**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**SECOND TRIMESTER (Batch 2019-21)**

**END TERM EXAMINATION, DECEMBER-2019**

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| Course Name | **Management Accounting** | Course Code |  |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

Exam instructions, Professor may wish to include.

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**Q1**. ABC ltd manufactures televisions that are designed for use in sports bars. The Company has budgeted manufacturing overhead costs for the year as follows:

|  |  |
| --- | --- |
| Type of Cost | Cost Pools |
| Electric Power | Rs.12,50,00,000 |
| Inspection | Rs.7,50,00,000 |
| Total MOH | Rs.20,00,00,000 |

Under a traditional cost system, the company estimated the budgeted capacity for machine hours to be 40,000 hours. The company is considering changing to an activity based cost system. As a part of its consideration of the new costing system, the company developed the following estimates:

|  |  |
| --- | --- |
| Type of Cost | Activity- Based Cost Drivers |
| Electric Power | 50,000 kilowatt hours (KWH) |
| Inspection | 10,000 inspections (INSP) |

The following information related to the production of 2000 units of Model #1003 was accumulated

|  |  |
| --- | --- |
| Direct Materials Cost | Rs.25,00,000 |
| Direct Labour Costs | Rs.37,50,000 |
| Machine hours | 10000 |
| Direct Labour Hour | 5000 |
| Electric Power- Kilowatt hours | 20000 |
| No. of Inspections | 1000 |

Based on the above data, you are required to,

1. Calculate the total cost for the Model #1003 using traditional method of absorbing all manufacturing overheads on the basis of machine hours.
2. Calculate the total cost for the Model #1003 using activity based costing principles.
3. If ABC were setting a selling price based on 20 percent markup, how would profit be affected if the company did not change to an ABC system?

**[Marks-12]**

**Q2**. ABC Manufacturing Company began operations on January 1. During the year, it started and completed 1,800 units of product. The company incurred the following costs.

* + Raw materials purchased and used—Rs. 3,14,000
  + Wages of production workers—Rs. 3,61,000
  + Salaries of administrative and sales personnel—Rs.1,94,500
  + Depreciation on manufacturing equipment—Rs.5,67,000
  + Depreciation on administrative equipment—Rs.1,83,000

 ABC sold 1,020 units of product.

Required:

1. Determine the total product cost for the year.
2. Determine the total cost of the ending inventory.
3. Determine the total of cost of goods sold.
4. Determine the total period cost for the year.
5. Based on the information provided, explain the statement “cost can be assets or expenses”?

**[Marks-8]**

**Q3**. Santiago Company is considering the addition of a new product to its cosmetics line. The company has three distinctly different options: a skin cream, a bath oil, or a hair coloring gel. Relevant information and budgeted annual income statements for each of the products follow.



**Required:**

1. Determine the margin of safety as a percentage for each product.
2. Prepare revised income statements for each product, assuming a 20 percent increase in the budgeted sales volume.
3. For each product, determine the percentage change in net income that results from the 20 percent increase in sales. Which product has the highest operating leverage?
4. Assuming that management is pessimistic and risk averse, which product should the company add to its cosmetic line?
5. Assuming that management is optimistic and risk aggressive, which product should the company add to its cosmetics line?

**[Marks-10]**

**Q4**. Ellis Quilting Company makes blankets that it markets through a variety of department stores. It makes the blankets in batches of 1,000 units. Ellis made 20,000 blankets during the prior accounting period. Its manufacturing plant has the capacity to produce 30000 blankets. The cost of producing the blankets is summarized here.

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| Variable Costs (that vary with units produced) |  |  |  |
| Materials cost (Rs.250 per unit × 20,000) | Rs. | 5,000,000 |  |
| Labor cost (Rs.220 per unit × 20,000) |  | 4,400,000 |  |
| Manufacturing supplies (Rs.20 × 20,000) |  | 400,000 |  |
| Variable Cost ( that vary with the number of batches) |  |  |  |
| Batch-level costs (20 batches at Rs.4,000 per batch) |  | 80,000 |  |
| Product-level costs (Fixed) |  | 160,000 |  |
| Facility-level costs (Fixed) |  | 290,000 |  |
|  |  |  |  |
| Total costs | Rs. | 10,330,000 |  |
|  |  |  |  |
| Cost per unit = Rs.10,330,000 ÷ 20,000 = Rs.516.5 | | |

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| **Required:** |

A. Kent Motels has offered to buy a batch of 500 blankets for Rs.496 each. Ellis normal selling price is Rs.550 per unit, calculate the relevant cost per unit for the special order. Should Ellis accept the special order? Why? Explain briefly.

B. Kent offered to buy a batch of 1,000 blankets for Rs.496 per unit, calculate the relevant cost per unit for the special order. Should Ellis accept the special order? Why? Explain briefly.

**[Marks-15]**

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| **Q5**. Tod hunter Publications established the following standard price and costs for a hardcover picture book that the company produces. |

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| --- | --- | --- | --- |
|  | | | |
| Standard price and variable costs |  |  |  |
| Sales price | Rs. | 36.00 |  |
| Materials cost |  | 9.00 |  |
| Labor cost |  | 4.50 |  |
| Overhead cost |  | 6.30 |  |
| Selling, general, and administrative costs |  | 7.20 |  |
| Planned fixed costs |  |  |  |
| Manufacturing overhead | Rs. | 135,000 |  |
| Selling, general, and administrative |  | 54,000 |  |
|  | | | |

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| Assume that Tod hunter actually produced and sold 31,000 books. The actual sales price and costs incurred follow. |

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| --- | --- | --- | --- |
|  | | | |
| Actual price and variable costs |  |  |  |
| Sales price | Rs. | 35.00 |  |
| Materials cost |  | 9.20 |  |
| Labor cost |  | 4.40 |  |
| Overhead cost |  | 6.35 |  |
| Selling, general, and administrative costs |  | 7.00 |  |
| Actual fixed costs |  |  |  |
| Manufacturing overhead |  | 120,000 |  |
| Selling, general, and administrative |  | 60,000 |  |
|  | | | |

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| **Required:** |

1. Determine the flexible budget variances.
2. Indicate whether each variance is favorable or unfavorable.
3. Identify the management position responsible for each variance. Explain what could have caused the variance.

**[Marks-15]**