia: ial U ial V ial Y | ard loss in process is 2 Of finished product. The opening Stock (Kgs.) 200 150 300 Ming stock is valued at the opening of | ard loss in process is 20% of inpuOf finished product. The details ofOpening StockClosing Stock1Opening StockClosing Stock200350150200300200300200ariance is Calculated at the point of variance is Calculated at the point of tal Usage Variance.arial Mix Variance, and rial Yield Variance.Image ContractImage | ard loss in process is 20% of input. During a p Of finished product. The details of stock and p I Opening Stock Closing Stock Purc (Kgs.) (Kgs.) Purc 200 350 150 200 300 200 300 200 stock is valued at standard cost. Compute Compute Compute ariance is Calculated at the point of issue of 'Fi Cariance is Calculated at the point of issue on 'L arial Usage Variance. State and the point of issue on 'L arial Yield Variance, and State and cost variance when variance is calculated at the point of issue on 'L | ard loss in process is 20% of input. During a particular's model.Of finished product. The details of stock and purchases for the details of stock and purchases for the details of stock and purchases for the details of stock and purchase during the details of the details of stock and purchase during the details of | ard loss in process is 20% of input. During a particular's month, the Cor Of finished product. The details of stock and purchases for the month ar Opening Stock Closing Stock Purchase during the month (Kgs.) (Kgs.) (Quantity in kgs) 200 350 800 150 200 1,000 300 200 1,100 King stock is valued at standard cost. Compute: - rial price and Material cost variances, when: Variance is Calculated at the point of issue of 'First-in-First-out' basis. Variance is Calculated at the point of issue on 'Last-in-First-Out' basis. Variance, and tial Yield Variance. Fiel price and cost variance when variance is calculated at the point of issue of 'First-in-First-Out' basis. The point of 'First-in-First-Out' basis. The point of 'First-in-First-Out' basis. The point of 'First-in-First-Out' basis. The point of 'F | | | | | | | |

| r | | | | | | | | |
|------------------|--|---|--------------------|------------------|--------------------|--|--|--|
| | i) Material price variance $=M_1-M_2=8,430-7,850=580$ (A) | | | | | | | |
| | ii) Material cost variance= $M_1 - M_4 = 8,430 - 8,550 = 120$ (F) | | | | | | | |
| | b) Material Mix Variance $=M_2 - M_3 = 7,850 - 7,980 = 130$ (F) | | | | | | | |
| | c) Material yield variance $=M_3 - M_4 = 7,980 - 8,550 = 570$ (F) | | | | | | | |
| | d) Material usage variance $=M_2-M_4=7,850-8550=700$ (F) | | | | | | | |
| | <u>M1 - Actual material used: -</u> | | | | | | | |
| | a) <u>Based on FIFO Method: -</u> | | | | | | | |
| | A- | 200 kg × ₹ 4.00 = | 800 | | | | | |
| | | 450 kg × ₹ 4.50 = | <u>2,025</u> | 2,825 | 5 | | | |
| | 650 kg | | | | | | | |
| | В- | 150 kg×₹ 3.00 = | 450 | | | | | |
| | | 800 kg×₹ 3.50 = | <u>2,800</u> | 3,250 |) | | | |
| | | 950 kg | | | | | | |
| | C- | 300 kg ×₹ 2.00 = | 600 | | | | | |
| | | 900 kg ×₹ 1.80 = | <u>1,620</u> | <u>2,220</u> | <u>)</u> 8,295 | | | |
| | | 1200 kg | | | | | | |
| | | | | | | | | |
| | b) <u>Based o</u> | on LIFO Method: - | | | | | | |
| | A- | 650 kg ×₹ 4 | .50 = 2,925 | | | | | |
| | B- | 950 kg ×₹ 3 | .50 = 3,325 | | | | | |
| | C- | 1,100 kg ×₹ 2 | 1.80 = 1,980 | | | | | |
| | | 100 kg×₹2 | 2.00= 200 | | 8.430 | | | |
| | | 5 | | | | | | |
| | M ₂ -Standard | d Cost of Material used: - | | | | | | |
| | | 650 kg × ₹ 4.0 | 0 = 2,600 | | | | | |
| | B- | 950 kg × ₹ 3.0 | 0 = 2.850 |) | | | | |
| | C- | 1.200 kg × ₹ 2.0 | 00 = 2.400 | | 7.850 | | | |
| | | Grooming Education / | Academy | | | | | |
| | M ₃ -Standard | d Cost of Material if it had been use | d in standard p | oportion: - | | | | |
| | | *2800 kg × 0.25 × ₹ 4 | 1.00 = 2,800 | | | | | |
| | В- | 2800 kg × 0.35 × ₹ 3 | .00 = 2.940 | | | | | |
| | C- | 2800 kg × 0.40 × ₹ 2 | .00 = 2.240 | | 7,980 | | | |
| | *(650+950+ | -1200) | , | | | | | |
| | | | | | | | | |
| | M ₄ -Standard | <u>d Material Cost of output: -</u> | | | | | | |
| | (It is given th | nat output was 2,400 kg. Standard los | s in process is 20 | % of input. Th | erefore, Input for | | | |
| | an output of | $2,400 \text{ kg} = (2400 \div 80) \times 100 = 3,000 \text{ kg}$ | g. | | _ | | | |
| | A- | $3,000 \text{ kg} \times 25/100 = 750$ | _ | Kg ×₹ 4.00= | ₹ 3,000 | | | |
| | B- | $3,000 \text{ kg} \times 35/100 = 1,050$ | | Kg × ₹ 3.00 = | ₹ 3,150 | | | |
| | C- | 40 1200 | | Kg×₹ 2.00 = = | =₹ 2,400 | | | |
| | | $3,000 \text{ kg} \times \frac{100}{100} = 1200$ | | C | | | | |
| | | Total Input Kg's 3,000 | kg | | ₹ 8,550 | | | |
| 21. | UV Ltd. Prese | ents the following information for No | vember, 20X1: - | | | | | |
| | Budgeted pro | oduction of product $P = 200$ units. | | | | | | |
| | Standard Con | nsumption of Raw Materials = 2kg pe | er unit of P. | | | | | |
| | Standard pri | ce of Material A = ₹ 6 per kg. | | | | | | |
| 30 | Actually, 250 |) units of P were produced and mater | ial A was purcha | sed at ₹ 8 per k | g. and consumed | | | |
| J. | at 1.8 kg. per | unit of P. | | | | | | |
| Ş ^o r | Calculate the | e material cost variances. | | (| Nov. 2008 RTP) | | | |

| | 1) Total Material Cost Variance = (Standard Price × S | tandard Quant | tity) – (Actual Price × Actual | | | | |
|------|---|---|---|--|--|--|--|
| | Quantity) | | | | | | |
| | $= (6 \times 500) - (8 \times 450)$ | | | | | | |
| | = 3,000 - 3,600 = 600 (A) | | | | | | |
| | 2) Material Price Variance = (Standard price – Actual price) × Actual quantity | | | | | | |
| | $= (6 - 8) \times 450 = 900 (A)$ | | | | | | |
| | 3) Material Usage Variance = (Standard quantity – Actual quantity) × Standard price | | | | | | |
| | – (500 – 450) × 0 – 500 (F) | | | | | | |
| | Working Notes: | | | | | | |
| | Actual production of P | = | 250 units | | | | |
| | Standard quantity of A for actual production = 2 × 250 | = | 500 kg. (SQ) | | | | |
| | Actual quantity of A for actual production = 1.8×250 | = | 450 kg. (AQ) | | | | |
| | Standard price / kg. of A | = | ₹6 (SP) | | | | |
| | Actual price / kg/ of A | = | ₹8 (AP) | | | | |
| | | | | | | | |
| 22. | Following are the details of the product phomex for the | month of Apr | il 20X1; Standard quantity of | | | | |
| | material required per unit 5 kg. | | | | | | |
| | Actual output 1000 u | nits | | | | | |
| | Actual Cost of materials used ₹7,14, | 000 | | | | | |
| | Material price variance ₹ 51,000 | (Fav) | | | | | |
| | Actual price per kg of material is found to be less than s | tandard price | ner kα of material by ₹10 | | | | |
| | You are required to Calculate: - | | per kg of material by (10. | | | | |
| | a) Actual quantity and Actual price of materials used. | | | | | | |
| | b) Material Usago Varianco | | 14 | | | | |
| | D Material Usage variance | | m1 | | | | |
| | c) Material Cost Variance | | 200' | | | | |
| | c) Material Cost Variance Grooming Education Acad | emy _ | (May 2013 RTP) | | | | |
| Ans. | c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used | emy | (May 2013 RTP) | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri | emy <u>l: -</u> ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. | | | | |
| Ans. | a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) | emy <u>l: -</u> ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ | emy <u>l: -</u> ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 = ₹ 51,000 | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ | emy l: - ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 = ₹ 51,000 = 5,100 kgs | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ | emy l: - ce - Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 = ₹ 51,000 = 5,100 kgs | | | | |
| Ans. | a) Material Osage Variance c) Material Cost Variance a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - I AO × AP | emy l: - ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 = ₹ 51,000 = 5,100 kgs | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5 100 × AP | emy l: - ce – Actual Pri | (May 2013 RTP) $ce) = ₹ 51,000.$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 7,14,000$ $= ₹ 7,14,000$ | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - \checkmark AQ × AP \checkmark Or, 5,100 × AP \checkmark \therefore AP | emy ce – Actual Pri | (May 2013 RTP) ce) = ₹ 51,000. = ₹ 51,000 = ₹ 51,000 = ₹ 51,000 = ₹ 7,14,000 = ₹ 7,14,000 = ₹ 140 | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - \checkmark AQ × AP \checkmark Or, 5,100 × AP \checkmark \therefore AP \checkmark \therefore AP \checkmark \therefore AP \checkmark \therefore Actual Price is less by $\$$ 10 | emy l: - ce – Actual Pri | (May 2013 RTP) $ce) = ₹ 51,000$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 7,14,000$ $= ₹ 7,14,000$ $= ₹ 140$ | | | | |
| Ans. | c) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - \checkmark AQ × AP \checkmark Or, 5,100 × AP \checkmark \therefore AP \checkmark \therefore AP \checkmark \therefore AP \checkmark So, Standard Price | env <u>l: -</u> ce – Actual Pri | (May 2013 RTP) $ce) = ₹ 51,000.$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 7,14,000$ $= ₹ 7,14,000$ $= ₹ 140$ $₹ 140 + ₹ 10 = ₹ 150 per kg$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - \checkmark AQ × AP \checkmark Or, 5,100 × AP \checkmark \therefore AP \checkmark \therefore AP \checkmark \therefore AL \checkmark Actual Price is less by ₹ 10 \checkmark So, Standard Price \checkmark Actual Quantity | emy l: - ce – Actual Pri | (May 2013 RTP) $ce) = ₹ 51,000.$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 51,000$ $= ₹ 7,14,000$ $= ₹ 7,14,000$ $= ₹ 140$ $₹ 140 + ₹ 10 = ₹ 150 per kg$ $= 5,100 kgs.$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ So, Standard Price ✓ Actual Quantity ✓ Actual Price | env <u>l: -</u> ce – Actual Pri | (May 2013 RTP) $(May 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 51,000$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/kg$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ Actual Quantity ✓ Actual Quantity ✓ Actual Quantity | emy l: - ce – Actual Pri | (May 2013 RTP) $(May 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 51,000$ $= $ 5,100 kgs$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/kg$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ So, Standard Price ✓ Actual Quantity ✓ Actual Price | emy <u>l: -</u> ce – Actual Pri | (May 2013 RTP) $(may 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 51,000$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/kg$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ Actual Quantity ✓ Actual Quantity ✓ Actual Price b) Material Usage Variance: - ✓ Std. Price (Std. Quantity-Actual Quantity) | emy l: - ce – Actual Pri | (May 2013 RTP) $(may 2013 RTP)$ $(may 2013 RTP)$ $= $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $$ | | | | |
| Ans. | b) Material Osage variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ Actual Quantity ✓ Actual Quantity ✓ Actual Price b) Material Usage Variance: - ✓ Std. Price (Std. Quantity-Actual Quantity) ✓ Or, SP (SQ-AQ) | emy l: - ce – Actual Pri | (May 2013 RTP) $(May 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 51,000 kgs$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/ kg$ | | | | |
| Ans. | b) Material Osage variance c) Material Cost Variance Grooming Education Acad a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - \checkmark AQ × AP \checkmark Or, 5,100 × AP \checkmark Or, 5,100 × AP \checkmark \therefore AP \checkmark \therefore AP \checkmark \therefore ACtual Price is less by ₹ 10 \checkmark So, Standard Price \checkmark Actual Quantity \checkmark Actual Price \checkmark Actual Price \checkmark Std. Price (Std. Quantity-Actual Quantity) \checkmark Or, SP (SQ-AQ) \checkmark = ₹ 150 (1,000 units × 5 kg - 5,100 kg) = ₹ 15,0 | <u>l: -</u> ce – Actual Pri | (May 2013 RTP) $(may 2013 RTP)$ $(may 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 5,100 kgs$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/kg$ | | | | |
| Ans. | b) Material Osage Variance c) Material Cost Variance a) Actual Quantity and Actual Price of Material used Material Price Variance = Actual Quantity (Standard Pri Or, AQ (SP-AP) Or, 10 AQ Or, AQ Actual cost of material used is given i.e.: - ✓ AQ × AP ✓ Or, 5,100 × AP ✓ ∴ AP ✓ ∴ AP ✓ ∴ AP ✓ Actual Price is less by ₹ 10 ✓ So, Standard Price ✓ Actual Quantity ✓ Actual Price b) Material Usage Variance: - ✓ Std. Price (Std. Quantity-Actual Quantity) ✓ Or, SP (SQ-AQ) ✓ = ₹ 150 (1,000 units × 5 kg - 5,100 kg) = ₹ 15,0 | emy <u>l: -</u> ce – Actual Pri | (May 2013 RTP) $(May 2013 RTP)$ $= $ 51,000$ $= $ 51,000$ $= $ 51,000 kgs$ $= $ 7,14,000$ $= $ 7,14,000$ $= $ 140$ $= $ 140 + $ 10 = $ 150 per kg$ $= 5,100 kgs.$ $= $ 140/ kg$ | | | | |

| | c) <u>Material Cost Variance: -</u> | | | | | | | |
|----------|--|------------------|-------------------|-----------------|--|--|--|--|
| | – Std. Cost–Actual Cost | | | | | | | |
| | $- = (SP \times SQ) - (AP \times AQ)$ | | | | | | | |
| | – = ₹ 150 × 5,000 – ₹ 140 × 5,100 | | | | | | | |
| | - = ₹7,50,000-₹7,14,000= ₹36,000 (F) | | | | | | | |
| | Or. | | | | | | | |
| | – Material Price Variance + Material Usage Variance | | | | | | | |
| | ₹ 51 000 (F) $-$ ₹ 15 000 (A) = ₹ 36.000 (F) | | | | | | | |
| 23. | A Company manufacturing two products uses Standard Co | osting System | The followin | o data relating | | | | |
| 20. | to April 20X1 have been furnished to you: - | botting by stern | | Suutu i cluting | | | | |
| | Products | A (₹) | | B (₹) | | | | |
| | Standard Cost per unit: - | | | <i>D</i> (1) | | | | |
| | Direct Materials | 2 | | <u> </u> | | | | |
| | Direct Wages | 0 | | 4 | | | | |
| | Eived Overheade | 0 | | 12 | | | | |
| | Theu Overneaus | 26 | | 22 | | | | |
| | | <u>20</u> | | 22 | | | | |
| | Unite processed /in Drocess | | | | | | | |
| | Decision of the menth. All Meteoriele emplied | | ٨ | | | | | |
| | Beginning of the month: All Materials applied | | A 000 | B 12,000 | | | | |
| | And 50% complete in respect of labour and | | 4,000 | 12,000 | | | | |
| | Uverheads | | | | | | | |
| | End of the month: All Materials applied and | 40 | | | | | | |
| | 80% complete in respect of labour and | | | | | | | |
| | Overheads | <u>_</u> 0 | 8,000 | 12,000 | | | | |
| | Units completed and transferred to | <i></i> | | | | | | |
| | Warehouse during the month | | 16,000 | 20,000 | | | | |
| | Grooming Education Acader | ny | | | | | | |
| | You may use average cost method to analyse. | | | | | | | |
| | The following were the actual costs recorded during the i | nonth: | | 6 J.J.J | | | | |
| | Direct materials purchased at standard price amount to | ₹ 2,00,000 a | nd actual cost | t of which is ₹ | | | | |
| | 2,20,000. Direct materials used for consumption at stand | ard price amo | bunt to $₹ 1,75,$ | | | | | |
| | Direct wages for actual hours worked at standard wages | rates were ₹ | 4,20,000 and | at actual wage | | | | |
| | rates were ₹ 4,12,000. | | | 1 | | | | |
| | Fixed Overneads budgeted were (8,25,000 and a | ctual fixed | overneads in | curred were | | | | |
| | 38,50,000. | | | | | | | |
| | Dequired. | | | | | | | |
| | <u>Requireu:</u> | ation and at th | no point of nu | schago | | | | |
| | a) Direct material price variance at the point of consump | ouon and at u | le point of pui | chase. | | | | |
| | Direct material usage variance. a) Direct wage rate and officiency variance. | | | | | | | |
| | d) Fixed everbands volume and even diture variance. | | | | | | | |
| | u) Fixed over means volume and expenditure variance. a) Standard cost of WID at the and of the month. | | | | | | | |
| | | | | (May 2000) | | | | |
| Ans | Direct Material Price variance at the point of cons | umntion | | (May 2000) | | | | |
| 2. | $\sqrt{M_1 - Actual Quantity \times Actual Price}$ | umption. | | | | | | |
| a george | $1.75,000 \times 2,20,000$ | | | | | | | |
| ~ | $= 1,75,000 \times \frac{1}{2,00,000}$ | | | | | | | |
| | = ₹ 1,92,500 | | | | | | | |
| | ✓ M_2 = Actual Quantity × Standard Price | | | | | | | |



| | 42429 | Return-in- | process l | abour | | | | ₹ | 12,000 | | |
|--|--|--|--|---|-------------------------------|-------------------------------|------------------------|--|--------------------------------------|--|--|
| | | ✓ 0v | verheads | | | | | | ₹ 5,000 | | |
| | March 1 to 31 | Labour: 40 | Labour: 4000 hours | | | | | ₹1,78,000 | | | |
| | Overheads | | | | | | | | 90,000 | | |
| | You are required to a) For each element b) Actual Cost of re c) The Standard Co d) The labour rate expenditure var | o compute: - ht, equivalent eturn-in-proce ost per return e and labour iance. | units of p ess on Ma efficienc | oerforma Irch 31. y variar | ance and t nce as we | the actual co ell as overh | ost per eo ead volu | quivalent u ume and o (Ma | unit. overhead y 2016] | | |
| Ans. | a) Statement Showing Cost Elements Equivalent. Units of Performance and the Actual Cost per Equivalent Unit: - | | | | | | | | | | |
| | Detail of | Detail of | Detail of Detail Equivalent Un | | | nits | | | | | |
| | Returns | Input Units | | - | Output units | Lab | our | Overh | eads | | |
| | | | | | | Units | (%) | Units | (%) | | |
| | Returns in Process at Start | 200 | Returns Comple March | ; ted in | 900 | 900 | 100 | 900 | 100 | | |
| | Returns Started in March | 825 | Returns Process end of M | ; in at the March | 125 | 100 | 80 | 100 | 80 | | |
| | | 1,025 | | | 1,025 | 1,000 | | 1,000 | | | |
| | Costa | (3 | | | | | | | | | |
| | ✓ From Previous | ng Educ | ation A | cademy | | . <u>)</u>)00 | 5.0 | . <u>)</u> 00 | | | |
| | ✓ During the mor | eer in Devel | oping Cone | Yo, m | 1.78. | 000 | 90.0 | 00 | | | |
| | ✓ Total Cost | | | | | 1,90,000 | | 95,000 | | | |
| | ✓ Cost per Equiva | alent Unit | | 3 | 7 | 190 | .00 | 95. | 00 | | |
| | b) Actual Cost of | returns in p | rocess of | 1 March | 31: - | | | | | | |
| | Particulars | Number | s · | Stage Compl | e of etion | Rate per R (₹) | leturn | Tota (₹) | al | | |
| | | 105 A | 1 | <u> </u> | 0 | <u>C</u> | 0 | D = (A X) | BX C) | | |
| | ✓ Labour | 125 retur | ns | 0.8 | 0 | 190.0 | 0 | 19,00 | 0 | | |
| | • Overnead | 125 retur | ns | 0.8 | 0 | 95.00 |) | 9,50 28 5 | 0 | | |
| | | ç ^{er} | | | | | | 20,0 | | | |
| Se al an | c) Standard Cost ✓ Labour = 5 ✓ Overhead = ✓ Budgeted V ✓ Actual labo | per Return: 5 hrs × ₹ 40 p = 5 hrs × ₹ 20 Yolume for Ma ur rate = ₹ $\frac{1.7}{2}$ | $\frac{-}{2}$ ber hour = $\frac{-}{2}$ ber hou $\frac{-}{2}$ $\frac{-}{2}$ $\frac{-}{2}$ $\frac{-}{2}$ $\frac{-}{2}$ $\frac{-}{2}$ | = ₹ 200 r = ₹ 10 <u>₹ 30</u> $\frac{88,000}{1,000} = 1$ ₹ 44.50 | 00 1 <u>0</u> 980 Retur | 'ns | | | | | |

| | d) <u>Computation of Varia</u> | nces: - | | | | | |
|-----|---|--|----------------|------------------|--|--|--|
| | Statement Showing Outp | ut (March Only) Element Wise | Labour | Overhead | | | |
| | ✓ Actual performance i | n March in terms of equivalent units as | 1,000 | 1,000 | | | |
| | calculated above | | | | | | |
| | ✓ Less: Returns in pro | cess at the beginning of March in terms | 50 | 50 | | | |
| | of equivalent units i.e | e., 25% of returns (200) | | | | | |
| | | | 950 | 950 | | | |
| | | | | | | | |
| | <u> Variance Analysis: -</u> | | | | | | |
| | <u>Labour Rate Variance: -</u> | | | | | | |
| | \checkmark = Actual Time × (Stand | ard Rate – Actual Rate) | | | | | |
| | \checkmark = Standard Rate × Actu | al Time — Actual Rate × Actual Time | | | | | |
| | $\checkmark = $ ₹ 40 × 4,000 hrs₹ 1,78,000 = ₹ 18,000 (A) | | | | | | |
| | | | | | | | |
| | Labour Efficiency Varianc | <u>e: -</u> | | | | | |
| | \checkmark = Standard Rate \times (Stan | ndard Time – Actual Time) | | | | | |
| | \checkmark = Standard Rate × Stan | dard Time – Standard Rate $	imes$ Actual Tim | e | | | | |
| | \checkmark = ₹ 40 × (950 units × 5 | hrs.) – ₹ 40 × 4,000 hrs. | | | | | |
| | ✓ = 1,90,000 - 1,60,000 = | = ₹ 30,000 (F) | | | | | |
| | | | | | | | |
| | Overhead Expenditure or | <u>Budgeted Variance: -</u> | | | | | |
| | \checkmark = Budgeted Overhead – | - Actual Overhead | | | | | |
| | ✓ = ₹ 98,000 - ₹ 90,000 | | | | | | |
| | ✓ = ₹ 8,000 (F) | | 10 | | | | |
| | | | 'o, | | | | |
| | Overhead Volume Variance | <u>xe:-</u> | _ | | | | |
| | \checkmark = Recovered/Absorbed | Overhead – Budgeted Overhead | | | | | |
| | $= 950 \text{ Units} \times 5 \text{ hrs.} \times 3$ | 20 - ₹98,000 = ₹3,000 (A) | | | | | |
| 25. | C Preserves produces Jams, | Marmalade and Preserves. All the produ | icts are produ | ced in a similar | | | |
| | fashion; the fruits are cook | ted at low temperature in a vacuum pro | ocess and the | n blended with | | | |
| | glucose syrup with added ci | tric acid and pectin to help setting. | c 11.1 | 61 | | | |
| | Margins are tight and the fir | m operates, a system of standard costing | for each batch | n of Jam. | | | |
| | The Standard cost data for a | batch of raspberry Jam are $400 \text{ km} \approx 310 \text{ cm}$ | | | | | |
| | Fruit's extract | 400 kgs @ ₹ 16 per kg. | | | | | |
| | Glucose syrup | 700 kgs @ ₹ 10 per kg. | | | | | |
| | Pectin | 99 kgs @ ₹ 33.2 per kg. | | | | | |
| | Litric acid | 1 kg at $₹$ 200 per kg | | | | | |
| | Labour | 18 nours @ < 32.50 per nour. | | | | | |
| | Standard processing loss 20 | 4 | | | | | |
| | The climate conditions prov | v. | 2 consoquonc | normal prices | | | |
| | in the trade were \gtrless 19 per k | g for fruits abstract although good huvin | a could achiev | e some savings | | | |
| | The impact of exchange ra | tes for imported sugar plus the minimu | m price fived | for sugarcane | | | |
| | caused the price of syrup to | increase by 20% The retail results for th | a hatch wara | - | | | |
| | Fruit evtract | 428 kgs at $₹$ 18 nor kg | | | | | |
| | Glicose surin | 742 kgs at ₹ 12 nor kg | | | | | |
| | Pectin | 7 12 kgs at ₹ 22 8 nor ba | | | | | |
| 0 | Citric acid | 1 kgs at ₹ 95 per kg | | | | | |
| | Labour | i ngo at v 20 pei ng. 20 hrs at ₹ 20 nor hour | | | | | |
| | Laboul | Lo mo. at Voo per noui | | | | | |

| | 4) Labour Operating variance: - | | | | | | | | | |
|------|---|--|--|--|--|--|--|--|--|--|
| | Standard Labour cost—Actual Labour Cost | | | | | | | | | |
| | $= 18 \times 32.50 - 20 \times 30$ | | | | | | | | | |
| | = 585 - 600 = 15 (A) | | | | | | | | | |
| | | | | | | | | | | |
| | 5) Total varia | ince: - | | | | | | | | |
| | – Plannin | ig variance + Usa | ge variance + Pr | ice variance + la | bour operating v | variance | | | | |
| | = 2600 | (A) + 1899.2 (A | A) + 583 (F) + 1 | 5(A) = 3931.2 | (A) | | | | | |
| 26. | SB Constructions | s Limited has ent | tered into a big c | ontract at an agr | eed price of ₹1,5 | 50,00,000 subje | | | | |
| | to an escalation | clause for mate | rial and labour | as spent out on | the contract an | nd correspondin | | | | |
| | actuals are as fol | llows: - | | I | | | | | | |
| | Material | Quantity | Standard Rat | e per Actu | al Quantity | Rate per | | | | |
| | | (tonnes) | tonne (₹ |) (| tonnes) | tonne (₹) | | | | |
| | A | 3,000 | 1,000 | | 3,400 | 1,100 | | | | |
| | B | 2,400 | 800 | | 2,300 | 700 | | | | |
| | C | 500 | 4,000 | | 600 | 3,900 | | | | |
| | D | 100 | 30,000 | - | 90 | 31,500 | | | | |
| | Labour | Hours | Hourly Ra | te | Hours | Hourly Rate | | | | |
| | | (0.000 | (₹) | | = < 0.00 | (₹) | | | | |
| | L ₁ | 60,000 | 15 | | 56,000 | 18 | | | | |
| | - | 40,000 30 | | | 28 000 | 35 | | | | |
| | L ₂ | 40,000 | 30 | | 30,000 | | | | | |
| | L ₂ | 40,000 | 30 | 10 | 38,000 | | | | | |
| | L ₂ You are require 1) Give your an 2) Prepare the contract are 3) Calculate the | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian | 30 ble escalation cla t, if all the expen nces and verify t | im and determir ses other than n hem: - | ne the final contr naterial and labo | act price payab our related to th | | | | |
| | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian I Cost variance. | 30 ble escalation cla t, if all the expen nces and verify t | im and determin ses other than n hem: - Academy | ne the final contr naterial and labo | act price payab | | | | |
| | L ₂ You are require 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian I Cost variance. I Price variance. I Usage variance | 30 ble escalation cla t, if all the expen nces and verify t ing Education | im and determin ses other than n hem: - Academy | ne the final contr naterial and labo | act price payab our related to t | | | | |
| | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iii) Materia v) Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance | 30 ble escalation cla t, if all the expen nces and verify t | im and determir ses other than n hem: - | ne the final contr naterial and labo | act price payab | | | | |
| | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance | 30 ble escalation cla t, if all the expen nces and verify t | im and determin ses other than n hem: - Academy | ne the final contr naterial and labo | ract price payab | | | | |
| | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iii) Materia v) Labour v) Labour vi) Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian | 30 ble escalation cla t, if all the expen nces and verify t | im and determin ses other than n hem: - Academy | ne the final contr naterial and labo | act price payab our related to t | | | | |
| Ans. | L ₂ You are required i) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour vi) Labour vi) Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian | 30 ble escalation cla t, if all the expen nces and verify t ing Education neer in Science or neer in Science or neer in Science or neer in Science or | im and determin ses other than n hem: - Academy | ne the final contr naterial and labo | act price payab our related to t (May 201 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour v) Labour vi Labour vi Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian showing addition | ble escalation cla t, if all the expen nces and verify t ing Education nee in the coning Con nee. nce. onal claim due t Std. Rate | im and determin ses other than n hem: - Academy co escalation cla Actual Rate | ne the final contr naterial and labo ause: - Variation in | act price payab our related to t (May 201 Escalation | | | | |
| Ans. | L ₂ You are required i) Give your an 2) Prepare the contract are 3) Calculate the ii) Materia iii) Materia iii) Materia iv) Labour v) Labour vi) Labour vi) Labour vi) Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours | ble escalation cla t, if all the expen nces and verify t ing Education neer in Science of neer in Science of the neer in Science of the science of the science of the neer in Science of the Std. Rate (b) | im and determin ses other than n hem: - Academy teepts | ause: - Variation in Rate (₹) | act price payab our related to t (May 201 Escalation claim (₹) | | | | |
| Ans. | L ₂ You are required i) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iii) Materia iv) Labour v) Labour v) Labour vi Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) | ble escalation cla t, if all the expen nces and verify t nee in the expent nce. nce. onal claim due t Std. Rate (b) | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) | ause: - Variation in Rate (₹) (d) = (C-b) | act price payab our related to t (May 201 Escalation claim (₹) (e)=(a×d) | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour v) Labour v] Labour di Calculate the iii) Materia iii) Materia | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance l Usage variance Cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 | ble escalation cla t, if all the expen nces and verify t ing Education nce. nce. onal claim due t Std. Rate (b) 1,000 | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 | (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iii) Materia iv) Labour v) Labour v) Labour v] Labour daterial | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance Cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 | ble escalation cla t, if all the expen nces and verify t ing Education neer in Schoning Cor neer in Schoning Cor n | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 700 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 -100 | (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 -2,40,00 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iii) Materia iv) Labour v) Labour v) Labour v] Labour di C | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance. l Usage variance cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 | ble escalation cla t, if all the expen nces and verify t ing Education nce. nce. onal claim due t Std. Rate (b) 1,000 800 4,000 | im and determin ses other than n hem: - Academy to escalation cla Actual Rate (C) 1,100 700 3,900 | the the final contribution that erial and laboratorial | (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 -2,40,00 -50,00 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour v) Labour v] Labour di Statement Material A B C D | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 100 | ble escalation cla t, if all the expen nces and verify t ing Education neer in the oping Con- neer in the oping Co | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 700 3,900 31,500 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 -100 +1,500 | (May 201 Escalation claim (₹) (e)=(a×d) +3,00,00 -2,40,00 +1,50,00 | | | | |
| Ans. | L2You are required1) Give your and2) Prepare the contract are3) Calculate the i) Materiad ii) Materiad iii) Materiad iii) Materiad iv) Labour v) Labour v) Labour vi) Labour1) StatementMaterialMaterialBCDMaterial escal | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance l Usage variance cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 100 ation claim | ble escalation cla t, if all the expen nces and verify t ing Education nce. onal claim due t Std. Rate (b) 1,000 800 4,000 30,000 | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 700 3,900 31,500 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 -100 +1,500 | (May 201 (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 -2,40,00 -2,40,00 (+1,50,00 1,60,00 | | | | |
| Ans. | L ₂ You are required i) Give your an 2) Prepare the contract are 3) Calculate the ii) Materia iii) Materia iii) Materia iv) Labour v) Labour v) Labour vi) Labour daterial A B C D Material escal Labour | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 100 ation claim | ble escalation cla t, if all the expen nces and verify t ing Education neer in the expen nce. onal claim due t Std. Rate (b) 1,000 800 4,000 30,000 | im and determin ses other than n hem: - Academy coescalation cla Actual Rate (C) 1,100 700 3,900 31,500 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 -100 +1,500 | (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 -2,40,00 -2,40,00 (1,60,00 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour v) Labour v) Labour v] Labour daterial Material A B C D Material escal Labour L ₁ | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance al Usage variance Cost variance rate variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 100 ation claim | ble escalation cla t, if all the expen nces and verify t ing Education nee in Standard (b) 1,000 800 4,000 30,000 | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 700 3,900 31,500 | the the final contribution that erial and laboratorial | (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,00 -2,40,00 -2,40,00 +1,50,00 +1,80,000 | | | | |
| Ans. | L ₂ You are required 1) Give your an 2) Prepare the contract are 3) Calculate the i) Materia ii) Materia iii) Materia iv) Labour v) Labour v) Labour v) Labour v] Labour daterial A B C D Material escal Labour L ₁ L ₂ | 40,000 ed to: - alysis of admissil contract account ₹ 13,45,000. e following varian l Cost variance. l Price variance al Usage variance Cost variance rate variance Efficiency varian showing addition Std. Qty./ Hours (a) 3,000 2,400 500 100 ation claim | ble escalation cla t, if all the expen- nces and verify t ing Education nce. onal claim due t Std. Rate (b) 1,000 800 4,000 30,000 | im and determin ses other than n hem: - Academy co escalation cla Actual Rate (C) 1,100 700 3,900 31,500 | ause: - Variation in Rate (₹) (d) = (C-b) + 100 -100 +1,500 +3 +5 | (May 201 (May 201 Escalation claim (₹) (e)=(a×d) + 3,00,000 -2,40,000 +1,50,000 +1,80,000 +2,00,000 | | | | |

| Statement Showing Final C | ontract F | <u>rice</u> | | | | |
|--|------------------|---|---------------------------|------------------------|-----------------|--|
| Particulars | | | | | (₹) | |
| ✓ Agreed contract price | | | | | 1,50,00,00 | |
| ✓ Add: Agreed escalation | n claim: | | | (₹) | | |
| ✓ Material Cost | | | | 1,60,000 | | |
| ✓ Labour Cost | | | | 3,80,000 | 5,40,00 | |
| ✓ Final Contract Price | | | | | 1,55,40,00 | |
| 2) | | | | | | |
| Dr. | C | ontract Account | : | | C | |
| Particulars | | (₹) | Pa | rticulars | (₹) | |
| To Material: - | | | By Con | tractee's A/c | 1,55,40,00 | |
| A - 3,400 × ₹ 1,100 | | | | | | |
| B – 2,300 × ₹ 700 | | | | | | |
| C – 600 × ₹ 3,900 | | | | | | |
| D- 90 × ₹ <u>31,500</u> | | 1,05,25,000 | | | | |
| To Labour: - | | | | | | |
| L ₁ – 56,000 × ₹ 18 | | | | | | |
| L ₂ – 38,000 × ₹ <u>35</u> | | 23,38,000 | | | | |
| To Other expenses | | 13,45,000 | | | | |
| To Profit and Loss A/c | | 13,32,000 | | | | |
| | | 1,55,40,000 | | | 1,55,40,00 | |
| - | | | | | | |
| 3) Material Variances | | | | | | |
| SQ × SP (₹) | | AQ × AP (₹ |) | AQ | × SP (₹) | |
| A-3,000×1,000=30,00,00 | 0 | 3,400×1,100= | =37,40,000 |) 3,400× | 1,000=34,00,00 | |
| B-2,400×800=19,20,00 |) oming F | 2,300×700= | -16,10,000 |) 2,300 | ×800=18,40,00 | |
| C-500×4,000=20,00,000 |) Pioneer in | Develo 600×3,900= | =23,40,000 |) 600×4 | 4,000=24,00,00 | |
| D-100×30,000=30,00,00 | 0 | 90×31,500= | =28,35,000 |) 90×3 |),000=27,00,00 | |
| Total 99,20,000 | | 1, | 05,25,000 |) | 1,03,40,00 | |
| ✓ Material Cost Vari Actual Price) | ance = = = | € (Standard Quan ₹ 99,20,000 - ₹ ₹ 6,05,000 (A) | tity × Star 1,05,25,00 | ndard Price) — (10 | Actual Quantit | |
| ✓ Material Price Variance = Actual Quantity (Standard Price – Actual Price) = ₹ 1,03,40,000 – ₹ 1,05,25,000 = ₹ 1,85,000 (A) | | | | | | |
| ✓ Material Usage Var Standard Price) | iance = | - (Standard Quan | tity × Star | ndard Price) — (| Actual Quantity | |
| 27 | = | ₹99,20,000 - ₹ | 1,03,40,00 | 0 | | |
| 18 | = | ₹4,20,000 (A) | | | | |
| <u>Labour Variances</u> | | | | F | | |
| SH × SR (₹) | | AH × AR (₹) | | AH > | ×SR (₹) | |
| L ₁ - 60,000×15 = 9,00,000 |) | 56,000×18=10,08 | 8,000 | 56,000×1 | 15=8,40,000 | |
| L ₂ - 40,000×30=12,00,00 | 0 | 38,000×35=13,3 | 0,000 | 38,000×3 | 0=11,40,000 | |
| Total 21.00 000 |) _ | 23 38 000 | | 198 | RO 000 | |

| = ₹ 21,00,000 - ₹ 23,38,000 = ₹ 2,38,000 (A) ✓ Labour Rate Variance = (Actual Hours × Standard Rate) - (Actual Hours × Actual Rate) | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| $= \underbrace{}_{2,38,000} (A)$ $\checkmark \text{ Labour Rate Variance} = (Actual Hours \times Standard Rate) - (Actual Hours \times Actual Rate)$ $= \underbrace{}_{10,80,000} \underbrace{}_{22,22,000} _{20,000} = \underbrace{}_{22,22,000} _{20,000} _{$ | | | | | | | | | |
| ✓ Labour Rate Variance = (Actual Hours × Standard Rate) – (Actual Hours × Actual Rate) $= \pm 10.90,000, = \pm 22.29,000$ | = ₹ 2,38,000 (A) | | | | | | | | |
| | ✓ Labour Rate Variance = (Actual Hours × Standard Rate) – (Actual Hours × Actual Rate) | | | | | | | | |
| = ₹ 19,80,000 - ₹ 23,38,000 | | | | | | | | | |
| = ₹ 3 , 58 , 000 (A) | = ₹ 3, 58, 000 (A) | | | | | | | | |
| ✓ Labour Efficiency Variance = (Standard Hours × Standard Price) – (Actual H | ours × | | | | | | | | |
| Standard Price) | | | | | | | | | |
| = ₹ 21,00,000 - ₹ 19,80,000 | | | | | | | | | |
| = ₹ 1,20,000 (F) | | | | | | | | | |
| 27. A company has a normal capacity of 120 machines, working 8 hours per day for 25 days in a r | month. | | | | | | | | |
| The fixed overheads are budgeted at ₹ 1,44,000 per month. The standard time requi | red to | | | | | | | | |
| manufacture one unit of product is 4 hours. | | | | | | | | | |
| In April, 20X1, the company worked 24 days of 840 machine hours per day and produced | 5,305 | | | | | | | | |
| units of output. The actual fixed overheads were ₹ 1,42,000. | | | | | | | | | |
| | | | | | | | | | |
| Calculate: - | | | | | | | | | |
| a) Expense Variance | | | | | | | | | |
| b) Volume Variance | | | | | | | | | |
| c) Total fixed overheads variance. | | | | | | | | | |
| (IC. | AI SM) | | | | | | | | |
| Ans. Variances: - | | | | | | | | | |
| i) Fixed Overhead Expenditure Variance = (Budgeted fixed overhead – Actual fixed overh | ead) | | | | | | | | |
| = 1,44,000 - 1,42,000 = ₹ 2,000 (F) | | | | | | | | | |
| ii) Total Volume Variance = (Standard fixed overhead – Budgeted | | | | | | | | | |
| fixed overhead | | | | | | | | | |
| = 1,27,320 - 1,44,000 = ₹ 16,680 (A) | | | | | | | | | |
| a) Efficiency variance oming Education Academy | | | | | | | | | |
| = Std. rate per hr. (Std. hrs. for actual production – Actual hrs.) | | | | | | | | | |
| = 6 × (21,220 – 20,160) = ₹6,360 (F) | | | | | | | | | |
| b) Capacity variance | | | | | | | | | |
| = Std. Rate (Actual hours - Budgeted hours) | | | | | | | | | |
| = 6 × {20,160 – (24 days × 120 machine × 8 hrs.)} = ₹17,280 (A) | | | | | | | | | |
| c) Calendar variance | | | | | | | | | |
| = (Actual No. of days – Budgeted No. of days) × Std. rate per day | | | | | | | | | |
| = (24 – 25) × 5,760 = ₹5,760 (A) | | | | | | | | | |
| iii) Fixed overhead variance = (Standard fixed overhead – Actual | | | | | | | | | |
| Fixed overhead | | | | | | | | | |
| = 1,27,320 - 1,42,000 | | | | | | | | | |
| = ₹ 14,680 (A) | | | | | | | | | |
| Alternatively: - | | | | | | | | | |
| ✓ Expenditure variance + Volume Variance = $2,000$ (F) + $16,680$ (A) = ₹ $14,680$ (A) | | | | | | | | | |
| Working Notes: - | | | | | | | | | |
| Budget A | ctual | | | | | | | | |
| 1)Fixed overheads for the month1,44,0001,4 | 2,000 | | | | | | | | |
| 2) Working days per month 25 | 24 | | | | | | | | |
| 3) Working hours per month (120 machines × 8 hrs. × 25) (840 machines b) | nours | | | | | | | | |
| = 24 000 24 days) = 27000 24 days) = 27000 27 days) = 27000 27 days) = 27000 27 days) = 27000 270000 270000 270000 270000 2700000 270000 270000 270000 270000 270000 270000 270000 270000 2700000 2700000 2700000 2700000 2700000 27000000 270000000 2700000000 270000000000 | 0.160 | | | | | | | | |
| uaysj = 24,000 × 24 daysj = 2 | -, | | | | | | | | |

| | 5 Standar | d hours f | or actual p | roduction | | | | | |
|-------------|---|---|--|--|--|---|--|--|---|
| | = Actua | l product | ion units × | Std. hours pe | r unit | | | | |
| | = 5,305 | × 4 = 21, | 220 hrs. | | | | | | |
| | 6) Standard fixed overhead rate per unit = $\frac{\overline{1,44,000}}{6000 \text{ units}} = \overline{124}$ | | | | | | | | |
| | 7) Standard fixed overhead rate per hour = $\frac{₹1,44,000}{₹1,4400} = ₹6$ | | | | | | | | |
| | Standard fix | xed overh | ead per da | $y = \frac{1,44,000}{25} =$ | ₹5,760 | | | | |
| 20 | Pabu Moon | Itd Hood | t atondard | ²⁵ days | , n in mon | ufacturing on | o of its prod | luct (Dol | au Can' Tha |
| 20. | baby Moon | Ltu. Uses | stanuaru (| costing system | n m man | ulacturing on | e of its proc | luct bai | by Cap. The |
| | Direct Mete | is lollows | 5: han @ ₹ (0) | | Ŧ (0 | | | | |
| | Direct Mate | | ler @ ₹ 00 | per meter | ₹ 00 ₹ 40 | | | | |
| | Variable ov | ur 2 nour | @ \ 20 pe | n nor hour | 140 ∓20 | | | | |
| | Total | erneau z | lioui @ \ i | o per nour | 1 <u>20</u> ₹120 | | | | |
| | TOLAI | | | | ۲ <u>120</u> | | | | |
| | During the i | nonth of | August, 10 | ,000 units of ' | Baby Cap | o' were manuf | actured. De | tails are | as follows: |
| | Direct mate | rial consu | umed 11, | 400 meters | @₹ | t 58 per meter | | | |
| | Direct labou | ır Hours | | ? | @ | ? | ₹ 4,48,800 |) | |
| | Variable ov | erhead in | curred | | | | ₹ 2,24,4 | 400 | |
| | Variable ov | erhead ef | ficiency va | riance is ₹ 4,0 | 000 A. Va | riable overhea | ads are base | ed on Di | rect Labour |
| | Hours. | | | | | | | | |
| | You are req | uired to (| CALCULATI | E the followin | g Variano | ces: | | | |
| | a) Materia | al Varian | ces- Mater | rial Cost Var | iance, M | aterial Price | Variance a | nd Mat | erial Usage |
| | Variano | ce. | | | | | | | |
| | | | | | | | | | |
| | b) Variabl | e Overhe | ads varian | ces- Variable | overhead | l Cost Varianc | e, Variable | overhea | d Efficiency |
| | b) Variabl Variand | e Overhe ce and Va | ads variano riable over | ces- Variable head Expend | overhead iture Var | l Cost Varianc iance. | e, Variable | overhea | d Efficiency |
| | b) VariablVariandc) Labour | e Overhe ce and Va variance | ads variano riable over s- Labour C | ces- Variable head Expend Cost Variance, | overhead iture Var Labour F | l Cost Varianc iance. Rate Variance a | e, Variable and Labour | overhea Efficien | d Efficiency cy Variance. |
| A ma | b) Variabl Variand c) Labour | e Overhe ce and Va variance | ads variand riable over s- Labour C | ces- Variable head Expend Cost Variance, | overhead iture Var Labour F | l Cost Varianc iance. Rate Variance a | e, Variable | overhea Efficien (RTP | d Efficiency vy Variance. Nov. 2021) |
| Ans. | b) Variabl Variand c) Labour a) Material | e Overhe ce and Va variance Varianc Budget | ads variand riable over s- Labour C es Groom | ces- Variable head Expend Cost Variance, hing Educat | overhead iture Var Labour F | l Cost Varianc iance. Rate Variance a demy | e, Variable | overhea Efficien (RTP | d Efficiency cy Variance. Nov. 2021) |
| Ans. | b) Variabl Variand c) Labour a) Material Quantity | e Overhe ce and Va variance Varianc Budget | ads variand riable over s- Labour C es Groom | ces- Variable head Expend Cost Variance, Ing Educat Std. fo Quantity | overhead iture Var Labour F iton Aca or actual Price | l Cost Varianc iance. Rate Variance a demy | e, Variable | overhea Efficien (RTP Actual Price | d Efficiency cy Variance. Nov. 2021) |
| Ans. | b) Variabl Variand c) Labour a) Material Quantity (Meter) | e Overhe ce and Va variance Varianc Budget Price (₹) | ads variand riable over s- Labour C es Groom Amount (₹) | ces- Variable head Expend Cost Variance, ning Educat Std. fo Quantity (Meter) | overhead iture Var Labour F ion Aca or actual Price (₹) | l Cost Varianc iance. Rate Variance a demy Amount (₹) | e, Variable and Labour Quantity (Meter) | overhea Efficien (RTP Actual Price (₹) | d Efficiency cy Variance. Nov. 2021) Amount (₹) |
| Ans. | b) Variabl Variand c) Labour a) Material Quantity (Meter) 1 | e Overhe ce and Va variance Varianc Budget Price (₹) 60 | ads variand riable over s- Labour C es Groon Amount (₹) 60 | ces- Variable head Expend cost Variance, Ding Educat Std. fo Quantity (Meter) 10,000 | overhead iture Var Labour F Ion Aca or actual Price (₹) 0 60 | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 | e, Variable and Labour Quantity (Meter) 11,400 | overhea Efficien (RTP Actual Price (₹) 58 | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 |
| Ans. | b) Variable Variant c) Labour a) Material Quantity (Meter) 1 | e Overhe ce and Va variance Varianc Budget Price (₹) 60 | ads variand riable over s- Labour () es Amount (₹) 60 | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 | overhead iture Var Labour F Ion Aca or actual Price (₹) 0 60 | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 | e, Variable and Labour Quantity (Meter) 11,400 | overhea Efficien (RTP Actual Price (₹) 58 | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta | ces- Variable head Expend Cost Variance, hing Educat Std. fo Quantity (Meter) 10,000 | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan | l Cost Varianc iance. Rate Variance a Cemy Amount (₹) 6,00,000 dard Price – A | e, Variable and Labour Quantity (Meter) 11,400 ctual Quant | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variant c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 - 6,61,2 | ads variand riable over s- Labour () es Amount (₹) 60 ance = (Sta 200 = ₹ 61,7 | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) | overhead iture Var Labour F fon Aca or actual Price (₹) 0 60 ty × Stan | l Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A | e, Variable and Labour Quantity (Meter) 11,400 ctual Quant | overhea Efficien (RTP Actual Price (₹) 58 :ity × Ac | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,000 Material (60, 56) | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 - 6,61,2 Price Var | ads variand riable over s- Labour C es Groon Amount (₹) 60 ance = (Sta 200 = ₹ 61,7 iance | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 | ces- Variable head Expend: Cost Variance, hing Educat Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti | efficien (RTP Actual Price (₹) 58 tity × Ac | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variable Variable Variable c) Labour a) Material Quantity (Meter) 1 Material = (60 - 58) Material = (10.000) | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 8) 11,400 Usage Va | ads variand riable over s- Labour C es Groon Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A Price – A | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = (60 - 58) Material = (10,000) | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 8) 11,400 Usage Var 0 – 11,400 | ads variand riable over s- Labour O es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 0) 60 | ces- Variable head Expend: Cost Variance, hing Educat Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan = ₹ 84,000 (A) | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A tity – Act A) | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard P | overhea Efficien (RTP Actual Price (₹) 58 :ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material = (10,000 b) Variable | e Overhe ce and Va variance Variance Variance Budget Price (₹) 60 Cost Varia 0 - 6,61,2 Price Var 3) 11,400 Usage Var 0 - 11,400 | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,7 iance = ₹ 22,800 riance = (St 0) 60 | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan = ₹ 84,000 (A | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A tity – Act A) | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard P | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = (60 - 58) Material = (10,000) b) Variable = Standa | e Overhe ce and Va variance Variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 8) 11,400 Usage Var 0 – 11,400 coverhe ard varia | ads variand riable over s- Labour O es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 0) 60 ads varian ole overhea | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan = ₹ 84,000 (A ces Variable id – Actual Va | overhead iture Var Labour F Ton Aca or actual Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov | d Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) ad cost Varian | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard Pa | overhea Efficien (RTP Actual Price (₹) 58 tity × Ac | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material = (10,000 b) Variable = Standa = (10,000 | e Overhe ce and Va variance Variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 Usage Var 3) 11,400 Usage Var 3) 11,400 Usage Var 3) 0 – 11,400 | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 2,800 riance = (Sta 2,2,800 riance = (Sta 2,3,800 riance = (Sta 2,3,800) riance = | ces- Variable head Expend Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan = ₹ 84,000 (A ces Variable id – Actual Va ₹ 10) – 2,24,4 | overhead iture Var Labour F or actual Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov 00 = ₹ 24 | d Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) ad cost Varian rerhead .400 (A) | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard Pr nce | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material = (10,000 b) Variable = Standa = (10,000 Variable | e Overhe ce and Va variance Variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 Usage Var 3) 11,400 Usage Var 0 – 11,400 e Overhea ard variab | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,3 iance = ₹ 22,800 riance = (Sta 0) 60 ads varian ole overhea 2 hours × 5 d Efficiency | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quant = ₹ 84,000 (A ces Variable d – Actual Va ₹ 10) – 2,24,4 y Variance = | overhead iture Var Labour F Ton Aca r actual Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov 00 = ₹ 24 (Standard | d Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) d cost Varian rerhead c,400 (A) d Hours – Actu | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard Pr nce | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material = (10,000 b) Variable = Standa = (10,000 Variable Hour | e Overhe ce and Va variance Variance Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 Usage Var 3) 11,400 Usage Var 3) 11,400 Usage Var 4) – 11,400 Coverhea ard varial 0 units × e overhea | ads variand riable over s- Labour O es Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 2,800 = ₹ 61,2 iance = (Sta 2,900 = \$ 1 | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quant = ₹ 84,000 (A ces Variable id – Actual Va ₹ 10) – 2,24,4 y Variance = (| overhead iture Var Labour F Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov 00 = ₹ 24 (Standard | d Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) ad cost Varian rerhead 4,400 (A) d Hours – Actu | e, Variable and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard Pr nce | everhea Efficien (RTP Actual Price (₹) 58 City × Active ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,00 Material = (60 - 58 Material = (10,000 b) Variable = Standa = (10,000 Variable Hour Let Actu | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 Usage Var 3) 11,400 Usage Var 3) - 11,400 Usage Var 3) 0 – 11,400 Usage Var 3) - 11,400 Usage Var 3) 11,400 Usage Var 4) 11,400 | ads variand riable over s- Labour C es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = (Sta 200 = ₹ 61,2) iance = (Sta 200 = \$ 50,2) iance = (Sta 200 = \$ 50,2) ianc | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quant = ₹ 84,000 (A ces Variable id – Actual Va ₹ 10) – 2,24,4 y Variance = (| overhead iture Var Labour F Price (₹) 0 60 ty × Stan Price – A tity – Act A riable Ov 00 = ₹ 24 (Standard | l Cost Varianc iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) ad cost Varian rerhead 4,400 (A) d Hours – Actu | e, Variable of and Labour Quantity (Meter) 11,400 ctual Quantic ctual Quantic Standard Procession of the second nce | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,000 Material = (60 - 58) Material = (10,000) b) Variable = Standa = (10,000) Variable Hour Let Actu (20.000) | e Overhe ce and Va variance Variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 8) 11,400 Usage Var 3) 11,400 Usage Var 3) 11,400 Usage Var 4) – 11,400 Coverhea ard varial 0 units × coverhea al Hours – X) × 10 | ads variand riable over s- Labour (2) es Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance 2 (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = \$ \$ 20,800 riance = (Sta 200 = ₹ 61,2 iance = \$ \$ 20,800 riance = (Sta 200 = ₹ 60,2) riance = (Sta 200 = \$ 50,2) riance = (Sta 200 = \$ 50 | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quan = ₹ 84,000 (A ces Variable id – Actual Va ₹ 10) – 2,24,4 y Variance = (| overhead iture Var Labour F Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov 00 = ₹ 24 (Standard | Amount (₹) Amount (₹) Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) d cost Varian rerhead 4,400 (A) d Hours – Actu | e, Variable of and Labour of and Labour of a second | everhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | d Efficiency cy Variance. Nov. 2021) Amount (₹) 6,61,200 tual Price) |
| Ans. | b) Variable Variand c) Labour a) Material Quantity (Meter) 1 Material = 6,00,000 Material = (60 - 58 Material = (10,000 b) Variable = Standa = (10,000 Variable Hour Let Actua (20,000 2,00.000 | e Overhe ce and Va variance Variance Budget Price (₹) 60 Cost Varia 0 – 6,61,2 Price Var 3) 11,400 Usage Var 3) 11,400 Usage Var 3) 11,400 Usage Var 4) – 11,400 Coverhea ard varial 0 units × e overhea al Hours – X) × 10 0) – 10X | ads variand riable over s- Labour O es Groom Amount (₹) 60 ance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 riance = (Sta 200 = ₹ 61,2 iance = ₹ 22,800 iance = (Sta 2,00 = ₹ 61,2 iance = ₹ 22,800 iance = (Sta 2,00 = ₹ 61,2 iance = ₹ 22,800 iance = (Sta 2,00 = ₹ 61,2 iance = ₹ 22,800 is 60 be 'X', then = 4,000 (A = - 4.00 | ces- Variable head Expend: Cost Variance, Std. fo Quantity (Meter) 10,000 ndard Quanti 200 (A) = (Standard (F) tandard Quant = ₹ 84,000 (A ces Variable id – Actual Va ₹ 10) – 2,24,4 y Variance = (: .) 0 | overhead iture Var Labour F Price (₹) 0 60 ty × Stan Price – A tity – Act A) overhea riable Ov 00 = ₹ 24 (Standard | d Cost Variance iance. Rate Variance a demy Amount (₹) 6,00,000 dard Price – A ctual Price) Ac cual Quantity) ad cost Varian rerhead c,400 (A) d Hours – Actu | e, Variable of and Labour Quantity (Meter) 11,400 ctual Quanti ctual Quanti Standard Pr nce | overhea Efficien (RTP Actual Price (₹) 58 ity × Ac ty rice | Amount (₹) 6,61,200 tual Price) |

| | Theref | ore, Actua | al Hours (X) = | 20,400 | | | | | |
|--------|--------------------|-------------------------|---------------------------------|----------------------------|-------------------|------------------|--|------------|---------------|
| | Variab | le overhe | ad Expenditu | re Variance | e = Varia | ble Overhead | l at Actual I | Hours - Ac | tual Variable |
| | Overhe | eads | | | | | | | |
| | = 20,40 |)0×₹10 | – 2,24,400 = = | t 20,400 (A | () | | | | |
| | c) Labour | variance | es | | | | | | |
| | | Budge | t | Std. f | for actua | al | | Actual | |
| | Hours | Rate | Amount | Hours | Hours Rate Amount | | | Rate | Amount |
| | | (₹) | (₹) | | (₹) | (₹) | | (₹) | (₹) |
| | 2 | 20 | 40 | 20,000 | 20 | 4,00,000 | 20,400 | 22* | 4,48,800 |
| | *Actual | Rate = ₹4 | l,48,800 ÷ 20, | 400 hours | = ₹22 | | | | |
| | Labour = 4,00,0 | Cost Vari)00 – 4,48 | ance = (Stand 3,800 = ₹ 48,8 | lard Hours 00 (A) | × Standa | rd Rate) – (A | ctual Hour | s × Actual | Rate) |
| | Labour | Rate Vari | ance = (Stand | lard Rate – | Actual R | ate) × Actua | Hours | | |
| | = (20 - | 22) × 20,4 | 400 = ₹ 40,80 | 0 (A) | | | | | |
| | Labour | Efficiency | y Variance = (| Standard H | lours – A | ctual Hours) | × Standard | l Rate | |
| 29. | _ (20,00 | $\frac{10}{20,40}$ | $\frac{500}{20} \times 20 = 30$ | e following | standard | ls for factory | overheads | | |
| | i) Va | ariable ov | verhead per u | nit: ₹1 | 10/- | as for factory | overneuus | • | |
| | ii) Fi | xed overl | neads per mo | nth ₹1 | , 1,00,000 | | | | |
| | ✓ | Ć Capaci | ty of the plan | t 20,000 ur | nits per n | nonth. | | | |
| | ✓ | The ac | tual data for t | he month a | are as fol | lows: - | | | |
| | iii) A | ctual over | heads incurr | ed ₹3 | 3,00,000 | | | | |
| | iv) A | ctual outp | out (units) | 15 | ,000 uni | ts | | | |
| | Required | _ | | | | | | | |
| | Calculate | Overhea | d Variances | Educa | ation Ac | ademy | | | |
| | a) Produ | ction Volu | ime Variance | neer in Develop | | s | | | |
| | b) Overh | ead exper | nse Variance | | | | | 10 | |
| | | | | | | | Ň | , o' | (ICAI SM) |
| Ans. | Productio | n/Overh | ead volume | variance (| only for | fixed overh | ead) | | |
| | a) Fixed | Overhead | d Volume Va | riance: - | | | E Contraction of the contraction | | |
| | = Abso | orbed ove | rhead – Bud | geted Over | head | 9 |) ² | | |
| | = (₹5 - ₹75 | × 15,000 | units) — (₹5 1 00 000 — ₹ | × 20,000 i 25 000 (Ad | units) | _0 ⁵¹ | | | |
| | b) Overh | ,000 – 1. ead expe | nse variance | 25,000 (AU | lversej | 2 | | | |
| | i) Fo | r Variab | le overhead: | - | -2 | × | | | |
| | = / | AQ (SR – | AR) | | ad | | | | |
| | = 2 | 15,000 ur | nits (₹10 – ₹1 | .0) = Nil | 85 | | | | |
| | ii) For | fixed ov | erhead: - | Ð | / | | | | |
| | = B | udgeted (| Overhead – A | ctual Over | head | | N | | |
| | = (* | ₹5 × 20,0 ₹⊑ × 20.0 | 00 units) - (| i otal overr | 1ead - Va | ariable overn | iead) | | |
| | = (- | 1 00 000 | -(73.000) | 13,00,000 - 0 ₹ 1 50 (| - XIU X . 000) | 15,000 units |) | | |
| | | 1,00,000 | — ₹ 1 50 000 | 0 - ₹ 1,30,0 = ₹ 50 000 | 000) N (Adver | se) | | | |
| | Wo | rking not | te- | 100,000 | o (naver | 50) | | | |
| | Fixe | ed overhe | ad absorption | n rate = ₹1 | ,00,000/ | 20,000 = ₹5 | | | |
| | | 25-Call | | | | | | | |
| 888 88 | 8 0402 💷 🔊 | 2 | SI | upport@es | cholars.i | n | | | 38 |
| | 9 | | | | | | | | |
| | | | | | | | | | |

| | 30. | The following standards have been set to manufacture a product: - | | | | | | | | | | |
|----|-----|--|------------------------------|--|--|--|--|--|--|--|--|--|
| | | Direct Material: - | (₹) | | | | | | | | | |
| | | 2 units of A @ ₹ 4 per unit | 8.00 | | | | | | | | | |
| | | 3 units of B @ ₹ 3 per unit | | | | | | | | | | |
| | | 15 units of C @ ₹ 1 per unit | <u>15.00</u> | | | | | | | | | |
| | | | 32.00 | | | | | | | | | |
| | | Direct Labour, 3 hours @ ₹ 8 per hour | <u>24.00</u> | | | | | | | | | |
| | | Total standard prime cost 56.00 | | | | | | | | | | |
| | | The company manufactured and sold 6,000 units of the product during the year. Direct material costs were as follows: - 12,500 units of A at ₹4.40 per unit 18,000 units of B at 2.80 per unit | | | | | | | | | | |
| | | The company worked 17,500 direct labour hours during the year. For 2,500 of th company paid at ₹ 12 per hour while for the remaining, the wages were paid at stan Calculate: - | ese hours, the dard rate. | | | | | | | | | |
| | | b) Labour rate & Efficiency Variances | | | | | | | | | | |
| | | b) Labour rate & Enferency variances. | (ICALSM) | | | | | | | | | |
| | Ans | Varianços: - | (ICAI SM) | | | | | | | | | |
| | | = (Actual Quantity × Standard Price) – (Actual Quantity × Actual Price) = ₹ 1,92,500 – ₹ 2,11,600 = ₹ 19,100 (A) ✓ Material Usage Variance= Standard Price (Standard Quantity – Actual Quantity) = (Standard Price × Standard Quantity) – (Standard Price × Actual Quantity) = ₹ 1,92,000 – ₹ 1,92,500 = ₹ 500(A) | | | | | | | | | | |
| | | Workings: - | | | | | | | | | | |
| | | For Material Cost Variances: - | | | | | | | | | | |
| | | Standard Quantity×Standard Price | | | | | | | | | | |
| | | A $12,000 \times 4$ = 48,000 | | | | | | | | | | |
| | | B $18,000 \times 3 = 54,000$ | | | | | | | | | | |
| | | C $90,000 \times 1 = 90,000$ | | | | | | | | | | |
| | | ₹ 1,92,000 | | | | | | | | | | |
| | | Actual Quantity × Actual Price | | | | | | | | | | |
| | | $A = 12.500 \times 4.40 = 55.000$ | | | | | | | | | | |
| | | $B = \frac{12,500 \times 4.40}{18,000} = 55,000$ | | | | | | | | | | |
| | | \sim C 88.500 × 1.20 = 1.06.200 | | | | | | | | | | |
| | | ₹2.11.600 | | | | | | | | | | |
| | | Actual Quantity×Standard Price | | | | | | | | | | |
| | Ð | A $12,500 \times 4 = 50,000$ | | | | | | | | | | |
| | X | B $18,000 \times 3 = 54,000$ | | | | | | | | | | |
| X | 2 | C $88,500 \times 1 = 88,500$ | | | | | | | | | | |
| 63 | | ₹ 1,92,500 | | | | | | | | | | |
| | | | | | | | | | | | | |

| | Variances: - | | | | | | | | |
|------|--|--|--|--|--|--|--|--|--|
| | Labour Rate Variance: - Actual Hours (Standard Rate — Actual Rate) | | | | | | | | |
| | = (Actual Hours × Standard Rate) – (Actual Hours × Actual Rate) | | | | | | | | |
| | = ₹ 1,40,000 - ₹ 1,50,000 | | | | | | | | |
| | = ₹ 10,000 (A) | | | | | | | | |
| | | | | | | | | | |
| | Labour Efficiency Variance: Standard Rate (Standard Hours – Actual Hours) | | | | | | | | |
| | = (Standard Rate × Standard Hours) – (Standard Rate × Actual Hours) | | | | | | | | |
| | = ₹ 1,44,000 - ₹ 1,40,000 | | | | | | | | |
| | = ₹ 4,000 (F) | | | | | | | | |
| | | | | | | | | | |
| | Workings: - | | | | | | | | |
| | For Labour Cost Variance: - | | | | | | | | |
| | Standard Hour × Standard Rate | | | | | | | | |
| | Labour $(6000 \times 3) \times \mathbb{R} = 1,44,000$ | | | | | | | | |
| | Actual Hour × Actual Rate | | | | | | | | |
| | Labour $2500 \times 12 = 30,000$ | | | | | | | | |
| | $15,000 \times 8 = 1,20,000$ | | | | | | | | |
| | 1,50,000 | | | | | | | | |
| | Actual Hour × Standard Rate | | | | | | | | |
| | Labour $17,500 \times 8 = 1,40,000$ | | | | | | | | |
| 31. | The standard mix to produce one unit of a product is as follows: - | | | | | | | | |
| | Material X 60 units @ ₹ 15 per unit = 900 | | | | | | | | |
| | Material Y 80 units @ ₹ 20 per unit = 1,600 | | | | | | | | |
| | Material Z <u>100 units</u> @ \gtrless 25 per unit = 2,500 | | | | | | | | |
| | <u>240 units</u> $= 5,000$ | | | | | | | | |
| | During the month of April, 10 units were actually produced and consumption was as follows: - | | | | | | | | |
| | Material X 640 units @ $₹17.50$ per unit cation Academy = 11,200 | | | | | | | | |
| | Material Y 950 units @ $₹$ 18.00 per unit eloping Concepts = 17,100 | | | | | | | | |
| | Material Z <u>870</u> units @ ₹ 27.50 per unit <u>= 23,925</u> | | | | | | | | |
| | <u>2,460 units</u> $0 = 52,225$ | | | | | | | | |
| | | | | | | | | | |
| | Calculate all Material Variances. | | | | | | | | |
| | (ICAI SM) | | | | | | | | |
| Ans. | 1) Material Cost Variance = Standard cost – Actual cost | | | | | | | | |
| | = ₹ 50,000 - ₹ 52,225 | | | | | | | | |
| | Material Cost Variance = $₹ 2,225$ (A) | | | | | | | | |
| | 2) Materials Price Variance = (Standard Price – Actual Price) × Actual Quantity | | | | | | | | |
| | Material X = $(15 - 17.50) \times 640$ = $₹ 1,600$ (A) | | | | | | | | |
| | Material Y = $(20 - 18) \times 950$ = $₹ 1,900$ (F) | | | | | | | | |
| | Material Z = $(25 - 27.50) \times 870$ = $(27.50) \times 870$ | | | | | | | | |
| | Material Price $= ₹ 1,875 (A)$ | | | | | | | | |
| | Variance | | | | | | | | |
| | 3) Material Usage Variance = (Standard Quantity – Actual Quantity) \times Standard Price | | | | | | | | |
| | Material X = $(600 - 640) \times 15$ = $\gtrless 600$ (A) | | | | | | | | |
| | Material Y = $(800 - 950) \times 20$ = $₹ 3,000(A)$ | | | | | | | | |
| | Material Z = $(1,000 - 870) \times 25$ = $\frac{3,250 (F)}{250}$ | | | | | | | | |
| | Material Usage $= ₹ 350 (A)$ | | | | | | | | |
| | variance | | | | | | | | |
| | | | | | | | | | |

| Γ | | 4) Material Mix Varia | nce = (Revised Stand | lard Quantity | – Actual Quant | tity) × Standard Price |
|-----|-----|--|---|-----------------|---------------------|----------------------------|
| | | Material X | = (615* – 640) × 1 | .5 = | = ₹ 375 (A) | |
| | | Material Y | = (820* – 950) × 2 | :0 = | = ₹ 2,600 (A) | |
| | | Material Z | $=(1.025 - 870) \times$ | 25 = | = ₹ 3.875 (F) | |
| | | MMV | (1,010 0,0) | = | = ₹ 900 (F) | |
| | | 1,11,1 Å | | = | <u>- ()00 (1)</u> | |
| | | *Revised Standard | Quantity (RSQ) is cal | culated as foll | lows: - | |
| | | – Material X | $=\frac{2,460}{2,400} \times 600 = 615$ | units | | |
| | | – Material Y | $r = \frac{2,460}{2,400} \times 800 = 820$ | units | | |
| | | – Material 7 | $-\frac{2,400}{2,460} \times 1,000 - 1.000$ |)25 units | | |
| | | Material Z | 2,400 | 725 units | | |
| | | 5) Material Yield Vari | ance = (Standard Qu | antity – Revis | sed Standard Q | uantity) × Standard Price |
| | | Material X | $= (600 - 615) \times 10^{-10}$ | 15 = | = ₹ 225 (A) | |
| | | Material Y | $= (800 - 820) \times 2$ | 20 = | = ₹ 400(A) | |
| | | Material Z | = (1,000 - 1,025) |)×25 = | = ₹ 625 (A) | |
| | | Material Yield | 1 | = | = ₹ 1,250 (A) | |
| | | Variance | | | | |
| | | Workings: - | | | | |
| | | Standard cost for 10 u | nits | | - | |
| | | X = 600 units ×₹ | 15 = 9.000 | | 10 | |
| | | Y = 800 units ×₹ | 20 = 16.000 | -0- | * | |
| | | X = 1.000 units x | ₹25 = 25,000 | 12 | | |
| | | 2,400 | 50,000 | 190 | | |
| | | | | 8 | | |
| | | Actual cost for 10 unit | S D | | | |
| | | X = 640 units ×₹ | 17.50 = 11,200 | | ту | |
| | | Y = 950 units ×₹ | 18.00 = 17,100 | | | |
| | | X = <u>870</u> units ×₹ | 27.50 = <u>23,925</u> | | | |
| | | 2,460 | 52,225 | | | |
| | 32. | A single product compa | ny has prepared the f | ollowing cost | sheet based on | 8,000 units of output per |
| | | month: | 3- | | | |
| | | and the second sec | _ | | 3 | ŧ |
| | | Materials 1.5 kg @ ₹ 24 | per kg | | 36.0 | 00 |
| | | Direct Labour 3 Hours (| @₹4 per hour | | 12.0 | 00 |
| | | Factory overheads | | | 12.0 | 00 |
| | | Total | | | 60.0 |)0 |
| | | The flexible budget for | factory overheads is a | as under: | | |
| | ~ ~ | Output (units) | 6.000 | 7.500 | 9.000 | 10.500 |
| | s. | Factory overheads (₹) | 81.600 | 92.400 | 1.03.200 | 1.14.000 |
| X | Q° | | , | , | _,, | _,, |
| × | | The actual results for th | e month of October, 2 | 20X1 are give | n below: | |
| 639 | | ✓ Direct Materials pu | rchased and consume | ed were 11,22 | 4 kg at ₹2,66,5′ | 70. |
| | | ✓ Direct Labour hour | s worked were 22,40 | 0 and Direct V | Vages paid amo | ounted to ₹ 96,320. |
| | | ✓ Factory overheads | incurred amounted to | o ₹96,440 out | of which the va | ariable overhead is ₹ 2.60 |
| | | per Direct Labour h | our worked.: | | | |
| | | \checkmark Actual output is 7.6 | 20 units | | | |

| | ✓ work-in-process: | | |
|------|------------------------------------|---------------------------------------|-------------|
| | Opening WIP: | 300 units: | |
| | | Materials 100% complete | |
| | | Labour and Overheads 60% complete | |
| | Closing WIP | 200 units: | |
| | | Materials 50% complete | |
| | | Materials 50% complete | |
| | | Labour and Overneads 40% complete | |
| | You are required to analyse the va | riances. | |
| Ans | 1) Material Price variance | = M ₄ - M ₂ | (NOV. 2002) |
| mis. | If Material Tree variance | -266570 - 269276 | |
| | | = 2,00,370 = 2,03,370 | |
| | | = 2,806 (F) | |
| | 2) Material usage variance | $= M_2 - M_4$ | |
| | | = 2,69,376 - 2,67,120 | |
| | | = 2,256 (A) | |
| | | , () | |
| | 3) Material cost variance | $= \mathbf{M}_1 - \mathbf{M}_4$ | |
| | | = 2,66,570 - 2,67,120 | |
| | | = 550 (F) | |
| | | | |
| | Working Notes for material vari | ances: | |
| | M ₁ | = Actual cost of actual material used | |
| | | $= AQ \times AP$ | |
| | | = 11,224 × 23.75 | |
| | | = 2,66,570 | |
| | Groomin | g Education Academy | |
| | M ₂ Pione | = Std. cost of actual material used | |
| | | $= AQ \times SP$ | |
| | | = 11,224 × 24 | |
| | | = 269,376 | |
| | M4 | ⊘ = Std. cost of Std. Material used. | |
| | | $=$ SQ \times SP | |
| | ~8 ⁶ ~ | = *7,420 × 1.5 × 24 | |
| | \$2 ² | = 2,67,120 | |
| | *7,620 (Actual output)-300 (Open | ing WIP) +100 (Closing WIP X 50%) | |
| | Gar | | |
| | 4 J Labour cost variance | $= L_1 - L_5$ | |
| | 67 | = ₹96,320 – ₹90,240 | |
| | a serie | = ₹6,080(A) | |
| | 5) Labour rate variance | $= \mathbf{L}_1 - \mathbf{L}_2$ | |
| | 10 | = ₹96,320 - 89,600 | |
| 25 | P | = ₹6,720 (A) | |
| X | 6) Labour efficiency variance | $= \mathbf{L}_2 - \mathbf{L}_5$ | |
| | 1 | = 89.600 - 90.240 | |
| 0 | | 0,000 ,000 | |

| | | Labour efficiency | | 105.3% | |
|-------|----------|--|------------------------|--------------------------|----------------------|
| | | Labour rate variance | | ₹1,53,846 (A) | |
| | | | | | |
| | You | are required to CALCULATE: | | | |
| | i) | Actual labour rate per hour | | | |
| | ii) | Standard hours required for 9,0 | 00 units | | |
| | iii) | Labour Efficiency variance | | | |
| | iv) | Standard labour cost per unit | | | |
| | vj | Actual labour cost per unit. | | | (MTD D 2024) |
| Anc | i) | Labour rate Variance - Al | | | (MTP Dec. 2021) |
| Alls. | 1) | $-153846 = 25641(12-\Delta R)$ | I (SK – AK) | | |
| | | -6 = 12 - AR | | | |
| | | AR = ₹ 18 | | | |
| | | | | | |
| | ii) | Labour Efficiency | | | |
| | - | $=\frac{s}{100} \times 100 = 105.3$ | | | |
| | | H $AH \times 105.3$ 25,641 $\times 105.3$ | | | |
| | | $SH = \frac{100}{100} = \frac{100}{100}$ | | | |
| | | SH = 26,999.973 | | | |
| | | SH = 27,000 hours | | | |
| | iii) | Labour Efficiency Variance = S | R (SH – AH) | | |
| | - | = 12(27,000 - 25,641) | | | |
| | | = ₹ 16,308 (F) | | | |
| | | | | | |
| | iv) | Standard Labour Cost per Unit | | | |
| | | $=\frac{27,000\times12}{9,000}=$ ₹ 36 Grooming | Education Acade | emv | .0 |
| | v) | Actual Labour Cost Per Unit | | | |
| | , | = ^{25,641×18} = ₹ 51 282 | | | _29 |
| | Wa | 9,000 | | as a | 3V |
| | | Standard Jahour Data por Hour | | ~ ⁵ | |
| | | - Standard labour Rate per Hour | | 20 | |
| | АК СН | - Standard Hours | | -9 | |
| | | - Actual hours | | ~ OSM | |
| 34. | The | overhead expense budget for a | factory producing t | o a capacity of 200 u | nits per month is as |
| 0.11 | foll | ows: - | nactory producing (| | |
| | D | escription of overhead | Fixed cost per | Variable cost per | Total cost per |
| | | | unit in (₹) | unit in (₹) | unit in (₹) |
| | Po | ower and fuel | 51,000 | 500 | 1,500 |
| | Re | epair and maintenance | 500 | 250 | 750 |
| | Pr | inting and stationary | 500 | 250 | 750 |
| | Ot | ther overheads | 1,000 | 500 | 1,500 |
| | Т | otal | ₹ 3,000 | ₹ 1,500 | 4,500 |
| | The | e factory has actually produced on | ly 100 units in a part | icular month Details o | foverheads actually |
| | inc | urred have been provided by the | accounts departmer | it and are as follows: - | r over neuro actuary |
| | D | escription of overhead | | | Actual cost |
| | Po | ower and fuel | | | ₹ 4,00,000 |
| | | - A- | | | |
| | | c3° | | | |

| | Repair and maintenance | | | ₹ 2,00,000 | | | | | |
|--------|--|---|------------------------|-------------------------|--|--|--|--|--|
| | Printing and stationary | | | ₹ 1,75,000 | | | | | |
| | Other overheads | | | ₹ 3.75.000 | | | | | |
| | | | | | | | | | |
| | You are required to Calculate the overhead volume variance and the overhead expense variance | | | | | | | | |
| | | | | (ICALSM) | | | | | |
| Ans | i) Overhead's volume | variance (in case of fixed over | nord): - | (ICH SH) | | | | | |
| Alls. | 1) Over nead S volume | variance (in case of fixed over) | ieauj | | | | | | |
| | Chandand Guada | | (i | | | | | | |
| | ▼ Standard fixed o | verneads per unit (SR): < 3,000 (| Givenj | | | | | | |
| | Act | al production | : 100 units | | | | | | |
| | Star | ndard production (capacity) | : 200 units | | | | | | |
| | | | | | | | | | |
| | ✓ Fixed Overhead | Volume Variance: - | | | | | | | |
| | = Absorbed ove | rhead — Budgeted Overhead | | | | | | | |
| | = (₹ 3,000 × 10 | 0 units) – (₹3,000 × 200 units) | | | | | | | |
| | = ₹ 3,00,000 - ₹ | (6,00,000 = 3,00,000) (Adverse) |) | | | | | | |
| | | | | | | | | | |
| | ii) Overhead expense | variances: - | | | | | | | |
| | 🖌 For variable ov | erhead: - | | | | | | | |
| | = Actual Quanti | ty (Standard Rate – Actual Rate) | | | | | | | |
| | = 100 units (₹ 1 | ,500 – ₹1,500) = Nil | | | | | | | |
| | Kindly show the | calculation of standard rate | | | | | | | |
| | ✓ For fixed overh | ead: - | | | | | | | |
| | = Budgeted Ove | erhead – Actual Overhead | | | | | | | |
| | = (₹ 3.000 × 20 | 0 units) – (Total overhead – Va | riable overhead) | | | | | | |
| | = (₹ | 3.000×200 units) – (₹11.50.00) | $0 - 1.500 \times 100$ |) units) | | | | | |
| | =₹6.00.000 - | (₹ 11.50.000 – ₹1.50.000) | |) | | | | | |
| | = ₹6.00.000 - | 10.00.000 = $4.00.000$ (Adverse) | | 0 | | | | | |
| 35. | Y Ltd. manufactures "Prod | uct M" which requires three ty | pes of raw mate | rials - "A". "B" & "C". | | | | | |
| | Following information rela | ted to 1st quarter of the F.Y. 202 | 2-23 has been co | llected from its books | | | | | |
| | of accounts. The standard n | naterial input required for 1.000 | kg of finished pro | oduct 'M' are as under: | | | | | |
| | Material | Ouantity (Kg) | Std R | ate ner Kø (₹) | | | | | |
| | Δ | | 00 | 25 | | | | | |
| | R R | 2 | 50 | 25 | | | | | |
| | В | | 50 | 43 FF | | | | | |
| | L C | 01 | 50 | 22 | | | | | |
| | Standard Laga | 1,1 | 00 | | | | | | |
| | Standard Loss | | 00 | | | | | | |
| | Standard Output | | 00 | | | | | | |
| | | | | .1 . 1 | | | | | |
| | During the period, the com | pany produced 20,000 kg of prod | uct M' for which | the actual quantity of | | | | | |
| | materials consumed and pu | irchase prices are as under: | | | | | | | |
| | Material | Quantity (Kg.) | Purchase | Price per Kg. (₹) | | | | | |
| | А | 11,000 | | 23 | | | | | |
| | В | 7,500 | | 48 | | | | | |
| | C 🔪 | 4,500 | | 60 | | | | | |
| | | | | | | | | | |
| | You are required to calcula | te: | | | | | | | |
| | i) Material Cost Variance | | | | | | | | |
| | ii) Material Price Variance | for each raw material and Produ | ıct 'M' | | | | | | |
| | L.S | | | | | | | | |
| | 630 | | | | | | | | |
| | <i>ي</i> مەرمە ب | support@oscholors in | | | | | | | |
| 220 00 | A | | | | | | | | |

| | iii) Material Usage Variance for each material and Product 'M' | | | | | | | | | |
|------|--|--------------|-------------|------------------|--------------|-------------|--------------|--------------|-----------|------------|
| | iv) Material Yield Variance | | | | | | | | | |
| | Note: Indicate the nature of variance i.e., Favourable or Adverse. | | | | | | | | | |
| | | | | | | | | | () | Nov. 2022) |
| Ans. | Output | Given Sta | andard 1 | 000 kgs | Revise | d Standar | d 2000 | Actu | al 2000 | 0 kgs |
| | | | | | | kgs | | | | |
| | | Quantity | Rate | Amount | Quantity | Rate | Amount | Quantity | Rate | Amount |
| | А | 500 | 25 | 12,500 | 10,000 | 25 | 250,000 | 11,000 | 23 | 253,000 |
| | В | 350 | 45 | 15,750 | 7,000 | 45 | 315,000 | 7,500 | 48 | 360,000 |
| | С | 250 | 55 | 13,750 | 5,000 | 55 | 275,000 | 4,500 | 60 | 270,000 |
| | | 1,100 | | 42,000 | 22,000 | | 840,000 | 23,000 | | 883,000 |
| | | | | | | | | | | |
| | 1) Mater | ial Cost va | riance = | standard | Cost – act | ual Cost 8 | 3,40,000 - | 8,83,000 : | = 43,000 | A |
| | 2) Mater | ial Price V | ariance | = (Standa | rd Rate – A | Actual rate | e) × Actua | l Quantity | | |
| | a) (2 | 5-23) × 11, | 000 = 22 | ,000F | | | - | | | |
| | b) (4 | 5-48) × 7,5 | 00 = 22,5 | 500A | | | | | | |
| | c) (5 | 5-60) × 4,5 | 00 = 22,5 | 500A | 23,000A | | | | | |
| | | - | | | | | | | | |
| | 3) Mater | ial Usage V | Variance | e = (standa | ard quanti | ty – Actua | l Quantity |) × Actual | Rate | |
| | a) (1 | 0,000 - 11, | 000) × 2 | 5 = 25,00 | DA Î | - | | - | | |
| | b) (7 | 000 - 7500 |)) × 45 = | 22,500A | | | | | | |
| | c) (5 | 000 - 4500 |) × 55 = | 27,500F | 20,000A | | | / | D, | |
| | | | - | | | | | à, | | |
| | 4) Mater | ial Yield V | ariance | | | | | 25 | | |
| | = (Std. | . Total Quai | ntity – Ac | tual Tota | Quantity | × Standar | d weighte | d average | purchas | e price |
| | = (22,0 | 000 - 23,00 |)0) × 8,4(|),000/22, | 000 = 38,1 | 82 (Adver | rse) | 2 | • | • |
| 36. | Ahaan Lim | nited opera | tes a sys | tem of sta | ndard cost | ting in res | pect of or | e of its pr | oducts 'A | AH1' which |
| | is manufac | ctured with | in a sing | le cost cer | ntre. Detail | s of stand | ard per u | nit are as f | ollows: | |
| | ✓ The s | tandard ma | aterial in | put is 20 l | kilograms a | at a stand | ard price of | of ₹24 per | kilogran | n. |
| | ✓ The s | tandard wa | ige rate i | s ₹72 per | hour and S | 5 hours ar | e allowed | to produc | e one un | iit. |
| | ✓ Fixed | production | n overhea | ad is abso | rbed at the | e rate of 1 | 00% of wa | ages cost. | | |
| | | 1 | | | Å | ger - | | 0 | | |
| | During the | e month of A | April 202 | 2, the foll | owing was | s incurred | : | | | |
| | ✓ Actua | l price paid | l for mat | erial purc | hased @ ₹ | 22 per kil | ogram. | | | |
| | ✓ Total | direct wag | es cost w | , as ₹43,92 | .,000 | 1 | 0 | | | |
| | ✓ Fixed | production | n overhe | ad cost in | curred was | s ₹45,00,0 | 00 | | | |
| | Analysis of | f variances | was as fe | ollows: | | | | | | |
| | Variance | es | | 8 | | | Fa | vourable | | Adverse |
| | Direct ma | aterial pric | e | | | | : | ₹4,80,000 | | - |
| | Direct ma | aterial usag | re de | | | | | ₹ 48.000 | | |
| | Direct la | oour rate | 8 | | | | | , - | | ₹69.120 |
| | Direct labour efficiency ₹ 33 120 | | | | | | | | - | |
| | Fixed production overhead expenditure | | | | | | | | | |
| | | 6 | | r - teroor | | | 1 | | 1 | ,, |
| | You are re | auired to C | ALCULA | TE the fol | lowing for | the mont | h of Anril | 2022 | | |
| | i) Mater | ial cost var | iance | | | ine mont | | | | |
| | ii) Rudge | ated output | · (in unite | 2) | | | | | | |
| | iii) Ouant | tity of raw | materiale | י) s nurchae4 | d (in kilor | ramel | | | | |
| | iv) Actua |] outnut (in | unite) | , pur chast | | , | | | | |
| | \mathbf{v} Actua | l hours wo | rked | | | | | | | |
| 1 | I vj Actua | | incu | | | | | | | |

| | vi) | Actual wage rate per labour hour |
|--------------------|-------|--|
| | vii) | Labour cost variance |
| | viii) | Production overhead cost variance |
| | - | (RTP Nov 2022) |
| Ans. | i) | Direct Material Cost Variance = Direct Material Price Variance + Direct Material Usage |
| | | Variance = ₹4,80,000 F + ₹ 48,000 F = ₹ 5,28,000 F |
| | ii) | Budgeted Output (units) |
| | iii) | |
| | - | Fixed Production Overhead Expenditure Variance = Budgeted Fixed Overhead - Actual |
| | | Fixed Overheads |
| | | |
| | | (Budgeted Output x Standard Overhead Rate - Actual Fixed Overheads) |
| | | |
| | | = ₹ 1,80,000 A = Budgeted Output x ₹ 360 (5 hrs @₹ 72) - ₹ 45,00,000 |
| | | |
| | | Budgeted Output = $\frac{\frac{3}{45,00,000 - \frac{3}{1,80,000}}{1} = 12,000 \text{ units}}{12,000 \text{ units}}$ |
| | iv) | Quantity of Materials nurchased (in kilograms) |
| | 1.1 | Material Price Variance = Actual Usage X (Standard Price ner kg - Actual price ner kg) |
| | | Material Thee variance – Actual Usage X (Standard Thee per Kg - Actual price per Kg) |
| | | ₹ 4.80.000 F = Actual Usage (₹ 24 -₹ 22) |
| | | Actual usago in kgs = $\frac{4,80,000}{4,80,000}$ = 2.40,000 kgs |
| | | Actual usage in kgs – $\frac{1}{\sqrt{2}}$ – 2,40,000 kgs |
| | | |
| | v) | Actual Output (units) |
| | AC | tual Direct wages |
| | Di | rect labour rate variance ₹69,120A |
| | Di | Trect labour efficiency variance ₹33,120 F |
| | Sta | andard labour cost for actual output |
| | | Actual Output = $\frac{\text{Standard rabbull cost for actual output}}{\text{Standard wage rate per unit}}$ |
| | | $=\frac{343,56,000}{12,100}$ = 12.100 units |
| | | $\overline{360}$ (72×5) |
| | | Alternatively, let X be the actual quantity of output Then, Standard Quantity of input for actual |
| | | 20x - 50 |
| | | $\frac{20X}{Material cost variance = (SO \times SP) - (AO \times AP)}$ |
| | | ₹ 5 28 000 ± (20 X x ₹24) - (2 40 000 kgs x ₹22) |
| | | $480X \qquad = 352.80\ 0.00 + 35.28\ 0.00$ |
| | | 480X = ₹58.08.000 |
| | | $-\frac{358,08,000}{12} = 12100\text{units}$ |
| | | $\frac{1}{480} - \frac{12,100}{480}$ diffes |
| | VI) | Actual hours worked |
| | Q° | Labour Efficiency variance = Standard Labour Rate (Standard time for actual output - |
| Nº. | | Actual time) $\overline{z} = 22.120 \text{ E} = \overline{z} = \overline{z} = \overline{z} = 121.00 \text{ units}$ (stuel time) |
| 19 ⁹⁰ - | | $\sqrt{55,120}$ F = $\sqrt{2}$ (5 hours × 12100 units - Actual time) |
| | | 460 Hours = 60,500 Hours - Actual time |
| | | Actual time = 60,500 - 460 = 60,040 Hours |
| | viij | Actual Wages paid $= \pm 42.02.000$ |
| | | Actual wages pain $-143,72,000$ |
| | | Actual hours worked $= 00,040$ hours |
| | | Actual Wage rate per hour = $1000000000000000000000000000000000000$ |

| | viii) Labour cost variance |
|------|---|
| | = Labour rate variance + Labour efficiency variance |
| | =₹ 69,120 A + ₹33,120 F |
| | = ₹36,000 A |
| | ix) Production Overhead Cost Variance |
| | = Actual Output × Standard overhead rate - Actual Overheads Incurred |
| | = 12,100 units x₹ 360 - ₹ 45,00,000 |
| | = ₹ 43,56,000 - ₹ 45,00,000 |
| | = ₹ 1,44,000 A |
| 37. | NC Limited uses a standard costing system for the manufacturing of its product 'X'. The following |
| | information is a available for the last week of the month: |
| | ✓ 25,000 kg of raw material were actually purchased for ₹3,12,500. The expected output is 8 units |
| | of product 'X' from each one kg of raw material. There is no opening and closing inventories. |
| | The material price variance and material cost variance, as per cost records, are ₹12,500 (F) and |
| | ₹1800 (A), respectively. |
| | \checkmark The standard time to produce a batch of 10 units of product 'X' is 15 minutes The standard wage |
| | rate per labour hour is ₹50. The company employs 125 workers in two categories, skilled and |
| | semi-skilled, in a ratio of 60:40. The hourly wages actually paid were ₹50 per hour for skilled |
| | workers and ₹40 hours for semi-skilled workers. The weekly working hours are 40 hours per |
| | worker. Standard wage rate is the same for skilled and semi-skilled workers |
| | \checkmark The monthly fixed overheads are budgeted at 376480 Overheads are evenly distributed |
| | throughout the month and assume 4 weeks in a month. In the last week of the month, the actual |
| | fixed overhead expenses were ₹19 500 |
| | Required. |
| | i) Calculate the standard price per kg and the standard quantity of raw material |
| | i) Calculate the material usage variance labour cost variance and labour efficiency variance |
| | ii) Calculate the fixed overhead cost variance, the fixed overhead expenditure variance and the |
| | fixed overhead volume variance, the fixed overhead experiature variance and the |
| | Note: Indicate the nature of variance i.e. Favourable or Adverse |
| | (May 2023) |
| Ans. | i) Calculation of Standard Price Per Kg and the Standard Quantity of raw material: |
| | Material Price Variance = (SP – AP) x Actual Mat. Purchase |
| | $12500 = (SP - 12.5) \times 25000$ |
| | 12500 = 25000 S.P - 312500 |
| | S.P = ₹13 |
| | $M_{\rm starial} = (C + V_{\rm starian}) = (C + V_{\rm star}) = (A + V_{\rm star})$ |
| | $\begin{array}{c} \text{Material Cost Variance} = (SQ X SP) - (AQ X AP) \\ = 1800 \\ = -(SO X 13) = 312500 \end{array}$ |
| | -1800 = 13 SO - 312500 -1800 = 13 SO - 312500 |
| | SO = 23.900 |
| | e e e e e e e e e e e e e e e e e e e |
| | ii) Material usage variance = (Std. Q for actual output – Actual Q.) X S.P |
| | = (23,900 - 25,000) 13 |
| | = 14,300 (A) |
| | Labour Cost variance = (Std. Labour nours X SK) – (Actual Labour nours X AK) |
| | Skilled: |
| | $= (75 \times 40 \times 50) - (75 \times 40 \times 50)$ |
| | = 0 |
| | Semi-skilled: |
| | $= (50 \times 40 \times 50) - (50 \times 40 \times 40)$ |
| | = 1,00,000 - 80,000 |
| 1 | $= \frac{3}{100000000000000000000000000000000000$ |

