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|  | **Prime College**  Khusibun, Kathmandu Pre-board Examinations (2081) |

**Subject: ACC 202: Cost and Management Accounting Time: 3 hrs.**

**Level: BIM 4th Semester FM: 100, PM: 50**

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| ***Group – A: Brief Answer Questions (10x2=20)*** |

1. Mention any two limitations in the application of cost accounting.
2. What is perpetual inventory system?
3. Write any two features of semi-variable cost.
4. Distinguish between product cost and period cost.
5. Why Gantt’s Task and Bonus Plan is considered as “Progressive wage system”?
6. Determine the earnings of a worker under Rowan Premium Plan for 190 actual labour hours worked in a month for the production of 7,000 units @ Rs.45 per labour hour by taking the reference of one standard labour hour needed for the production of 35 units.
7. Following information are provided to you:

Estimated annual demand 9,000 units @ Rs.20 per unit

Cost to process a purchase order Rs.40

Holding cost @ 10% per annum of inventory value

Lead time is 8 working days

***Required:*** Economic order quantity and total cost at that level.

1. Calculate **Re-order Quantity** from the following information provided:

Maximum stock level = 10,000 units

Maximum consumption = 800 units

Average consumption = 700 units

Delivery period = 10 to 12 days

Re-order level = 12,000 units

1. Shree Ganesh Company Ltd. at present is working at its normal capacity of 5,000 units. The total cost per unit is Rs.100. The annual fixed costs are Rs.100,000.

***Required:*** Total cost at 70 % of the normal capacity.

1. The flexible budgeting data regarding a manufacturing company are presented below:

Flexible Budgeting Formula = Fixed cost + Unit variable cost x Units

= Rs.100,000 + Rs.5 per hour x Hours

**Other data:**

Normal capacity = 20,000 hours

Standard time per unit = 4 hours

Units produced = 10,000 units

Labour hours worked and paid = 41,000 hours

Actual Overhead cost incurred = Rs.230,000

***Required:*** Overhead capacity variance.

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| ***Group – B: Short Answer Questions (Attempt any SIX) (6 x5 = 30)*** |

1. What is cost-volume-profit analysis? Mention its assumptions.
2. Define flexible budget. How is flexible budget useful to the management?
3. “ABC system of stock control enables the management to exercise a selective control of inventory and concentrate on more important items.” Explain briefly.
4. Ganapati Co. Ltd. provided the following information from the fiscal year 2021:

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| --- | --- |
| Production and sales units | 80,000 |
| Selling price per unit (for regular sales) | Rs.15 |
| **Per unit cost of sales:**  Direct material  Direct labour cost (1 DLH)  Manufacturing overhead cost (0.25 MH)  Variable selling & distribution cost | Rs.3  Rs.4  Rs.3  Rs.2 |

Company has expected to sell same units of output during coming year too. One of the complete new customers has ordered for 25,000 units of output at a reduced price of Rs.10 to be dispatched from January 2022. However, special order unit requires a special test on the product. This will require additional variable production cost of Rs.2 per unit.

***Additional information:***

* Company has normal capacity of 25,000 MH. The budgeted fixed manufacturing cost at this capacity volume will be Rs.200,000
* If the offer is accepted, additional setup cost Rs.10,000 is needed.

***Required:*** **a)** Should the company accept the offer?

**b)** Opportunity cost of the offer. **(4+1=5)**

1. The following information of a manufacturing company is provided:

**Standard: Actual:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Labourers** | **Number** | **Rate per hour** | **Number** | **Rate per hour** |
| Men  Women  Boys | 4  7  9 | Rs.6  Rs.4  Rs.2 | 5  5  10 | Rs.6  Rs.5  Rs.1.8 |

Actual hours needed to work and paid……..40 hours in a week

Standard output per gang hour…………….10 units

Actual output realized………………………..430 units

***Required:*** Different Labour Variances. **(5)**

1. The sales revenue and profit of Shiva Food industries for two years are as follows:

|  |  |  |
| --- | --- | --- |
| **Year** | **Sales Revenue (Rs.)** | **Profit (Rs.)** |
| 2078 | 500,000 | 100,000 |
| 2079 | 300,000 | 50,000 |

***Required:* (i)** Profit Volume ratio

**(ii)** Fixed Cost

**(iii)** Break-even Point in Rs.

**(iv)** Sales revenue to earn a desired profit after tax of Rs.15,000

(Tax rate 25%)

**(v)** Margin of safety ratio if actual sales is Rs.800,000. **(1x5=5)**

1. A taxi car owner supplies the following particulars in respect of a taxi car:

|  |  |
| --- | --- |
| Cost of a taxi car  Driver’s salary per month  Garage rent per month  Insurance premium per year  Road tax and repair per year | Rs.800,000  Rs.17,000  Rs.12,000  Rs.24,000  Rs.32,000 |

The life of a taxi is 200,000 km and at the end of which it is estimated to generate a salvage value of Rs.100,000. The taxi runs on an average of 7,000 km per month of which 20%, it runs empty. Petrol consumption is 20 km per litre. The cost of petrol is Rs.173 per litre. Mobil and other sundry expenses amount to Rs.20 per 100 km.

***Required:*****(i)** Operating cost statement showing standing and running charges

**(ii)** Effective cost of running taxi per km. **(4+1=5)**

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| ***Group – C: Long Answer Questions (Attempt any three): (3 x10 = 30)*** |

1. Define management accounting? Explain the reasons for increased popularity of management accounting in modern business world. **(10)**
2. “The main objective of inventory management is to supply all kinds of inventory regularly so that there is no shortage of materials and the production may not have to be stopped.” Discuss. **(10)**
3. Shree Krishna Manufacturing Co. with normal capacity of 35,000 units furnished the following information related to two years:

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Year 1** | **Year 2** |
| Production units | 40,000 | 35,000 |
| Sales units | 37,000 | 31,000 |

Fixed factory overhead Rs.140,000 Direct material cost Rs.7 per unit

Variable factory overhead Rs.5 per unit Direct labour cost Rs.4 per unit

Fixed administrative overhead Rs.90,000

Variable administrative overhead Rs.2 per unit

Variable selling expenses 5% of sales

Selling price per unit Rs.45

***Required:***

**a)** Income statement under absorption costing for Year 2.

**b)** Income statement under variable costing for Year 2.

**c)** Reconciliation Statement. **(4+4+2=10)**

1. Vinayak Industries is running with three production departments P, Q, R and two service departments Y & Z. Overheads for a period are given below:

|  |  |  |  |
| --- | --- | --- | --- |
| Electric light  Salary  Factory rent | Rs.12,800  Rs.68,000  Rs.46,000 | Power  Depreciation  General overhead | Rs.43,650  Rs.52,000  Rs.34,000 |

The operating conditions of the department are given below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **Production Department** | | | **Service Department** | |
| **P** | **Q** | **R** | **Y** | **Z** |
| Direct material cost (Rs.)  Direct wages (Rs.)…...  Machine hours……….  Light points…………...  HP ratio……………….  Area (sq.ft.)…………..  Value of plant (in lakh)  Service rendered by service department……. | 60,000  30,000  3,000  10  20  400  6  40% | 40,000  20,000  2,000  8  10  300  4  30% | 30,000  15,000  2,000  6  6  200  3  30% | 20,000  10,000  1,000  4  3  100  -  - | 20,000  10,000  1,000  4  2  150  -  - |

***Required:* (a)** Overhead cost for each production department.

**(b)** Machine hour rate of production department. **(8+2=10)**

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| ***Group – D (Comprehensive Answer/Case/Situation Analysis Questions): (20)*** |

1. Shree Ganesh Manufacturing Co. is planning to prepare functional budget for their decision purpose from the following information:

Total sales for six months are 300,000 units, which are apportioned as:

January 20%, February 15%, March 10%, April 10%, May 20%, June 10% and July 15% respectively. Selling price per unit will be Rs.25. Out of total sales, 40% are in cash and rest on credit.

Each unit of finished product will need 3 kg of raw material at a cost of Rs.15 and 2 direct labour hours @ Rs.4 per hour.

*Other expenses are:*

* Variable manufacturing cost will be Rs.5 per unit and projected fixed manufacturing cost for the six months period is Rs.120,000.
* Variable selling expenses (excluding depreciation of office equipment of Rs.6,000 per month) will be 20% of sales revenue.

Company’s inventory policy requires keeping ending inventory of finished goods as 30% of following month’s sales need and raw material inventory as 40% of following month’s consumption need.

***Required:*** For the first four months, prepare:

**(i)** Sales budget

**(ii)** Production budget

**(iii)** Material purchase budget

**(iv)** Labour cost budget

**(v)** Manufacturing overhead budget

**(vi)** Cost of goods sold budget

**(vii)** Selling, distribution and administrative expenses budget

**(viii)** Explain why organizations need to prepare functional budget.

**(2+3+4+2+2+3+2+2=20)**

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