MGT 212: Cost and Management Accounting
BBS 2\textsuperscript{nd} Year

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

\textbf{Attempt All Questions}

\textbf{Brief Answer Questions} \hspace{5cm} [10 \times 2 = 20]

1. State any two objectives of cost accounting.
2. Define perpetual inventory system.
3. What is value analysis?
4. Mention any two causes of labor turnover.
5. Write any two limitations of volume based costing system.
6. A manufacturing company provides you the following information of material X:
   - Total cost at economic order quantity Rs. 2000
   - Ordering cost per order Rs. 50
   - Cost per unit of material Rs. 20
   - Carrying cost is 10% of inventory value
   \textit{Required:} Annual requirement of material X

7. Manakamana Ltd. is working now at its annual normal capacity of 20000 units. The total cost per unit is Rs. 100. The annual fixed costs are Rs. 50,000.
   \textit{Required:} Total cost at 60\% of the normal capacity.

8. Following particulars of a worker are provided:
   - Standard time allowed 15 hours
   - Actual time spent 12 hours
   - Wage rate per hour Rs.20
   \textit{Required:} Effective wages under Rowan Premium Plan

9. The following information of a manufacturing company are provided:
   - Annual requirement 36000 units
   - Safety stock 10 days consumption
   - Re-order period is 5 days
   \textit{Required:} Re-order level

10. The following particulars are extracted from the records of a company:
    - Beginning and ending number of employees were 200 and 250 respectively
    - Number of employees quit and discharged was 25 and 10 respectively
    - Employees replaced during the period were 30
    \textit{Required:} Labour Turnover Rate under Separation Method
11. PQ Ltd is a manufacturing company having three production departments A, B and C and two service departments X and Y. The operating conditions of the departments are given below:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Production Departments</th>
<th>Service Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Direct Materials (Rs.)</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Direct Wages (Rs.)</td>
<td>5000</td>
<td>2000</td>
</tr>
<tr>
<td>Area in sq. ft.</td>
<td>500</td>
<td>250</td>
</tr>
<tr>
<td>Capital value of assets (Rs. in Lakhs)</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Machine hours</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Horse Power of Machine</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Service rendered by Service departments</td>
<td>50%</td>
<td>30%</td>
</tr>
</tbody>
</table>

The overheads extracted from the books of the company are as under:
- Factory Rent: Rs. 4000
- Power: Rs. 2500
- Depreciation: Rs. 1000
- Other overheads: Rs. 9000

**Required:**
- A statement showing overheads distribution to departments
- Machine hour rate of the production departments.

12. Bright manufacturing company with normal capacity of 25000 units provides the following particulars for the year ending:

- Production units: 30000
- Sales units: 35000
- Variable manufacturing cost per unit: Rs. 6
- Fixed manufacturing cost per unit: Rs. 3
- Closing stock units: 2500
- Variable selling and administrative cost per unit: Rs. 2
- Fixed selling and administrative cost: Rs. 45000
- Selling price per unit: Rs. 15

**Required:**
- Income statement under external reporting system
- Reconciliation statement showing the profit of internal reporting

13. The sales revenue and earned profit of a special industry during two years were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Revenue (Rs)</th>
<th>Profit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1000000</td>
<td>60000</td>
</tr>
<tr>
<td>2012</td>
<td>1200000</td>
<td>80000</td>
</tr>
</tbody>
</table>

**Required:**
- Profit volume ratio
- Fixed cost
- Brake even point (Rs)
- Required sales amount to earn desired profit of Rs.25000 after tax. The corporate tax rate is 20%
- Profit when sales are Rs. 800000
14. a) Nepal Transport Company provides you the following information for the month of Baishakh:
- Cost of truck Rs. 2500000
- Kilometer runs in Baishakh 10000 kms
- Salary and wages Rs. 18000
- Diesel and lubricants Rs. 10 per km
- Repairs per month Rs. 6000
- Garage rent Rs. 2000 per month
- Insurance and road tax Rs. 48000 per annum
- Depreciation @ 10% per year under SLM

**Required:**

i) Total cost showing standing and running charges

ii) Profit if the company charges 30% profit on cost \( (4 + 1 = 5) \)

b) Distinguish between Joint product and By-product with suitable example. \( (5) \)

15. a) The following information is provided to you relating to a product M:
- Estimated sales 120,000 units
- Closing stock 10% of sales
- Opening stock 24,000 units

For making product M two types of materials are used – material A and material B.

Other details are as follows:
- i. 2 units of materials A and 3 units of material B are required to produce one unit of product M.
- ii. Closing stock for two types of material are 10% of each material needed for current production.
- iii. The opening stock of materials was 30,000 units and 26,400 units for material A and material B respectively.
- iv. The purchase price of materials is Rs. 10 and Rs. 15 per unit for material A and material B respectively.

**Required:**

- Production Budget, Material Consumption Budget and Material Purchase Budget \( (2+1+2=5) \)
- What are the preliminaries to establish standard costing system? Explain briefly. \( (5) \)

16. "Management accounting provides monetary and non-monetary information", comment briefly. \( (10) \)

**Long Answer Questions (attempt any two)** \[2 \times 15 = 30\]

17. The following details are given to you:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Process A</th>
<th>Process B</th>
<th>Process C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material used 10000 kgs</td>
<td>Rs. 20000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Material</td>
<td>Rs. 10000</td>
<td>Rs. 15000</td>
<td>Rs. 30000</td>
</tr>
<tr>
<td>Labour Cost</td>
<td>Rs. 10000</td>
<td>Rs. 20000</td>
<td>Rs. 40000</td>
</tr>
<tr>
<td>Factory Overhead 50% of labour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Expenses</td>
<td>Rs. 7000</td>
<td>Rs. 9400</td>
<td>Rs. 13090</td>
</tr>
<tr>
<td>Actual output kgs</td>
<td>8500</td>
<td>6100</td>
<td>4660</td>
</tr>
<tr>
<td>Output transferred to warehouse</td>
<td>20%</td>
<td>20%</td>
<td>100%</td>
</tr>
<tr>
<td>Scrap on input</td>
<td>20%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Sale of scrap per kg.</td>
<td>Rs. 2</td>
<td>Rs. 5</td>
<td>Rs. 10</td>
</tr>
</tbody>
</table>

**Required:**

i) Process Accounts

ii) Abnormal Gain Account

iii) Normal Loss Account \( (11 + 2 + 2 = 15) \)
18. A company adopts standard cost practices for its direct labour cost and factory overhead cost. The activities level and cost per direct labour hour are summarized below:

<table>
<thead>
<tr>
<th>Activities level in DLH</th>
<th>25000</th>
<th>50000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labour cost (Rs.)</td>
<td>(Rs.)</td>
<td>(Rs.)</td>
</tr>
<tr>
<td>Skilled labour No. 4 @ Re. 1 per hour</td>
<td>100,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Unskilled labour No. 6 @ Re. 0.50 per hour</td>
<td>75,000</td>
<td>150,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175,000</strong></td>
<td><strong>350,000</strong></td>
</tr>
</tbody>
</table>

Factory overheads (Rs.)
- Indirect material: 25,000
- Indirect labour: 37,500
- Supervision cost: 22,500
- Heat, light and power: 17,500
- Depreciation: 53,000
- Rent and Taxes: 12,000

Other data:
- Normal capacity: 40,000 DLH
- Hours worked: 42,000 DLH
- Actual hours produced: 38,000 DLH
- Actual cost incurred: Rs. 203,000
- Actual wages paid:
  - Skilled labour No. 5 @ Rs. 1.10 per hour: Rs. 231,000
  - Unskilled labour No. 5 @ Rs. 0.40 per hour: Rs. 84,000
  - **Total**: Rs. 315,000

**Required:**
1. Direct labour cost and factory overhead budget for the activity level of 40,000 DLH.
2. Analysis showing direct labour efficiency, mix, rate and cost variances.
3. Three overhead variances i.e. capacity, efficiency and spending. 

19. What do you mean by cost reduction? Discuss the nature and scope of cost reduction. Also explain the tools and techniques of cost reduction. 

(4+6+5=15)