

Internal Assessment Test - I

| | | | | | | | | |
|---------------|---------------------------|-----------|---------|------------|----|------|-------|---------|
| Sub: | Strategic Cost Management | | | | | | Code: | |
| Date: | 04.03.2024 | Duration: | 90 mts. | Max Marks: | 50 | Sem: | III | Branch: |
| SET- I | | | | | | | | |

Part A - Answer Any Two Full Questions (2* 20 = 40 marks)

1 (a) Why does profit differ under marginal and absorption costing?

The difference between the profit figures calculated under absorption and marginal costing principles is caused by the treatment of fixed production overheads. In marginal costing the full amount of fixed production overheads is written off in the period that it occurs.

(b) Explain Normal Loss, Abnormal Loss and Abnormal Gain.

All those losses which are not normal will be the abnormal loss. For treating the abnormal loss in the process account, we need to calculate the value of abnormal loss. $\text{Abnormal loss} = \left\{ \frac{\text{Normal cost at normal production}}{\text{Total output} - \text{normal loss units}} \right\} \times \text{Units of abnormal loss}$. **Abnormal Gain:** If the actual production units are more than the anticipated units after deducting the normal loss, the difference between the two is known as abnormal gain.

(c) Following information is given:

Sales Rs.2,00,000, Variable cost Rs.1,20,000, Fixed cost Rs.30,000

Calculate : (a) Break even point

(b) new break even point if selling price is reduced by 10%

(c) new break even point if variable cost is increased by 10%

(d) new break even point if fixed cost increases by 10%

Solution: (i) $\text{PV Ratio} = \frac{200000 - 120000}{200000} = 40\%$

(a) $\text{New PV Ratio} = \frac{180000 - 120000}{180000} = 1/3$,

$\text{New BEP} = \text{FC} / \text{PV Ratio} = 30000 / 1/3 = 90,000$

(b) $\text{New PV Ratio} = \frac{200000 - 132000}{200000} = 34\%$

$\text{New BEP} = 30000 / 34\% = 88235$

(c) $\text{New FC} = 33000$, $\text{New BEP} = 33000 / 40\% = \text{Rs.}82,500$

2 (a) Recall margin of safety.

Margin of safety measures the difference between real and break-even sales. Break-even point measures the volume of sales where all costs are covered.

(b) From the following particulars, prepare Process X account showing the cost per tonne of output:

| | |
|----------------------------|-------|
| Materials in tonnes | 1000 |
| Manufacturing expenses | 10000 |
| Cost of material per tonne | 125 |
| Wages | 26000 |
| Output in tonnes | 830 |

It is ascertained that in the process, normally 5% of the total weight is lost and 10% is scrap which realizes Rs.80 per tonne. There was no stock or work in process.

Dr Process A/c Cr

| | | | | | | | |
|---------------|------|------|--------|------------------------------------|-----|------|--------|
| Material | 1000 | 125 | 125000 | Loss 5% | 50 | - | - |
| Wages | | | 26000 | Normal loss | 100 | 80 | 8000 |
| Mfg. expenses | | | 10000 | Abnormal loss | 20 | 180 | 3600 |
| | | | | Output transferred to next process | 830 | 180 | 149400 |
| | | 1000 | 161000 | | | 1000 | 161000 |

The following details are forecasted by a company for the purpose of effective cash utilization and management:

Estimated sales and cost in Rs.

| Year and month 2021 | Sales | Material | Wages | Overhead |
|---------------------|----------|----------|----------|----------|
| (c) April | 4,20,000 | 2,00,000 | 1,60,000 | 45,000 |
| May | 4,50,000 | 2,10,000 | 1,60,000 | 40,000 |
| June | 5,00,000 | 2,60,000 | 1,65,000 | 38,000 |
| July | 4,90,000 | 2,82,000 | 1,65,000 | 38,000 |
| Aug | 5,40,000 | 2,80,000 | 1,65,000 | 60,800 |
| Sep | 6,10,000 | 3,10,000 | 1,70,000 | 52,000 |

(ii) credit items:

- Sales 20% of sales on cash basis, 50% of the credit sales are collected net month and balance in the following month
- Credit allowed by suppliers is 2 months
- Delay in payment of wages is ½ month and of overhead is 1 month

(iii) interest on 12% debentures of Rs.5,00,000 is paid half yearly in June and December.

(iv) dividend on investments amounting to Rs.25,000 is expected to be received in June 2021

(v) a new machinery will be installed in June 2021 at a cost of Rs.4,00,000 which is payable in 20 instalments from July 2021 onwards

(vi) advance income tax to be paid in August 2021 Rs.15,000

(vii) cash balance on 1st June 2021 is expected to be Rs.45,000 and the company wants to keep it at the end of every month around this figure. The excess cash is being put in a fixed deposit.

Prepare a monthly cash budget for four months starting from June 2021.

| | cash | | budget | |
|------------------------------|-----------------|-----------------|-----------------|-----------------|
| | June | July | Aug | sep |
| 0/bal | 45000 | 45500 | 45500 | 45000 |
| <u>Receipts</u> | | | | |
| cash sales | 100000 | 98000 | 108000 | 122000 |
| collections from past due | 248000 | 280000 | 296000 | 412000 |
| Dividend | 25000 | - | - | - |
| <u>Total (A)</u> | <u>518000</u> | <u>523500</u> | <u>549500</u> | <u>579000</u> |
| <u>Payments</u> | | | | |
| creditors | 200000 | 210000 | 260000 | 282000 |
| wages (1) wtd overhead | 162500 40000 | 165000 28000 | 165000 37500 | 167500 60800 |
| Instal mts for machine | - | 20000 | 20000 | 20000 |
| It. on decess | 20000 | - | - | - |
| Advance tax | - | - | 15000 | - |
| <u>Total (B)</u> | <u>422500</u> | <u>433000</u> | <u>497500</u> | <u>570000</u> |
| Surplus (A-B) | 85500 | 90500 | 52000 | 48700 |
| F.D. | 40000 | 45000 | 7000 | 3000 |
| closing balance | 45500 | 45500 | 45000 | 45700 |

WN 1
wages June 80000 + 82500 = 162500 etc, collections

| WN 2 | Total sales | cash | credit | June | July | Aug | sep |
|-------|-------------|------------------------|--------|---------------|---------------|---------------|---------------|
| April | 420000 | 84000 84000 | 336000 | 168000 | - | - | - |
| May | 450000 | 90000 | 360000 | 180000 | 180000 | - | - |
| June | 500000 | 100000 | 400000 | - | 200000 | 200000 | - |
| July | 490000 | 98000 | 392000 | - | - | 196000 | 196000 |
| Aug | 520000 | 108000 | 412000 | - | - | - | 216000 |
| sep | 610000 | 122000 | 488000 | - | - | - | - |
| | | | | <u>248000</u> | <u>380000</u> | <u>396000</u> | <u>412000</u> |

3 (a) Illustrate cost audit and management audit.

A cost audit is a thorough check and examination of the cost statements, data, records, and systems to make sure they are correct. Management Audit means that the whole company is looked at to evaluate its policies, plans, and management structure to see how well they work.

(b) Discuss the types of responsibility centres.

- **Cost Centre-** A Cost Centre is a department or a unit which supervises, allocates, segregates, and eliminates all sorts of the cost related to a company. The cost center prime work is to check the cost of an organization and to limit the unwanted expenditure the company may acquire. The cost can be the determination of both person and location. In multinational companies, the cost center is authorized to decrease and manage the cost.
- **Revenue Centre-** This center is accountable for initiating and monitoring revenue. The management does not have any control over the cost or investment but can monitor a few of the expenses in the marketing section. The production of the revenue center is calculated by analyzing the budgeted revenue with actual revenue and actual marketing expenses with budgeted marketing expenses.
- **Profit Centre-** It is a division or department of a company which operates for the calculation of profit. In an organization, different profit centers are managed by the managers, who identifies profits on the basis of costs and incomes. Profit Centre is accountable for all the actions associated with the sales of goods and production.
- **Investment Centre-** This center is responsible for both investments and revenue. The investment manager can control expenses, income, the fund invested in assets, etc. He also has the authority to form a credit policy, which has an immediate impact on debt collection.

(c) The standard material input required for 1000 kgs. Of a finished product are given below:

| Material | Quantity | Standard rate per kgs. |
|-----------------|----------|------------------------|
| P | 450 | 20 |
| Q | 400 | 40 |
| R | 250 | 60 |
| | 1100 | |
| Standard Loss | 100 | |
| Standard output | 1000 | |

Actual production in a period was 20,000 kgs. Of finished product for which the actual quantities of material used and the prices paid thereof were as under:

| Material | Quantity | Purchase rate per kgs. |
|----------|----------|------------------------|
| P | 10000 | 19 |
| Q | 8,500 | 42 |
| R | 4,500 | 65 |

Calculate: (i) MCV (ii) MPV (iii) MUV (iv) MMV (v) MYV.

- MCV : $SC \text{ for actual output} - \text{actual cost} = 800000 - 839500 = 39,500 \text{ (A)}$
- MPV: $P = 10000(F), Q = 17000 \text{ (A)}, R = 22500 \text{ (A)} = 29,500 \text{ (A)}$
- MUV: $P = 20000(A), Q = 20000 \text{ (A)}, R = 30000 \text{ (F)} = 10,000 \text{ (F)}$
- MMV: $P = 11818(A), Q = 5455 \text{ (A)}, R = 43,636 \text{ (F)} = 26,363 \text{ (F)}$
- MYV: $(AY-SY)SR = 36,363 \text{ (A)}$
- Verification: $MCV = MPV + MUV = 39,500(A) = 29,500(A) + 10,000 \text{ (A)}$
- $MCV = MPV + MMV + MUV = 39,500 \text{ (A)} = 29,500(A) + 26,363(F) + 36,363(A)$

4

| Particulars | Product A | Product B |
|------------------|-----------|-----------|
| Direct materials | 24 | 14 |

| | | |
|----------------------------------|---------|----------|
| Direct labor @Rs.3 per hour | 6 | 9 |
| Variable overhead @Rs.4 per hour | 8 | 12 |
| Selling price | 100 | 110 |
| Standard time | 2 hours | 3 hours. |

As a management accountant, give your suggestion to management as to which product you would recommend to manufacture when

- (a) Labour time is the key factor
(b) Sales value is the key factor

| Particulars | Product A | Product B |
|--------------------|-----------|-----------|
| SP | 100 | 110 |
| Less: D/M | 24 | 14 |
| D/L | 6 | 9 |
| Variable overheads | 8 | 12 |
| Variable cost | 38 | 35 |
| S-V | 62 | 75 |

(a) Contribution per labour hour = $62/2 \text{ hrs.} = 31$

$75/3 = 25$

(b) Contribution per rupee of sales value = $62/100 = 0.62p$

$75/110 = 0.68p$

Conclusion:

Product A is recommended when labour time is key factor

Product B is recommended when sales value is the key factor

B is more profitable when sales quantity is key factor

| Course Outcomes | | PO1 | PO2 | PO3 | PO4 | PO5 | PSO1 | PSO2 | PSO3 | PSO4 |
|-----------------|--|-----|--------------|------|-------------------------------|-----|------|------|-------|---------------|
| CO1 | Understand the goals and strategies of business units. | | | | | | | | | |
| CO2 | Determine standard costing and variance analysis cost control in Business decision making, | | | 3(c) | | | | 3(c) | | |
| CO3 | Applications of Management accounting and control systems in Corporate. | | | | 1(b) | | | | 2(c)* | |
| CO4 | Critically evaluate all traditional and non-traditional costing methods such as absorption costing; marginal costing and activity-based costing. | | 1(a) 1(c) | | 2(a) 2(b) 3(a) 3(b)* | | | | | 4(a) 4(b)* |

| Cognitive level | KEYWORDS |
|-----------------|--|
| L1 - Remember | list, define, tell, describe, recite, recall, identify, show, label, tabulate, quote, name, who, when, where, etc. |
| L2 - Understand | describe, explain, paraphrase, restate, associate, contrast, summarize, differentiate interpret, discuss |
| L3 - Apply | calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, experiment, show, examine, modify |
| L4 - Analyze | classify, outline, break down, categorize, analyze, diagram, illustrate, infer, select |
| L5 - Evaluate | asses, decide, choose, rank, grade, test, measure, defend, recommend, convince, select, judge, support, conclude, argue, justify, compare, summarize, evaluate |

PO1–Theoretical Knowledge; PO2–Foster Analytical and Critical Thinking Abilities for data based decision making; PO3– Develop Value Based Leadership; PO4 –Ability to Understand and communicate various business aspects to global; PO5 – Ability to lead themselves and others in the achievement of organizational goals contributing effectively to a team environment;
PSO1- Comprehend Contemporary features of Business Management Science and its administration
PSO2- Analyze and interpret the dynamic situations for making Business Management strategies
PSO3- Handle responsibility with the ethical values for all actions undertaken by them
PSO4- Adapt and focus on achieving the organizational goal and objectives with complete zeal and commitment.

CI**CCI****HOD**