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# AL-109 <br> April-2015 <br> $4^{\text {th }}$ year M.B.A., Integrated <br> <br> Advanced Cost \& Management Accounting 

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## Time : 3 Hours]

[Max. Marks : 100

1. (A) The summarized trading and Profit and Loss Account of Speed Ltd. for the year ended on $30^{\text {th }}$ September, 2014 is as under :

| Particulars | Amount <br> $₹$ | Particulars | Amount <br> $₹$ |
| :--- | ---: | :--- | :--- |
| To Cost of material | $12,00,000$ | By Sales | $69,60,000$ |
| To Direct Wages | $18,00,000$ |  |  |
| To Manufacturing expenses | $9,60,000$ |  |  |
| To Gross profit | $30,00,000$ |  | $\mathbf{6 9 , 6 0 , 0 0 0}$ |
|  | $\mathbf{6 9 , 6 0 , 0 0 0}$ |  |  |
| To Staff salary | $7,20,000$ | By Gross Profit | $30,00,000$ |
| To Rent and taxes | $1,20,000$ |  |  |
| To Selling expenses | $6,00,000$ |  |  |
| To General expense | $4,80,000$ |  | $\mathbf{3 0 , 0 0 , 0 0 0}$ |
| To Net profit | $10,80,000$ |  |  |
|  |  | $\mathbf{3 0 , 0 0 , 0 0 0}$ |  |

During the year the company manufactures 2000 bikes. For the year ending $30^{\text {th }}$ September, 2014 it is estimated that :
(1) Output and sales will be 2200 bikes.
(2) Price of material will rise by $30 \%$ on the previous year's level.
(3) Wage rates will rise by $50 \%$.
(4) Manufacturing cost will rise by $25 \%$.
(5) A bonus of $1 / 6^{\text {th }}$ of salary is expected to be paid to office staff.
(6) Selling cost and other expenses will rise in proportion to the cost of materials.

Prepare a Statement of Cost to show a profit of $10 \%$ on selling price.
(B) Discuss the difference between :
(1) Cost Accounting and Management Accounting.
(2) Job Costing and Process Costing.
2. (A) A product passes through three processes $\mathrm{A}, \mathrm{B}$ and C . The details of expenses incurred on the three processes during the year 2014 were as under :

| Particulars | A | B | C |
| :--- | ---: | ---: | ---: |
| Units introduced | $1,00,000$ | - | - |
| Materials (₹) | 50,000 | 75,000 | 25,000 |
| Labour (₹) | $1,50,000$ | $4,00,000$ | $3,25,000$ |
| Direct expenses (₹) | 30,000 | 90,750 | $1,36,000$ |
| Selling price per unit of output | 600 | 825 | 1,250 |

Management expenses and selling expenses of ₹ $4,00,000$ and $₹ 2,50,000$ respectively are not allocated to process accounts.

Normal loss of the three processes, calculated on the input of every process was : Process A-5\%, B-15\% and C-20\%. The loss of Process A was sold at ₹ 2 per unit, that of $B$ at ₹ 5 per unit and process $C$ at $₹ 10$ per unit.

Actual output in units was; Process A: 46500, Process B: 27000, Process C: 10500. Two third of the output of Process A and one half of the output of Process B was passed on to the next process and balance was sold. The entire output of process C was sold. Prepare Three Process Accounts and Profit and Loss Account.
(B) From the following data relating to three different vehicle; compute the cost per running kilometer :

|  | Vehicle - 1 | Vehicle - 2 | Vehicle - 3 |
| :--- | :--- | :--- | :--- |
| Life of vehicle | 1000000 kms | 800000 kms |  |
|  | 15000 |  | 18000 |
| Cost of vehicle | 1000000 | 750000 | 1500000 |
| Annual license fees | 7500 | 7500 | 7500 |
| Insurance p.a. | 2500 | 2000 | 2600 |
| Shade Rent p.m. | 800 | 800 | 800 |
| Supervision charges p.a. | 12000 | 12000 | 12000 |
| Driver's salary per hour | 12 | 12 | 12 |
| Kilometers run per hour | 20 | 15 | 24 |
| Petrol cost per litre | 60 | 60 | 60 |
| Repairs and maintenance per km. | 1.65 | 1.85 | 2.0 |
| Tyre maintenance per km. | 1 | 1.2 | 0.90 |
| Interest on cost of vehicle | $5 \%$ | $5 \%$ | $5 \%$ |
| The vehicle runs 20 kilometers per |  |  |  |

3. (A) Answer the following :
(1) Define Break even point. What are the assumptions in break even analysis?
(2) Explain briefly three specific decision making areas where the principles of marginal costing could be applied.

## OR

(1) Explain the meaning of Marginal Costing, Differential Costing and Relevant costing. Also point out their difference.
(2) The following information is given :

Output in units 1125000 , Fixed cost ₹ 1687500 , variable cost per unit ₹ 3 and selling price per unit ₹ 7.5 .
Compute :
(1) Break even point
(2) $\mathrm{P} / \mathrm{V}$ ratio
(3) Sales needed for a profit of ₹ $13,50,000$
(4) Profit, if $9,00,000$ units are sold at $₹ 15$ per unit.
(B) Following information has been made available from the cost record of united automobiles Ltd. Manufacturing two spare parts :
Material for $\mathrm{A} ₹ 80$ per unit.
Material for B ₹ 60 per unit.
Wages - A 24 hours at ₹ 2.5 per hour
Wages - B 16 hours at $₹ 2.5$ per hour
Variable overheads for A and B - 150 \% of Wages.
Fixed overheads ₹ 7,500 .
Selling price A-250, B-200.
The directors want to acquire the desirability of adopting any one of the following alternative sales mixes in budget for the next period :
250 units of $A$ and 250 units of B
400 units of A only
400 units of A and 100 units of B
150 units of A and 350 units of B
State which of the alternative sales mix you would recommend to management.
4. Attempt any two from the following :
(A) From the following compute Sales Variances :

| Product | Standard |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Selling price | Quantity | Selling price |
| A | 6000 | 6 | 5250 | 7 |
| B | 5000 | 15 | 4750 | 16 |
| C | 4500 | 20 | 5500 | 18 |
| D | 7000 | 25 | 8000 | 24 |

(B) Prepare cash budget for three months ended $31^{\text {st }}$ May 2015 based on the following information for Carnival Ltd. :

| Months | Total <br> Sales | Material | Wages | Factory <br> overheads | Selling and <br> Distribution <br> overheads |
| :--- | :---: | ---: | :---: | :---: | :---: |
| January | 100,000 | 100,000 | 20,000 | 16,000 | 4000 |
| February | 110,000 | 70,000 | 22,000 | 16,500 | 4500 |
| March | 140,000 | 70,000 | 23,000 | 17,000 | 4500 |
| April | 180,000 | 110,000 | 23,000 | 17,500 | 5000 |
| May | 150,000 | 100,000 | 20,000 | 16,000 | 4500 |

## Additional information :

(1) Cash balance as on $1^{\text {st }}$ March, 2015 ₹ 75,000
(2) Cash sales are $50 \%$ of total sales.
(3) Sales commission at $5 \%$ on total sales is to be paid within a month following actual sales.
(4) A new machine is to be installed on $1^{\text {st }}$ April at ₹ $1,50,000$ on hire purchase agreement. The amount to be repaid in three equal installments along with $12 \%$ interest per annum on outstanding amount, the installments are to be paid at the end of April, May and June.
(5) Time Credit sales 1 month, Credit purchase 2 months, Overheads 1 month and wages $1 / 2$ month.
(6) ₹ 50,000 being the amount of $2^{\text {nd }}$ call and share premium amounting to $₹ 10,000$ will be received in the month of March.
(C) The following is the composition of gang of workers in a factory during a particular month, in one of the production departments. The standard composition of workers and wage rate were as below :
20 skilled workers at a standard rate of ₹ 200 per hour each.
20 semiskilled workers at a standard rate of ₹ 120 per hour each.
40 unskilled workers at a standard rate of $₹ 80$ per hour each.
The standard output of the gang was 4 unit per hour of a product.
During the month actual composition of gang was 20 skilled, 30 Semi-skilled and 50 unskilled workers at ₹ 200 , ₹ 140 and ₹ 100 per hour each respectively.
The gang was engaged for 200 hours during the month, which includes 12 hours when no production was possible due to machine break down. Actual output is 810 units of the product during the month.
Compute all Labour Variances.
5. Write a note on any four of the following :
(1) Distinguish between Activity based costing and traditional costing system.
(2) Life cycle costing.
(3) Target costing.
(4) Throughput costing.
(5) Zero based budgeting.

