# CWA Inter - Stage I : Cost and Management Accounting - June 2010 

1-5(CMA)<br>Revised Syllabus

Time Allowed : 3 Hours
Full Marks : 100
The figures in the margin on the right side indicate full marks.
Answer Question No. 1, Which is compulsory, carrying 20 marks and any five from the rest carrying 16 marks each.
Please: (i) Write answers to all Parts of a question together;
(ii) When answering a question start a new page;
(iii) Answer only required number of questions;
(iv) Working notes should form part of answer.

## Marks

1. (a) From the following two groups of words, match each item in Group I with the suitable item in Group II as per their relevance:

| Group I | Group II |
| :--- | :--- |
| A. Step Cost | (a) Supervisory expenses |
| B. Limiting Factor | (b) Labour Turnover |
| C. Flux Method | (c) Marginal Costing |
| D. Blanket rate | (d) Remuneration system |
| E. Volume variance | (e) Long Term solvency |
|  | (f) Standard costing |
|  | (g) Apportionment of overheads |

(b) State whether the following statements are TRUE (T) or FALSE (F) :
(i) ABC analysis is made on the basis of unit prices of material.
(ii) When maximum stock level is fixed, the stock in hand should not exceed that level.
(iii) Primary packing material is considered as indirect material.
(iv) Under inflationary condition, use of FIFO method of pricing material issues results in overstatement of profit.
(v) Integrated accounts merge the cost and financial accounts in one set of accounts.
(c) In each of the cases given below one out of four alternative answers is correct.

Indicate the correct answer (= 1 mark) and give workings/reasons in support of your answer (= 1 mark) :
(i) In a product, 4 kgs of material X is used. While minimum and maximum production vary between 250 units and 400 units, this average production is maintained at 300 units per week. Delivery period varies between 2 to 4 weeks. $\mathrm{Re}-$ order level of Material X is
A. 4000 ;
B. 5800;
C. 6400 ;
D. None of these.
(ii) Cost per unit of a product manufactured in a factory amounted to Rs. 80 ( $70 \%$ variable) when production volume was 6,000 units. If production is increased by $20 \%$, the unit cost of production without change in Fixed Costs, will be
A. Rs.74;
B. Rs.75;
C. Rs.76;
D. None of these.
(iii) Sales and Profit of a Company for two consecutive periods are Period I Sales Rs.20,000, Profit Rs.2,000; Period II - Sales Rs.30,000, Profit Rs.4,000 Its P/V ratio is
A. $20 \%$
B. $25 \%$
C. $30 \%$;
D. None of these
(iv) The following data relate to a manufacturing company:

Budgeted overhead - Rs.50,000, Budgeted production - 5000 units
Actual production - 4000 units, Actual overhead - Rs.42,000
Under recovery of overhead would be
A. Rs.8000;
B. Rs.1000;
C. Rs.2000;
D. None of the
(v) When the capacity ratio and the activity ratio of a manufacturing shop are $95 \%$ and $105 \%$ respectively, the Efficiency ratio would be
A. $90.47 \%$;
B. $103 \%$;
C. $110.52 \%$;
D. None of these.
2. (a) What is Over and Under absorption of overhead expenditure? State the usual methods of disposal of under and over recovery of overheads in costing.
(b) A machine shop situated inside a Factory Shed has 25 identical machines. The 10 following information are provided:
(i) Total cost of all machines Rs.37,50,000 (all machines are of equal value). Expected life of the machines 10 years. There will be no residual value.
(ii) Overhead Costs (for Factory Shed of 1,00,000 sq.ft.) Rs. per annum
Rent (for entire factory) 75,000

Electricity for lighting (for entire factory) $\quad 15,000$
Supervisor's salaries (for 24machines) 1,25,000
Repair and maintenance (for 25 machines) 50,000
(iii) There will be Power cost of Re.1/- per hour/per machine when the machines will be in operation.
(iv) Total area of the Machine Shop is 10,000 sq.ft.
(v) Wages of Operator is Rs. 320 per day of 8 hours. As the machine are highly automatic, one Operator will attend to four machines when those are runnin.
(vi) Estimated running time of each machine is 2500 hrs . per annum.

You are required to work out a comprehensive Machine Hour Rate for each machine.
3. (a) M/s. Alpha Manufacturing is committed to supply 2,40,000 Bearings per annum $2 x 4$ to M/s. Stormy Fans Ltd. on a steady daily basis. It is estimated that it costs 0.10
paise as inventory holding cost per bearing per month and the set up cost per batch of production of Bearings at Alpha is Rs. 360 .

You are required to work out:
(i) the optimum run size for manufacture of bearings;
(ii) the time interval between two consecutive production runs;
(iii) minimum inventory cost per annum;
(iv) minimum cost of inventory.
(b) P. Ltd., an electrical contractor, has supplied you the following information in respect of two contracts started after April, 2009 and currently under execution by them:

|  | Position as at 31.3 .2010 |  |
| :--- | ---: | :---: |
|  | Contract A | Contract B |
|  | Rs. | Rs. |
| Contract Price | $2,40,000$ | $1,50,000$ |
| Work Certified | $2,16,000$ | $1,00,000$ |
| Estimated total cost on completion of contract | $2,10,000$ | $1,20,000$ |
| Cash received | $1,60,000$ | 80,000 |
| Uncertified work | 10,000 | 7,000 |
| Cost incurred against contract | $1,80,000$ | 95,000 |

Calculate the Profit to be carried to Profit and Loss Account for the year ended 31.3.2010.
4. (a) State the various areas where technique of marginal costing can be used for decision making.
(b) A company prepares Budget for a production level of 2,00,000 units of a product. The variable cost per unit of the product is Rs. 15 and Fixed Cost is Rs.2. The Company fixes the selling price to fetch a profit of $10 \%$ on cost.

You are required to calculate:
(i) The Break Even Point in unit and Rupees.
(ii) Profit/volume ratio.
(iii) If selling price is reduced by $5 \%$ what will be the revised Break even point in Rupees and P/V ratio.
(iv) If an increase of profit by $10 \%$ over the Budget is desired, what should be the sales at reduced price.
5. (a) State the limitations of Ratio Analysis.
(b) ABC Ltd. manufactures main product A and two By Products B and C. The following information are available:

|  | Main product | By Product |  |
| :--- | ---: | ---: | :---: |
|  | A | B | C |
| Sales(Rs.) | $10,00,000$ | 80,000 | 90,000 |
| Joint Cost upto separation point(Rs.) | $4,54,500$ |  |  |
| Cost after separation(Rs.) | 90,000 | 14,000 | 16,000 |
| Estimated net profit (\% of net sales) |  | $20 \%$ | $20 \%$ |
| Estimated selling expenses (\% of sales value) | $20 \%$ | $10 \%$ | $15 \%$ |

Prepare a statement showing profit under joint cost concept.
6. (a) A company manufactures and sells 7500 units per month of a single product @ 8 Rs. 40 per unit using $60 \%$ of its capacity. Variable cost of sales is Rs. 28 per unit. The company allows Trade Margin @ $10 \%$ of selling price.
Fixed expenses amount to Rs. 5 lakhs per year.
As the market has become very competitive, it has become necessary to implement certain aggressive sales technique to retain the current market and the Company is considering two options as under:
Option (a): Reduce selling price by $5 \%$.
Option (b): Increase Trade Margin by $25 \%$ over existing rate.
You are required to evaluate the two options and give your recommendation about which option the company should adopt without affecting current amount of total profit.
(b) Three workmen A, B and C produce respectively 180, 120 and 100 units of 8 Product XX in a normal day of 8 hours working time. Standard hourly output of the product XX is 10 units per hour. There is a guaranteed wage of Rs. 5 per hour.

You are required to calculate (a) earnings of each workers (b) the wages cost per 100 pieces of product XX and (c) the average cost of wages to produce 100 pieces of product XX under (i) Halsey Scheme and (ii) Rowan Scheme of wage payment.
7. (a) Distinguish between systems of Standard Costing and Budgetary control. Can 6 the two systems be complimentary? Discuss.
(b) The following data are collected for a company in respect of Fixed Overhead expenses and production for a given month:

|  | Budget | Actual |
| :--- | ---: | ---: |
| Fixed Overheads (Rs.) | 60,000 | 62,000 |
| Machine Hours | 6,000 | 6,050 |
| Production - Units | 1,200 | 1,300 |

Calculate the following variances:
(a) Expenditure variance;
(b) Volume variance;
(c) Capacity variance;
(d) Efficiency variance;
(e) Total fixed overhead variance.
8. Write short notes on (any four):
(a) Opportunity Cost;
(b) Abnormal Gain in Process Costing;
(c) Idle Time;
(d) Fringe Benefits;
(e) Flexible Budget;
(f) Value Analysis.

