1. Zeeshan Limited manufactures an electric light that is sold for Rs. 280 each, last year the company sold 2,000 of these lights, realizing a gross profit of 25% of the cost of goods sold. Of this total cost of goods sold, materials accounted for 40% of the total and factory overhead 15%.

During the coming year, it is expected that materials and labor costs each will increase by 25% and factory overhead by 12.5%.

To meet the rising cost, a new selling price must be set.

**Required:** Compute the number of units that must be sold out to realize the same total gross profit in the coming year as was realized last year, if the new price per unit is set at (a) Rs. 325 and (b) Rs. 350.

2. A worker takes 9 hours to complete a job on daily wages and 6 hours on a scheme of payment by results. His day rate is Rs. 7.50 per hour. Materials cost of the product is Rs. 400 and overheads are recovered at 150% of total direct wages.

**Required:** Calculate factory cost of the product under:
(a) Piece Work Plan
(b) Hasley Plan
(c) Rowan Plan

3. In June, the volume variance of the All Processing Co. was zero and the budget variance showed a debit of Rs. 6,000. In July, volume variance was a debit of Rs. 8,000 but the budget variance was zero.

In June, actual factory overhead was Rs. 70,000 for an output of 8,000 tons. In July actual factory overhead was Rs. 56,000 and the output was 6,000 tons. In August, the output was 9,000 tons and actual factory overhead was Rs. 71,000.

**Required:**
a) Budgeted factory overhead for 9,000 tons  
b) Applied factory overhead in August.  
c) Budget variance and volume variance for August.

4. During the month of September Department No. M-40 of Wajahat Industry received 20,000 units from preceding department. To the units received in materials are added resulting in an increase of 80% in number of units. At the end of month 3,000 units were in process in the department. Stage of completion of in process units is estimated as: 100% materials, 50% labour and 40% overhead.

During processing 1,000 units were lost. The loss is regarded as unavoidable.

Following costs were charged to the department during the month:

| Cost from preceding department | Rs. 175,000 |
| Direct materials                | Rs. 166,250  |
| Direct labour                   | Rs. 117,250  |
| Manufacturing overhead          | Rs. 58,100   |

**Required:** Cost of production report

5. A job order calling for 50 motors was sent through the factory. The cost elements per motor were:

- **Materials**: Rs. 110
- **Labour**: Rs. 175
- **Predetermined factory overhead**: Rs. 125

After the motors had been manufactured, final inspection discovered that 2 motors were spoiled and would have to be sold as seconds at a price of Rs. 100 each, whereas, one motor was defective which would require Rs. 50 of additional materials, and Rs. 50 and Rs. 25 of additional labour and factory overhead.
Required:

Prepare Journal entries

(a) When the loss is charged to specific job.
(b) When the loss is not so charged.
(c) Also calculate per unit cost in both the cases.

6. Shahid Ltd, had the following inventories at the beginning and end of the month.

<table>
<thead>
<tr>
<th></th>
<th>Sept 1</th>
<th>Sept 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>Rs. 20,000</td>
<td>Rs. 23,000</td>
</tr>
<tr>
<td>Work in process – materials</td>
<td>Rs. 30,000</td>
<td>Rs. 34,000</td>
</tr>
<tr>
<td>Work in process – labour</td>
<td>Rs. 40,000</td>
<td>Rs. 35,000</td>
</tr>
<tr>
<td>Work in process – factory overhead</td>
<td>Rs. 50,000</td>
<td>Rs. 46,000</td>
</tr>
<tr>
<td>Finished Goods</td>
<td>Rs. 25,000</td>
<td>Rs. 28,000</td>
</tr>
</tbody>
</table>

During the month of September the cost of raw materials purchased was Rs. 125,000; direct labour cost incurred was Rs. 80,000 and factory overhead applied to production was Rs. 100,000.

Required:

(a) Prepare the necessary journal entries on September 30 to transfer the cost of goods manufactured and sold to proper summary accounts.
(b) Pass journal entries of sales return with your own figures?

7. The following information has been extracted from the books and records of Harris Manufacturing company:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Material purchased</td>
<td>Rs. 120,000</td>
</tr>
<tr>
<td>Total payroll</td>
<td>Rs. 50,000</td>
</tr>
<tr>
<td>Direct labour</td>
<td>Rs. 42,000</td>
</tr>
<tr>
<td>Superintendence</td>
<td>Rs. 5,500</td>
</tr>
<tr>
<td>Heat and light</td>
<td>Rs. 4,000</td>
</tr>
</tbody>
</table>
Insurance (fire and other) Rs.  500
Indirect materials purchased and used Rs.  2,000
Depreciation of building Rs.  1,500
Depreciation of equipment Rs.  1,500
Factory taxes Rs.  1,000
Employer’s provident fund contribution Rs.  5,000
(94% factory, 4% selling and 2% administrative) Rs.  1,300
Tool expenses Rs.  550 Rs.  22,850
Miscellaneous factory overhead costs
Predetermined overhead rate 60% of direct labour cost
The beginning and ending inventories were: January 1 December 31
Materials Rs.  12,000 Rs.  15,000
Work in process Rs.  6,000 Rs.  4,000
Finished goods Rs.  18,000 Rs.  21,000

**Required:**
From the foregoing information, prepare the cost of goods manufactured and sold statement with over under applied adjustments.

8. Define cost accounting and explain fully the advantages to a manufacturing company of maintaining cost accounts.