IV Semester B.Com. Examination, May/June 2018
(CBCS) (Fresh + Repeaters) (2015-16 and Onwards)
COMMERCE
Paper - 4.4: Cost Accounting

Time: 3 Hours
Max. Marks: 70

Instruction: Answers should be written completely in English or Kannada.

SECTION - A
1. Answer any five sub-questions. Each sub-question carries 2 marks. (5x2=10)
   a) Define Cost Accounting.
   b) What do you mean by cost?
   c) What is marginal cost?
   d) Give the meaning of material.
   e) What is Bin card?
   f) What do you mean by wage sheet?
   g) What is apportionment?

SECTION - B
2. What are the practical difficulties in installation of Cost Accounting?

3. From the following particulars calculate earnings of a worker under Halsey and Rowan plan.
   Standard time 10 hrs.
   Time taken 6 hrs.
   Hourly rate ₹ 2

4. From the following information compute a machine hour rate of machine no. 10 for the month of June.
   Cost of machine ₹ 32,000
   Estimated scrap value ₹ 2,000
   Effective working life 10000 hours
   Repairs and maintenance for life of machine ₹ 2,500
   Standing charges for the month of June ₹ 400
   Power consumed by machine @ ₹ 0.30 p.u. ₹ 600
   The machine consumes 10 units of power per hour.
5. Calculate Re-order level, maximum level, minimum level and average level from the following information.
   Reorder quantity 1500 units
   Reorder period 4 to 6 weeks
   Maximum consumption 400 units per week,
   Normal consumption 300 units per week,
   Minimum consumption 250 units per week.

6. Job No. 25 was commenced on 1-1-18 and completed on 31-1-18. Materials used ₹ 600 and labour ₹ 400. Factory overheads were
   Machine No. 10 used for 40 hours @ ₹ 3.50 p.hour,
   Machine No. 20 used for 30 hours @ ₹ 4 p.hour,
   Six welders were used for job for 5 days of 8 hours @ rate of 20 paise per hour,
   Other expenses were 100% of labour
   Ascertain works cost of job number – 25.

SECTION – C

Answer any three questions. Each question carries 14 marks. \( (3 \times 14 = 42) \)

7. Tata Engineering Company manufactured and sold 1000 machines in 2016. Following are the particulars obtained.

<table>
<thead>
<tr>
<th>Item</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of materials</td>
<td>80,000</td>
</tr>
<tr>
<td>Wages paid</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Factory expenses</td>
<td>50,000</td>
</tr>
<tr>
<td>Salaries</td>
<td>60,000</td>
</tr>
<tr>
<td>Rent, rates and insurance</td>
<td>10,000</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>30,000</td>
</tr>
<tr>
<td>General expenses</td>
<td>20,000</td>
</tr>
<tr>
<td>Sales</td>
<td>4,00,000</td>
</tr>
</tbody>
</table>

The company plans to manufacture 1200 machines in 2017. You are required to submit a statement showing the price to earn a profit of 10% on selling price. The following additional information is given to you.
a) Price of materials will rise by 20% on previous year's price
b) Wages will rise by 5%
c) Manufacturing expenses will rise in proportion to the combined cost of materials and wages.
d) Selling expenses per unit will remain unchanged.
e) Other expenses will remain unaffected by rise in output.

8. What do you mean by weighted average price? And prepare stores ledger under weighted average price from the following:

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Units</th>
<th>Rate (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 2</td>
<td>purchased</td>
<td>4000</td>
<td>4.00</td>
</tr>
<tr>
<td>Jan. 20</td>
<td>purchased</td>
<td>500</td>
<td>5.00</td>
</tr>
<tr>
<td>Feb. 5</td>
<td>issued</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>Feb. 10</td>
<td>purchased</td>
<td>6000</td>
<td>6.00</td>
</tr>
<tr>
<td>Feb. 12</td>
<td>issued</td>
<td>4000</td>
<td></td>
</tr>
<tr>
<td>Mar. 2</td>
<td>issued</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>Mar. 5</td>
<td>issued</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>Mar. 15</td>
<td>purchased</td>
<td>4500</td>
<td>5.50</td>
</tr>
<tr>
<td>Mar. 20</td>
<td>issued</td>
<td>3000</td>
<td></td>
</tr>
</tbody>
</table>

9. Overhead costs of Service department before distribution of Production department costs are as follows:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Production depts.</th>
<th>Service depts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount ₹</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>-7,550</td>
<td>7,200</td>
<td>9,650</td>
</tr>
</tbody>
</table>

The costs of service departments D and E are to be charged on the basis of following percentages:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>E</td>
<td>40%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Find the total overheads of production departments by using the following methods:

a) Simultaneous equation method.
b) Repeated distribution method.
10. Find out the profit as per costing records and financial accounts from the following:

<table>
<thead>
<tr>
<th></th>
<th>Sony</th>
<th>LG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of units produced and sold</td>
<td>600</td>
<td>400</td>
</tr>
<tr>
<td>Direct materials</td>
<td>₹3,600</td>
<td>₹2,800</td>
</tr>
<tr>
<td>Direct wages</td>
<td>₹3,000</td>
<td>₹2,400</td>
</tr>
<tr>
<td>Selling price per unit</td>
<td>₹25</td>
<td>₹30</td>
</tr>
</tbody>
</table>

Works overhead is 80% of wages and office overhead 25% of works cost. Actual works expenses ₹4,500 and office expenses ₹3,900. Reconcile the costing profit with financial profit.

11. From the following information for the year ending 31st December 2017 the company request you to apportion the expenses to various departments on an equitable basis and reapporportion the service department costs to production departments as given below. Service department X to production departments in the ratio of 3 : 2 : 1 and service department Y to production departments in the ratio of 4 : 3 : 2.

<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 wages (₹)</td>
<td>7,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Direct materials (₹)</td>
<td>3,000</td>
<td>2,500</td>
</tr>
<tr>
<td>Number of employees</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>Electricity (KW)</td>
<td>8,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Number of light points</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Assets value (₹)</td>
<td>50,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Area (sq. ft.)</td>
<td>800</td>
<td>600</td>
</tr>
</tbody>
</table>

The expenses for the period are as follows:

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stores overhead</td>
<td>4,000</td>
</tr>
<tr>
<td>Motive power</td>
<td>1,500</td>
</tr>
<tr>
<td>Labour welfare</td>
<td>3,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>3,000</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>12,000</td>
</tr>
<tr>
<td>Electric light</td>
<td>2,000</td>
</tr>
<tr>
<td>General overhead</td>
<td>10,000</td>
</tr>
<tr>
<td>Rent and taxes</td>
<td>6,000</td>
</tr>
</tbody>
</table>
IV Semester B.B.M. Examination, May/June 2018  
(2013 – 14 & Onwards) (Repeaters)  
BUSINESS MANAGEMENT  
Paper – 4.6 : Cost Accounting

Time : 3 Hours  
Max. Marks : 100

Instruction : Answers must be written in English only.

SECTION – A

1. Answer any eight of the following sub-questions. Each sub-question carries 2 marks. (8x2=16)
   a) Define Cost Unit.  
   b) What is Idle time ?  
   c) What is Memorandum Reconciliation Account ?  
   d) Define overhead.  
   e) What is meant by Direct Materials ?  
   f) What is meant by Machine Hour Rate ?  
   g) How do you calculate maximum level of stock ?  
   h) Give the meaning of piece rate system.  
   i) Write any 2 Items included in Financial Accounts but not in Cost Accounts.  
   j) What is meant by ‘Bin card’ ?

SECTION – B

Answer any three of the following. Each question carries 8 marks. (3x8=24)

2. Write the differences between Cost Accounting and Financial Accounting.

3. Nilsan company manufactured and sold 1000 units of product “P” in the year 2017
   Raw materials Rs. 1,00,000  
   Direct wages Rs. 80,000  
   Factory overhead 50% of wages  
   Office overhead 10% of factory cost  
   Selling and distribution expenses Rs. 10/- per unit sold  
   All units were sold for Rs. 4,00,000/-
   Prepare cost statement.
4. The standard time for a job is 20 hours at Rs. 10/- per hour. Mr. A finished the job in 15 hours and Mr. B finished in 12 hours. Calculate the remuneration payable under Halsey plan and Rowan’s plan.

5. From the following particulars relating to material “S” find out:
   a) Reorder level
   b) Minimum level
   c) Maximum level
   d) Average level
   Reorder Quantity 2400 units
   Reorder period 4 to 6 weeks
   Maximum consumption 450 units per week
   Minimum consumption 150 units per week.

SECTION – C

Answer question no. 10 and any three of the remaining questions. Each question carries 15 marks. (4x15=60)

6. From the following particulars prepare a statement showing:
   a) Raw materials consumed
   b) Prime cost
   c) Works cost
   d) Cost of production
   e) Profit.
   Raw materials
      Opening Rs. 20,000/-
      Closing Rs. 14,000/-
   Work in progress
      Opening Rs. 26,500/-
      Closing Rs. 14,000/-
   Purchase of raw material Rs. 90,000/-
   Carriage inwards Rs. 2,000/-
   Direct wages Rs. 40,000/-
   Chargeable expenses Rs. 15,000/-
   Work overheads Rs. 22,500/-
   Administrative overheads Rs. 10,000/-
   Selling and distribution overheads Rs. 14,000/-
   Sales Rs. 2,20,000/-
7. XYZ company Ltd. maintains both Cost Accounting and Financial Accounting. The cost system has revealed profit for the year ending 31st March 2017 a sum of Rs. 1,15,200/-. However, the Financial Accounting results differs from this figure. Verification revealed the following information:

a) Over absorption of factory overhead in Cost Accounting Rs. 2,200/-
b) Provision for doubtful debts Rs. 1,600/-
c) Preliminary expenses written off Rs. 24,400/-
d) Transfer fee received Rs. 3,400/-
e) Underwriting commission paid Rs. 10,000/-
f) Discount on issue of shares Rs. 12,400/-
g) Dividend received Rs. 14,600/-
h) Under recovery of depreciation in Cost Accounting Rs. 1,600/-

Prepare a reconciliation statement as on 31st March 2017 showing profit as per Financial Accounts.

8. Standard output of a product has been fixed at 6 units per day of 8 hours. Normal wages per day Rs. 12/-. Determine the total wage including the bonus payable. Under Halsey plan and Rowan's plan when the outputs were 5 units, 8 units, 12 units and 15 units made by the worker A, B, C and D respectively.

9. The following are the overheads allocation of three production departments and two service departments. X, Y, Z and F₁, F₂ respectively.
   X – Rs. 30,000, Y – Rs. 28,000
   Z – Rs. 40,000, F₁ – Rs. 10,000
   F₂ – Rs. 6,000.

Distribute the overheads of service departments to production departments as below:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th>F₁</th>
<th>F₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>F₁</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>–</td>
<td>10%</td>
</tr>
<tr>
<td>F₂</td>
<td>40%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td>–</td>
</tr>
</tbody>
</table>

Distribute the overheads under repeated distribution method.

April
1. Opening balance 500 units at Rs. 20/- per unit
2. Issued 70 units
3. Purchased 200 units at Rs. 24.00 per unit
4. Issued 100 units
5. Return of surplus 15 units at Rs. 24.00
6. Issued 80 units
7. Purchased 240 units at Rs. 25.00 per unit
8. Issued 180 units
9. Purchased 320 units at Rs. 30/- per unit
10. Issued 300 units
11. Purchased 100 units at Rs. 20/- per unit
12. Issued 100 units

The stock verification reveals that on 13th April and 25th April there were shortage of 5 units and 8 units respectively.
IV Semester B.B.A. Examination, May 2017  
(CBCS) (Fresh + Repeaters)  
(2015 – 16 & Onwards)  
BUSINESS ADMINISTRATION  
Paper – 4.6 : Cost Accounting

Time : 3 Hours
Max. Marks : 70

**Instruction : Answers should be written in English Only.**

SECTIONS – A

1. Answer any five sub-questions of the following. Each sub-question carries two marks.  
   \(5 \times 2 = 10\)
   a) Define Cost Accounting.
   b) Give the meaning of direct labour with two examples.
   c) What is Maximum level of stock ?
   d) What is over time ? Mention two causes for it.
   e) What is Reconciliation statement ?
   f) What is overhead absorption rate ?
   g) Annual demand for material – 3600 units, cost of placing the order Rs. 50, storage cost p.u. per year Re. 1. Calculate EOQ.

SECTIONS – B

Answer any three questions of the following. Each question carries six marks. \(3 \times 6 = 18\)

2. Explain the objectives of Cost Accounting.

3. Mr. Gopal furnishes the following data relating to the manufacture of a standard product during the month of April 2016.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material Consumed</td>
<td>Rs. 15,000</td>
</tr>
<tr>
<td>Direct Labour Charges</td>
<td>Rs. 9,000</td>
</tr>
<tr>
<td>Machine hours worked</td>
<td>Rs. 900</td>
</tr>
<tr>
<td>Machine hour rate</td>
<td>Rs. 5</td>
</tr>
<tr>
<td>Administrative overheads</td>
<td>20% on works cost</td>
</tr>
<tr>
<td>Selling overhead</td>
<td>Re. 0.50 per unit</td>
</tr>
<tr>
<td>Units produced</td>
<td>17,100</td>
</tr>
<tr>
<td>Units sold</td>
<td>16000 at Rs. 4 per unit</td>
</tr>
</tbody>
</table>

You are required to prepare Cost Sheet, showing cost per unit and profit for the period.
4. In a manufacturing company a material is used as follows:
   Re-order quantity — 3600 units
   Re-order period — 3 to 5 weeks
   Maximum consumption — 900 units per week
   Minimum consumption — 300 units per week
   Normal consumption — 600 units per week

   Calculate:
   1) Re-order level
   2) Minimum stock level
   3) Maximum stock level.

5. During the first week of April 2016, Mr. X produced 800 articles. He receives wages for a guaranteed 48 hours a week at Rs. 10 per hour. The estimated time to produce one article is 16 minutes.

   Calculate the wages according to
   a) Halsey Premium Plan and
   b) Rowan Premium Plan.

6. Compute machine hour rate from the following data:
   Purchase cost of the machine Rs. 2,00,000
   Scrap value after 10 years of Rs. 20,000
   Yearly working hours 2,000
   Charge 50% of depreciation as repairs
   Power cost 5 units of power per hour at Rs. 5 p.u.
   Oil expenses at Rs. 20 per day of 8 hours
   Consumable stores at Rs. 100 per day of 8 hours.

SECTION – C

Answer any three questions of the following. Each question carries 14 marks. (3x14=42)

7. The following expenses were incurred for a Job during the year ending 31-3-2016.

   Rs.
   Direct Material 3,000
   Direct Wages 4,000
   Chargeable expenses 1,000
   Factory overheads 2,000
   Selling and distribution overheads 2,000
   Administration overheads 3,000
   Selling price of the job 18,000
You are required to prepare a statement of Cost and Profit from the Job and an estimated price of a Job which is to be executed in the year 2017. Materials, wages and chargeable expenses will be required of Rs. 5,000, Rs. 7,000 and Rs. 2,000 respectively for the Job. The various overheads to recovered on the following basis.

a) Factory overheads as a percentage of direct wages.
b) Administration and selling and distribution overheads as a percentage of works cost.
c) Selling price of the estimate is to be calculated by applying rate of profit on cost of sales of 2016.

8. The following transactions were made during the month of April 2016. Prepare Stores Ledger Account by FIFO and LIFO methods.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Units</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 4 – 2016</td>
<td>Opening stock of materials</td>
<td>1500</td>
<td>Rs. 12</td>
</tr>
<tr>
<td>2 – 4 – 2016</td>
<td>Issued 200 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 – 4 – 2016</td>
<td>Purchased 1000 units at Rs. 15 per unit</td>
<td>1000</td>
<td>Rs. 15</td>
</tr>
<tr>
<td>8 – 4 – 2016</td>
<td>Issued 1200 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 – 4 – 2016</td>
<td>Purchased 600 units at Rs. 20 per unit</td>
<td>600</td>
<td>Rs. 20</td>
</tr>
<tr>
<td>15 – 4 – 2016</td>
<td>Issued 650 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 4 – 2016</td>
<td>Returned to stores from issue of April 02</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>24 – 4 – 2016</td>
<td>Purchased 300 units @ Rs. 25 per unit</td>
<td>300</td>
<td>Rs. 25</td>
</tr>
<tr>
<td>28 – 4 – 2016</td>
<td>Issued 250 units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 – 4 – 2016</td>
<td>Issued 300 units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. The Maruthi Co. is having 4 departments A, B, and C are production department and D is a service department the Actual Cost for a period are as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>20,000</td>
</tr>
<tr>
<td>Repair</td>
<td>12,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>9,000</td>
</tr>
<tr>
<td>Lighting</td>
<td>2,000</td>
</tr>
<tr>
<td>Supervision</td>
<td>30,000</td>
</tr>
<tr>
<td>Insurance on Materials</td>
<td>10,000</td>
</tr>
<tr>
<td>Employees Insurance</td>
<td>3,000</td>
</tr>
<tr>
<td>Power</td>
<td>18,000</td>
</tr>
</tbody>
</table>

The following data are also available in respect of four departments.

<table>
<thead>
<tr>
<th>Department</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area in Sq. feet</td>
<td>150</td>
<td>110</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>No. of Workers</td>
<td>24</td>
<td>16</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Total Wages in (Rs.)</td>
<td>8,000</td>
<td>6,000</td>
<td>4,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>
US – 536

Value of plant (Rs.)  24,000  18,000  12,000  6,000
Value of stock      15,000  9,000   6,000  –

Apportion the cost to various departments on the most equitable basis and service department cost to production department in 4 : 4 : 2 ratio.

10. From the following particulars calculate the earnings of a worker under
   1) Straight Piece rate
   2) Differential piece rate
   3) Halsey Bonus plan (50% sharing) and
   4) Rowan premium scheme

   Weekly working hrs  40
   Piece rate per piece Rs. 5
   Hourly rate of wages Rs. 15
   Normal time taken per piece 20 minutes
   Normal output per week 120 pieces
   Actual output of the worker per week 150 piece

   **Differential piece rate:**
   a) 80% of piece rate for output below normal output
   b) 120% of piece rate for output above normal output.

11. From the following figures prepare a Reconciliation Statement and find out profit as per financial accounts.
   
   a) Net profit as per Cost Accounts  3,44,800
   b) Works overhead under recovered  6,240
   c) Administration overhead recovered in excess  3,400
   d) Depreciation charged in Financial Accounts  22,400
   e) Depreciation recovered in Cost books  25,000
   f) Interest included in Financial books only  16,000
   g) Obsolescence loss charged in Financial Accounts  11,400
   h) Income tax provided in Financial only  80,600
   i) Bank Interest and transfer fees Credited in Financial books  1,500
   j) Depreciation of stock charged in Financial books  13,500
   k) Stores Adjustments credited in Financial Accounts  950
IV Semester B.B.M. Examination, May 2017
(2013 – 14 & Onwards) (Repeaters)
BUSINESS MANAGEMENT
Paper – 4.6 : Cost Accounting

Time : 3 Hours
Max. Marks : 100

Instruction: Answers must be written in English only.

SECTION–A

1. Answer any eight of the following sub-questions. Each sub-question carries 2 marks. (8x2=16)

   a) Define Cost Accounting.

   b) What are overheads under Cost Accounting?

   c) What is a Bin Card?

   d) State any four items which are included in Financial Accounts. But not in Cost Accounts.

   e) Write any 2 objectives of material control.

   f) What is Memorandum Reconciliation Account?

   g) Give the meaning of Cost Sheet.

   h) What is VED Analysis?

   i) What is Idle time?

   j) What is meant by Machine Hour Rate?
SECTION – B

Answer any three of the following:  

(3×8=24)

2. State the differences between Financial Accounting and Cost Accounting.

3. Two components “S” and “N” are used in a manufacturing unit of a factory

   - Minimum usage = 50 units per week
   - Maximum usage = 150 units per week
   - Normal usage = 100 units per week
   - Reorder quantity = S = 600 units
     N = 1000 units
   - Reorder period = S = 4 to 6 weeks
     N = 2 to 4 weeks

   Calculate:
   a) Reorder level
   b) Maximum level
   c) Minimum level.

4. From the following particulars prepare a Stores Ledger Account showing pricing of materials issued by adopting FIFO method for the month of Jan. 2017.

Jan. –  1  Opening stock 500 units @ Rs. 2.00 per unit.
Jan. –  3  Purchased 400 units @ Rs. 2.10 per unit.
Jan. –  5  Issued 600 units to Job “K”.
Jan. –  7  Purchased 800 units @ Rs. 2.40 per unit.
Jan. –  8  500 units issued to Job “S”.
Jan. –  9  Purchased 400 units @ Rs. 2.50 per unit.
Jan. – 10  600 units to Job “P”
5. From the following calculate Machine Hour Rate.
   a) Cost of the machine Rs. 90,000
   b) Working life – 10 years
   c) Working hours – 2000 per year
   d) Repair charges 50% of Depreciation.
   e) Power 10 units per hour @ 0.10 paisa per unit.
   f) Lubricating oil @ Rs. 2 per day of 8 hours.
   g) Consumable stores @ Rs. 10 per day of 8 hours.
   h) Wages of operator Rs. 4 per day.

SECTION – C

Answer Question No. 10 and any three of the remaining questions. Each question carries 15 marks. (4x15=60)

6. From the following particulars, prepare a Cost Sheet.

   Stock            Raw materials – Rs. 30,500
   (1-1-2016)       Finished goods – Rs. 20,400

   Stock
   (31-12-2016)     Raw materials – Rs. 48,500
                    Finished goods – Rs. 10,000

   Purchase of raw materials – Rs. 25,000.
Work in progress
1-1-2016 – Rs. 8,000
31-12-2016– Rs. 9,000
Sales Rs. 95,000
Direct wages Rs. 20,400
Factory expenses Rs. 10,500
Office expenses Rs. 5,400
Selling expenses Rs. 3,800
Distribution expenses Rs. 2,500

7. Prepare Stores Ledger Account from the following details using LIFO method of pricing the issues of materials.

<table>
<thead>
<tr>
<th>January</th>
<th>1</th>
<th>Opening Balance 10,850 units @ Rs. 130 P.U.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>Purchases 20,000 units @ Rs. 134 P.U.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Issued 6,750 units to Job No. : 1</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Issued 8,500 units to Job No. : 2</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Returns from Job No. : 2-550 units</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Purchases 17,750 units @ Rs. 128 P.U.</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Issued 11,250 units to Job No. : 2</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Physical verification revealed a loss of 250 units</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Issued 8,950 units to Job No. : 3</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Issued 6,300 units to Job No. : 4</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Purchases 10,000 units @ Rs. 132 P.U.</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Issued 7,750 units to Job No. : 5</td>
</tr>
</tbody>
</table>
8. A firm has three production departments A, B & C and two service departments X & Y. The following figures are extracted from the books of the firm.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect wages</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 240</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>100</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>700</td>
</tr>
<tr>
<td>Y</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Floor space (sq. feet)</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>400</td>
<td>100</td>
</tr>
<tr>
<td>Direct wages (Rs.)</td>
<td>900</td>
<td>600</td>
<td>900</td>
<td>900</td>
<td>700</td>
</tr>
<tr>
<td>Light points</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>H.P. of machines</td>
<td>75</td>
<td>30</td>
<td>25</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Value of machinery (Rs.)</td>
<td>12,000</td>
<td>16,000</td>
<td>20,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Working hours</td>
<td>3113</td>
<td>2014</td>
<td>2033</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The expenses of Service Departments X & Y are to be allocated as follows:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Y</td>
<td>40%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

You are requested to distribute the Service Department expenses to the production department A, B & C and calculate the Hourly rate of each production department.

Use repeated distribution method.
9. From the following particulars, you are required to calculate the earnings of a worker for a week under
   a) Straight piece rate system.
   b) Taylor's differential piece rate system.
   c) Halsey premium plan.
   d) Rowan premium plan.

   Weekly working hours – 48
   Hourly wage rate – Rs. 15
   Piece rate per unit – Rs. 6
   Normal time allowed per piece – 12 minutes
   Normal output per week – 240 pieces
   Actual output for the week – 300 pieces
   Differential piece rate: 80% of piece rate when output is below normal and 120% of piece rate when output is above normal

10. X Company Ltd. maintains both Cost Accounting and Financial Accounting. The cost system has revealed profit for the year ending 31st March 2011, a sum of Rs. 1,15,200. However, the Financial accounting results different from this figure. Verification revealed the following information.

   a) Over absorption of factory overhead in Cost Accounting Rs. 2,200.
   b) Provision for doubtful debts Rs. 1,600.
   c) Preliminary expenses written off Rs. 24,400.
   d) Transfer fee received Rs. 3,400.
e) Underwriting commission paid Rs. 10,000.
f) Discount on Issue of shares Rs. 12,400.
g) Dividend received Rs. 14,600.
h) Under recovery of depreciation in Cost Accounting Rs. 1,600.
j) Notional interest recorded in cost accounting Rs. 2,600.
k) Selling and distribution overhead over recorded in cost accounting.
l) Rent received not accounted in cost accounts Rs. 8,000.
m) Bank interest credited in financial accounts Rs. 2,500.

Prepare a reconciliation statement as on 31st March 2011 to show profit as per financial accounts.
IV Semester B.B.A. Examination, May 2016
(Fresh) (CBCS) (Semester Scheme) (2015-16 and Onwards)
BUSINESS ADMINISTRATION
Paper – 4.6 : Cost Accounting

Time : 3 Hours
Max. Marks : 70

Instruction : Answers should be written completely in English.

SECTION – A

1. Answer any five sub-questions of the following. Each sub-question carries two marks. (5×2=10)
   a) What do you mean by Cost Accounting?
   b) State the classification of materials.
   c) What is indirect labour? Give two examples.
   d) State the functional classification of overheads.
   e) State the need for reconciliation between Cost and Financial Accounts.
   f) Find out EOQ using the data given. Annual usage 4000 units. Cost of material Rs. 2 per unit cost of placing and receiving an order Rs. 5. Annual carrying cost of one unit 8% of inventory value.
   g) Give any four examples of administrative overhead.

SECTION – B

Answer any three questions of the following. Each question carries six marks. (3×6=18)


3. From the following data prepare a cost sheet of Anu Ltd. showing cost per unit and profit for the period ending 31-3-14.

   Rs.
   Opening stock of raw materials 30,000
   Purchase of raw materials 1,50,000
   Closing stock of raw materials 15,000
   Direct wages 75,000
   Machine hours worked 15,000
   Machine hour rate 1.25
   Office overhead 25% of works cost
   Selling overhead Rs. 2 per unit
   Rate of profit 20% on cost
   Units produced and sold 5000 units.

P.T.O.
4. Santosh Manufacturing Company Limited uses a material as follows:
   Maximum consumption 1350 units/week
   Minimum consumption 450 units/week
   Normal consumption 750 units/week
   Re-order period 3 to 5 weeks
   Re-order quantity 5400 units
   Calculate: (a) Re-order level (b) Minimum level (c) Maximum stock level.

5. A worker takes 54 hours to complete a job on daily wages and 36 hours on a scheme of payment by results. His day rate is Rs. 75 per hour calculate his earnings using (a) Halsey plan (b) Rowan plan.

6. The following is the budget of Shashank Manufacturing Company Limited for the year 2015.
   Rs.
   Factory overheads 56,000
   Direct materials cost 84,000
   Direct labour cost 1,12,000
   Direct labour hours 28000 hours
   Calculate overhead absorption rates using the following methods:
   a) Direct material cost percentage method.
   b) Direct labour cost percentage method.
   c) Direct labour hour rate method.

SECTION – C
Answer any three questions of the following. Each question carries 14 marks. (3x14=42)

7. The following expenses were incurred for a job during the year ending 31-3-2015.
   Rs.
   Direct material 60,000
   Direct wages 80,000
   Direct expenses 20,000
   Factory overhead 40,000
   Administration o/h 60,000
   Selling and distribution expenses 40,000
   Selling price of the above job 3,60,000
You are required to prepare a statement of cost and profit from the job and an estimated price of a job which is to be executed in the year 2016. Materials, Wages and Chargeable exps. will be required of Rs. 15,000, Rs. 21,000 and Rs. 6,000 respectively for the job. The various overheads to be recovered on the following basis while calculating the price.

a) Factory overheads as a percentage of direct wages.

b) Administration and selling and distribution overheads as a percentage of works cost.

c) Selling price of the estimate is to be calculated by applying rate of profit on cost of sales of 2015.

8. The following transactions took place in respect of Material 'X' during March 2015.

1-3-15 Opening stock of materials 500 units @ Rs. 1.50 per unit
2-3-15 Purchases 2000 units @ Rs. 2.00 per unit
4-3-15 Purchases 3000 units @ Rs. 2.50 per unit
6-3-15 Issues 2500 units
8-3-15 Purchases 2500 units @ Rs. 2.70 per unit
10-3-15 Issues 2000 units

You are required to prepare a Stores Ledger Account using Simple Average Method and Weighted Average Method of pricing material issues.

9. A department has 3 machines. From the following data compute machine hour rates of these machines, showing clearly the basis of apportionment.

<table>
<thead>
<tr>
<th>Service</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>10,000</td>
</tr>
<tr>
<td>Insurance of building</td>
<td>21,000</td>
</tr>
<tr>
<td>Power consumption</td>
<td>2,20,000</td>
</tr>
<tr>
<td>Rent</td>
<td>60,000</td>
</tr>
<tr>
<td>Insurance of machines</td>
<td>36,900</td>
</tr>
<tr>
<td>Indirect labour</td>
<td>46,000</td>
</tr>
<tr>
<td>General expenses</td>
<td>1,84,800</td>
</tr>
<tr>
<td>Supervision expenses</td>
<td>60,000</td>
</tr>
<tr>
<td>Wages of operators</td>
<td>30,000 (to be apportioned equally)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>72,000</td>
</tr>
</tbody>
</table>
The following additional information is available in respect of the above 3 machines.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>M₁</th>
<th>M₂</th>
<th>M₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP of machines</td>
<td>25000</td>
<td>20000</td>
<td>10000</td>
</tr>
<tr>
<td>Area occupied (sq.ft.)</td>
<td>80</td>
<td>120</td>
<td>40</td>
</tr>
<tr>
<td>Value of machines (Rs. in lakhs)</td>
<td>24</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>No. of light points</td>
<td>8</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>No. of M/c hours (in hrs.)</td>
<td>24000</td>
<td>12000</td>
<td>24000</td>
</tr>
<tr>
<td>Direct labour (in Rs.)</td>
<td>1200</td>
<td>2400</td>
<td>2400</td>
</tr>
<tr>
<td>No. of employees (in Nos.)</td>
<td>8</td>
<td>24</td>
<td>48</td>
</tr>
</tbody>
</table>

10. a) A workman's wages for a guaranteed 48 hour week is Rs. 25 per hour. Estimated time to produce one article is 20 minutes and under incentive scheme time allowed is increased by 80%. During a week the workman produced 100 articles. Calculate his earnings under (a) Halsey plan (b) Rowan plan.

b) Calculate the earnings of the workers under the following:
   i) Taylor's differential piece rate system.
   ii) Merrick's plan.
   Time rate Rs. 30 per hour
   Standard output per hour 6 units
   Differential piece rates to be applied.
   1) Low piece rate 80% of normal piece rate
   2) High piece rate 120% of normal piece rate
   In a day of 8 hours. A produced 39 units B 45 units, C 48 units and D 50 units.

11. From the following figures prepare a Reconciliation Statement and ascertain the profit as per Financial Accounts.

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit as per Cost Accounts</td>
<td>1,88,460</td>
</tr>
<tr>
<td>Income tax provided in Financial Books</td>
<td>10,000</td>
</tr>
<tr>
<td>Bank interest credited in Financial Books</td>
<td>250</td>
</tr>
<tr>
<td>Works overhead under recovered in Cost Accounts</td>
<td>1,550</td>
</tr>
<tr>
<td>Depreciation charged in Financial Accounts</td>
<td>5,600</td>
</tr>
<tr>
<td>Depreciation recovered in Cost Accounts</td>
<td>6,000</td>
</tr>
<tr>
<td>Administration overhead over recovered in Cost A/c's</td>
<td>850</td>
</tr>
<tr>
<td>Loss due to obsolescence charged in Financial A/c's</td>
<td>2,800</td>
</tr>
<tr>
<td>Interest on investment not included in Cost A/c's</td>
<td>4,000</td>
</tr>
<tr>
<td>Stores Adjustment (Cr. in Financial Accounts)</td>
<td>240</td>
</tr>
<tr>
<td>Loss due to depreciation in stock values</td>
<td></td>
</tr>
<tr>
<td>Charged in Financial Accounts</td>
<td>3,350</td>
</tr>
<tr>
<td>Transfer fee (Cr. in Financial Books)</td>
<td>5,500</td>
</tr>
<tr>
<td>Provision for doubtful debts provided in Financial Books</td>
<td>1,250</td>
</tr>
<tr>
<td>Preliminary expenses written off in Financial Books</td>
<td>800</td>
</tr>
</tbody>
</table>
IV Semester B.B.M. Examination, May 2016
(2013-14 and onwards) (Repeaters)
BUSINESS MANAGEMENT
Paper – 4.6 : Cost Accounting

Time : 3 Hours
Max. Marks : 100

Instruction: Answers must be written in English only.

SECTION – A

1. Answer any eight of the following sub-questions. Each sub-question carries 2 marks. (8×2=16)
   a) What is cost unit?
   b) What is ABC analysis?
   c) What is variable cost? Give two examples.
   d) Annual demand for material – 3600 units, cost of placing the order ₹ 50, storage cost per unit per year ₹ 1, calculate EOQ.
   e) Give the meaning of overtime.
   f) What is the difference between allocation and apportionment of overheads?
   g) What is absorption of overheads?
   h) What is prime cost?
   i) What is Base stock?
   j) What are ‘Notional Expenses’? Give examples.

SECTION – B

Answer any three of the following: (3×8=24)

2. State the fundamental requirements of installing a Cost Accounting System.

3. From the following particulars compute Machine Hour Rate.

<table>
<thead>
<tr>
<th>Cost of machine</th>
<th>1,30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated life of machine</td>
<td>10 years</td>
</tr>
<tr>
<td>Installation charges</td>
<td>20,000</td>
</tr>
<tr>
<td>Scrap value</td>
<td>10,000</td>
</tr>
<tr>
<td>Rent and rates per annum</td>
<td>16,000</td>
</tr>
<tr>
<td>Insurance per month</td>
<td>500</td>
</tr>
</tbody>
</table>
Repairs per annum 9,000
Consumable stores per annum 3,000
Total manufacturing services 2,000
Power cost is 5 units per hour @ 40 paise per unit
Setting up time (Non-productive) 700 hours
Number of working days in a year 300 and 9 working hours each day.

4. A workman's wage for a guaranteed 44 hour week is ₹ 10 per hour. The estimated
time to produce one article is 30 minutes and under the incentive scheme, the
time allowed is increased by 20%. During a particular period the worker
manufactured 100 articles. Calculate his Gross Wages under each of the following
methods:
   a) Halsey Bonus Method
   b) Rowan Bonus Method.

5. Two components X and Y are used as follows.
   Minimum usage 25 units per week each
   Maximum usage 75 units per week each
   Re-order quantity X: 300 units
   Y: 500 units
   Re-order period X: 4 to 6 weeks
   Y: 2 to 4 weeks.
   Calculate for each component:
   a) Reorder level
   b) Minimum level
   c) Maximum level and
   d) Average stock level.

SECTION – C

Answer question No. 10 and any three of the remaining questions. Each question
carries 15 marks. (4 x 15 = 60)

6. Bharath Ltd. furnishes the following stores transactions from March 2016:

   March 2016
   1st  Opening balance 25 units, value ₹ 162.50
   4th  Issues Req. No. 85 – 8 units
   6th  Receipts from B and Co. – 50 units at ₹ 5.75/unit
   7th  Issues Req. No. 97 – 12 units
   10th Returns to B and Co. – 10 units
   12th Issues Req. No. 108 – 15 units
   13th Issues Req. No.110 – 20 units
15th Receipts from M and Co. – 25 units at ₹ 6.10 per unit.
17th Issues Req. No. 121 – 10 units
19th Received replacement from B and Co. – 10 units
20th Returned from department material of B and Co. – 5 units
22nd Transfer from Job 182 to Job 187 in the department – 5 units
26th Issues Req. No. 146 – 10 units
29th Transfer from Dept. A to Dept. B – 5 units.
30th Shortage in stock taking – 2 units
Write up the priced stores ledger on FIFO and LIFO method.

7. Prepare a Reconciliation Statement to show the profit as per financial accounts.

- ₹
  Profit as per cost accounts 1,15,200
  Over absorption of works overheads in cost accounting 2,200
  Provision for doubtful debts 1,600
  Preliminary expenses written off 24,400
  Transfer fees received 3,400
  Underwriting commission paid 10,000
  Discount on issue of shares 12,400
  Dividend received 14,600
  Under recovery of depreciation in cost accounting 1,600
  Under valuation of closing stock in financial accounts 2,400
  Notional interest in cost accounts 2,600
  Rent received not accounted in costing 23,000
  Bank interest credited in financial accounts 2,500

8. From the following particulars, work out the earning of worker for a week under
   a) Straight piece rate
   b) Differential piece rate
   c) Halsey premium scheme (50% sharing) and
   d) Rowan premium scheme.
   Weekly working hours – 48
   Hourly wage rate – ₹ 7.50
   Piece rate per unit – ₹ 3.00
   Normal time taken per piece – 24 minutes
   Normal output per week – 120 pieces
   Actual output for the week – 150 pieces
   Differential piece rate – 80% of piece rate.
   When output is below normal and 120% of piece rate when output is above normal.
9. ATG Ltd. is a manufacturing Co. having three production departments A, B and C and two service department X and Y. The following is the budget for December.

<table>
<thead>
<tr>
<th>Departments</th>
<th>A (₹)</th>
<th>B (₹)</th>
<th>C (₹)</th>
<th>X (₹)</th>
<th>Y (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct material</td>
<td>1,000</td>
<td>2,000</td>
<td>4,000</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Direct wages</td>
<td>5,000</td>
<td>2,000</td>
<td>8,000</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Area (sq. feet)</td>
<td>500</td>
<td>250</td>
<td>500</td>
<td>250</td>
<td>500</td>
</tr>
<tr>
<td>Capital value of asset</td>
<td>20,000</td>
<td>40,000</td>
<td>20,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Machine hours</td>
<td>1,000</td>
<td>2,000</td>
<td>4,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Horse-power of machines</td>
<td>50</td>
<td>40</td>
<td>20</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

A technical assessment of the apportionment of expenses of service departments is as under:

<table>
<thead>
<tr>
<th>Service Department</th>
<th>A(%)</th>
<th>B(%)</th>
<th>C(%)</th>
<th>X(%)</th>
<th>Y(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>45</td>
<td>15</td>
<td>30</td>
<td>–</td>
<td>10</td>
</tr>
<tr>
<td>Y</td>
<td>60</td>
<td>35</td>
<td>–</td>
<td>5</td>
<td>–</td>
</tr>
</tbody>
</table>

Prepare (i) A statement showing re-distribution of service department 'X' and 'Y' expenses to production departments. (ii) Comprehensive machine hour rates of production departments.

10. From the following particulars, you are required to prepare a statement of cost.

<table>
<thead>
<tr>
<th>Description</th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of finished goods on 31-12-2014</td>
<td>80,000</td>
</tr>
<tr>
<td>Stock of raw materials on 31-12-2014</td>
<td>95,000</td>
</tr>
<tr>
<td>Purchase of raw materials</td>
<td>6,50,000</td>
</tr>
<tr>
<td>Wages (Productive)</td>
<td>4,75,000</td>
</tr>
<tr>
<td>Sale of finished goods</td>
<td>15,00,000</td>
</tr>
<tr>
<td>Stock of finished goods on 31-12-2015</td>
<td>6,74,000</td>
</tr>
<tr>
<td>Stock of raw materials on 31-12-2015</td>
<td>75,000</td>
</tr>
<tr>
<td>Works overhead charges</td>
<td>95,000</td>
</tr>
<tr>
<td>Office and general expenses</td>
<td>1,86,000</td>
</tr>
</tbody>
</table>

The company is about to send a tender for a large plant. The costing department estimates that the materials would cost ₹ 84,500 and wages to workmen ₹ 68,400. The tender is to be made at a net profit of 20% on the selling price.

Show what the amount of tender would be, if based on the percentages.