

PGDM IB, Batch 2017-19
Managerial Accounting
IB-202

Trimester – II, End-Term Examination: December 2017

Time allowed: 2 Hrs 30 Min
Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously.

Sec A 15 Marks: Attempt 3 out of 5 questions, all questions carry five marks

QA1. How does management accountant help firms make strategic decisions?

QA2. M.K. Ltd. manufactures and sells a single product X whose selling price is Rs 40 per unit and the variable cost is Rs 16 per unit.

- (i) If the Fixed Costs for this year are Rs 4,80,000 and the annual sales are at 60% margin of safety, calculate the rate of net return on sales, assuming an income tax level of 40%
- (ii) For the next year, it is proposed to add another product line Y whose selling price would be Rs 50 per unit and the variable cost Rs 10 per unit. The total fixed costs are estimated at Rs 6,66,600. The sales mix of X : Y would be 7 : 3. At what level of sales next year, would M.K. Ltd. break even? Give separately for both X and Y the breakeven sales in rupee and quantities.

QA3. Carbon Composite Poles manufactures fishing poles that have a price of \$125.00. It has costs of \$90. A competitor is introducing a new fishing pole that will sell for \$110.00. Management believes it must lower the price to \$110.00 to compete in the highly cost-conscious fishing pole market. Marketing department believes that the new price will allow Carbon to maintain the current sales level of 200,000 poles per year.

Required:

- a. What is the target cost for the new price if target operating income is 25% of sales?
- b. What is the change in operating income for the year if only the selling price is changed and costs remain the same?
- c. What is the target cost per unit if the selling price is reduced to \$110.00 and the company wants to maintain its same income level?

QA4. Why are sunk costs not relevant in decision making, explain with appropriate example?

QA5. Explain the essential features of life cycle costing?

Sec B 20 Marks: Attempt 2 out of 3 questions, all questions carry ten marks

QB1. The GE India Ltd. has a machining facility specialising in jobs for the aircraft components market. The previous job-costing system had two direct-cost categories (direct materials and direct labour) and a single indirect-cost pool (manufacturing overhead, allocated using direct labour hours). The indirect cost allocation rate of the previous system for 2007 would have been Rs115 per direct labour hour.

Recently, GE appointed Smart Solutions Ltd to assist the company to refine its job-costing system. A team with members from product design, manufacturing, and accounting as well as the business consultants from Smart Solutions Ltd used an activity-based costing approach to refine its job-costing system. The two direct-cost categories were retained. The team decided to place the single indirect-cost pool with five indirect-cost pools. The cost pools represent five activity areas at the facility, each with its own supervisor and budget responsibility. Pertinent data are as follows:

Activity Area	Cost-Allocation Base	Cost-Allocation Rate
Material handling	Parts	Rs0.40
Lathe work	Turns	Rs0.20
Milling	Machine hours	Rs20.00
Grinding	Parts	Rs0.80
Testing	Units tested	Rs15.00

Information-gathering technology has advanced to the point where the data necessary for budgeting in these five activity areas are collected automatically.

Two representative jobs processed under the new system at the facility in the most recent period has the following characteristics:

	Job 410	Job 610
Direct material costs per job	Rs9,700	Rs59,900
Direct labour costs per job	Rs750	Rs11,250
Number of direct labour hours per job	25	375
Parts per job	500	2,000
Turns per job	20,000	60,000
Machine hours per job	150	1,050
Units per job (all units are tested)	10	200

Required:

- Produce a report comparing the unit manufacturing costs of each job under the two job costing systems. (5 marks)
- Explain why the unit manufacturing costs under these two costing systems differ, and why might these differences be important to GE India Corporation. (3 marks)
- How might GE Corporation use the information generated from its activity-based costing system to manage its business better? (2 marks)

B2. BS Limited Manufactures one standard product and operates a system of variance accounting using a fixed budget. As assistant management accountant, you are responsible for preparing the monthly operating statements. Data from the budget, the standard product cost and actual data form the month ended 31 October are given below.

Using the data given, you are required to prepare the operating statement for the month ended 31 October to show the budgeted profit; the variances for direct materials, direct wages, overhead and sales, each analysed into causes; and actual profit.

Budgeted and standard cost data:

Budgeted sales and production for the month: 10000 units

Standard cost for each unit of product:

Direct material: X: 10 kg at £1 per kg
Y: 5 kg at £5 per kg
Direct wages: 5 hours at £3 per hour
Fixed production overhead is absorbed at 200 per cent of direct wages

Budgeted sales price has been calculated to give a profit of 20 per cent of sales price.

Actual data for month ended 31 October:

Production: 9500 units sold at a price of 10 per cent higher than that budgeted

Direct materials consumed:

X: 96000 kg at £1.20 per kg
Y: 48000 kg at £4.70 per kg

Direct wages incurred 46000 hours at £3.20 per hour Fixed production overhead incurred £290000.

Calculate Material, labour, fixed overhead and Sales margin variances and write in brief the possible causes of these variances

QB3. What are the various measures for assessing the financial performance of divisions? Discuss about all the measures in detail and recommend one method on the basis of its advantages.

Sec C 15 Marks: Compulsory Case study

J. K. Wood Company is promoted by an entrepreneur. It manufactures and sells snowboards. In the summer of 2011 its accountant gathered the following data to prepare budgets for 2016:

Materials and labor requirements

Direct materials

Wood	5 board feet per snowboard
Fiberglass	6 yards per snowboard
Direct manufacturing labor	5 hours per snowboard

J.K.'s CEO expects to sell 1,000 snowboards during 2016 at an estimated retail price of Rs. 1,000 per board. Further, he expects 2016 beginning inventory of 100 boards and would like to end 2016 with 200 snowboards in stock.

Direct materials inventories

	Beginning Inventory 1/1/2016	Ending Inventory 12/31/2016
Wood	2,000	1,500
Fiberglass	1,000	2,000

Variable manufacturing overhead is allocated at the rate of Rs. 14 per direct manufacturing labour-hour. There are also Rs. 1,32,000 in fixed manufacturing overhead costs budgeted for 2016. J.K. combines both variable and fixed manufacturing overhead into a single rate based on direct manufacturing labour-hours. Variable marketing costs are allocated to the rate of Rs. 2,500 per sales visit. The marketing plan calls for 30 sales visits during 2016. Finally, there are Rs. 60,000 in fixed nonmanufacturing costs budgeted for 2016.

	2015 unit Price	2012 Unit Price
Wood	Rs. 56 per b.f.	60 per b.f.
Fiberglass	9.60 per yard	10 per yard
Direct Manufacturing labor	24.00 per hour	25.00 per hour

The inventoriable unit cost for ending finished goods inventory on December 31, 2015, is Rs. 647.60.

Required

1. Prepare the 2016 revenues budget (in Rupees) and production budget (in units) (1 mark)
2. Prepare the direct materials usage and purchases budgets.(2 marks)
3. Prepare a direct manufacturing labor budget. (1 mark)
4. Prepare a manufacturing overhead budget. (1 mark)
5. What is the budgeted manufacturing overhead rate and what is the budgeted manufacturing overhead cost per output unit? (1 mark)
6. Calculate the cost of a snowboard manufactured in 2016. (1 mark)
7. Prepare an ending inventory budget for both direct materials and finished goods. (2 marks)
8. Prepare a cost of goods sold budget. (3 marks)
9. Prepare the budget income statement for J.K for 2016. (3 marks)