**Beg inventory + Production unit- selling unit = Ending inv**

**Prod unit=selling unit – beg unit+ ending inv**

**Problem no 1**

**Expected cash collection budget**

**July August September Total**

**May sales 430000\*10% 43000 43000**

**June Sales 540000\*70%,10% 378000 54000 432000**

**July sales 600000\*20,70,10 120000 420000 60000 600000**

**Aug sales 900000 20%,70% \_ 180000 630000 810000**

**Sep sales 500000 20% \_ \_ 100000 1000**

**Total 541000 654000 790000 1985000**

**Req 2**

**B/S**

**A/R**

**From August 900000\*10%=90000**

**From September 500000\*80%= 400000**

**Total A/R 490000**

**Prob 9-2:**

**Production budget**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **July** | **August** | **September** | **Total** |
| **Selling units** | **30000** | **45000** | **60000** | **135000** |
| **+ Ending inventory of finished goods** | **4500** | **6000** | **5000** | **5000** |
| **Total needs** | **34500** | **51000** | **65000** | **140000** |
| **\_ Beg inv of fin goods** | **3000** | **4500** | **6000** | **3000** |

**Production units 31500 46500 59000 137000**

**9-4: Direct Labour Budget:**

**1st Q 2nd Q 3rd Q 4th Q Total**

**Units to be produced 5000 4400 4500 4900 18800**

**Direct labour hour .4 .4 .4 .4 .4**

**Required per unit**

**Total direct labour 2000 1760 1800 1960 7520**

**hour**

**Per hour rate 11 11 11 11 11**

**Total direct**

**Labour cost 22000 19360 19800 21560 82720**

**Req 2:**

**1st Q 2nd Q 3rd Q 4th Q Total**

**Units to be produced 5000 4400 4500 4900 18800**

**Direct labour hour .4 .4 .4 .4 .4**

**Required per unit**

**Total direct labour 2000 1760 1800 1960 7520**

**hour**

**Normal wage 1800\*11 19800 19800 19800 79200**

**=19800**

**Overtime wage 200\*16.5 \_ \_ 160\*16.5 5940**

**3300 2640**

**Total wage 23100 19800 19800 22440 85140**

**9-5:**

**Req:1**

**1st Q 2nd Q 3rd Q 4th Q Total**

**Direct labour hours 5000 4800 5200 5400 20400**

**Variable overhead 1.75 1.75 1.75 1.75 1.75**

**Rate per hour**

**Variable MOH 8750 8400 9100 9450 35700**

**Fixed MOH 35000 35000 35000 35000 140000**

**Total MOH cost 43750 43400 44100 44450 175700**

**Req:2**

**MOH rate 43750**

**/ 5000**

**=8.75 9.04 8.48 8.23 8.61**

**9-2: Production Budget:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **July** | **August** | **September** | **Total** |
| **Selling units** | **30000** | **45000** | **60000** | **135000** |
| **+ Ending inventory of Finished goods** | **4500(45000\*10%)** | **6000(60000\*10%)** | **5000(50000\*10%)** | **5000** |
| **Total needs** | **34500** | **51000** | **65000** | **140000** |
| **-Beginning inventory of finished goods** | **3000** | **4500** | **6000** | **3000** |
| **Required production** | **31500** | **46500** | **59000** | **137000** |

**9-3: Raw material purchase budget:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **First** | **Second** | **Third** | **Fourth** | **Total** |
| **Required production units** | **60000** | **90000** | **150000** | **100000** | **400000** |
| **Raw material needed per units** | **\*3** | **\*3** | **\*3** | **\*3** | **\*3** |
| **Production needs** | **180000** | **270000** | **450000** | **300000** | **1200000** |
| **+Ending inventory of raw material** | **54000**  **(270000\*20%)** | **90000**  **(450000\*20%)** | **60000** | **48000**  **(240000\*20%)[80000\*3=240000]** | **48000** |
| **Total needs** |  |  |  |  |  |
| **-Beginning inventory of raw materials** | **36000** | **54000** | **90000** | **60000** | **36000** |
| **Raw material purchase budget** |  |  |  |  |  |

**Problem 9-4:**

**Req:1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1st** | **2nd** | **3rd** | **4th** | **Total** |
| **Units to be produced** | **5000** | **4400** | **4500** | **4900** | **18800** |
| **Direct labour required per unit** | **.4** | **.4** | **.4** | **.4** | **.4** |
| **Total hours required** | **2000** | **1760** | **1800** | **1960** | **7520** |
| **Rate per hour** | **11** | **11** | **11** | **11** | **11** |
| **Total cost of direct labour** | **22000** | **19360** | **19800** | **21560** | **82720** |

**Req;2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1st** | **2nd** | **3rd** | **4th** | **Total** |
| **Units to be produced** | **5000** | **4400** | **4500** | **4900** | **18800** |
| **Direct labour required per unit** | **.4** | **.4** | **.4** | **.4** | **.4** |
| **Total hours required** | **2000** | **1760** | **1800** | **1960** | **7520** |
| **Rate per hour(Normal)** | **11** | **11** | **11** | **11** | **11** |
| **Rate for excess working hour** | **16.5** |  |  | **16.5** |  |
| **Excess working hour** | **200**  **(2000-1800)** | **-** | **-** | **160** | **360** |
| **Total cost of direct labour** | **1800\*11**  **+200\*16.5**  **=** | **19800** | **19800** | **1800\*11**  **+160\*16.5**  **=** |  |