

Jagan Institute of Management Studies
End-Term Examination, December 2017 – January 2018
Trimester II – PGDM 2017-19

Management Accounting
ET_PG_MA_2812

Time: 3 Hrs.

M. Marks: 70

INSTRUCTIONS: Attempt any FIVE questions including Q1 & Q6 which are compulsory.

- Q 1** Attempt any **SIX** of the following:
- a) Explain the concept of P/V ratio and Margin of safety. How the P/V ratio may be improved?
 - b) What is cost-benefit analysis? Explain the meaning of the terms ‘Costs’ and ‘Benefits’ with examples.
 - c) What is shut down point? What non-cost factors will you consider before taking such a decision?
 - d) Explain materials cost variance. What may be the possible causes for its occurrence?
 - e) What is ‘cost plus basis’ strategy of price fixation? When is it followed?
 - f) What are the rules regarding distribution of joint cost among the joint products?
 - g) Write a note on Life Cycle Costing.
 - h) Explain the concept of responsibility accounting. What are the different types of responsibility centres?
 - i) What is cash break-even point? How is it a better guiding criterion in the short term than sales break-even point?

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- Q 2** Pidilite Industries is currently manufacturing the water-proofing product for its domestic customers. The following is the summarized Income Statement of the company for the year ending 31st March 2016 in which 800 waterproofs were sold.

Income statement for the year 2016

Sales	1,60,000
Less: Cost of Materials	32,000
Direct Wages	48,000
Mfg. Charges	20,000
Gross Profit	60,000
Les: Office Salaries	24,000
Rent & Taxes	4,000
Selling Expenses	8,000
General Expenses	12,000
Net Profit	12,000

The company has planned to sell 1,000 waterproofs in the next financial year which is in line with the strategy of 25% growth in sales for the next five years. The marketing research has shown that the prices of materials will rise by 25% over previous year's level. The inflation will also increase the payment to the workers by 12 ½%. The manufacturing charges are expected to rise in proportion to the combined cost of material and wages. However, selling cost per unit will remain unchanged. The sensitivity analysis suggests that the other expenses will remain unaffected by the rise in output.

You are required to suggest the price at which the waterproofs should be marketed in the year 2017 so as to achieve a profit margin of 10% on the selling price.

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Q 3 The following information was available relating to a product which passes through two processes:

	Process X	Process Y
Materials	16,000	6,000
Direct Labour	24,000	16,000
Works expenses	3344	2780
Input @ Rs.8 per unit	4000	---
Output in units	3900	3850
Stock on 1.1.2017 in units	400	600
Stock on 31.1.2017 in units	300	800
Valuation of opening stock, per unit	Rs.19	Rs.26
Normal wastage on input	2%	5%
Scrap value of wastage per unit	Re.1	Rs.4

Show the process accounts and the stock accounts assuming the FIFO method of stock valuation.

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Q 4 AB Ltd. Manufactures BXE by mixing three raw materials. For every batch of 100 Kgs of BXE, 125 Kgs of raw materials are used. During a particular month, 60 batches were prepared to produce an output of 5,600 kgs of BXE. The other relevant information were as given below:

	Standards		Actual		Quantity of material purchased
	Mix (%)	Price per Kg.	Mix (%)	Price per Kg	
A	50	Rs.20	60	Rs.21	5000 Kgs
B	30	Rs.10	20	Rs.8	2000 Kgs
C	20	Rs.5	20	Rs.6	1200 Kgs

Compute the material cost variances.

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Q 5 a) The profit plan for a Plant shows the following:

Annual budgeted fixed costs	Rs. 12 lakhs
Variable costs	Rs. 8,40,000,
Sales value	Rs. 22 lakhs,
Allocated head office budgeted fixed costs	Rs. 3,20,000.

You are required to compute the BEP before and after the allocation of fixed costs by the head office. Explain why the BEP change in rupees is greater than the allocated fixed costs.

- b) A Company sells its product at Rs. 30 per unit. In a period, if it produces and sells 8,000 units, it incurs a loss of Rs. 10 per unit. If the volume is raised to 20,000 units, it earns a profit of Rs. 8 per unit. Calculate break-even point both in terms of rupees as well as in units.
- c) "In case of a multi-product firm, the sales mix remains constant". Explain this assumption of C-V-P analysis with the help of an example. **10**

- Q 6 a)** A factory engaged in manufacturing plastic buckets is working at 40% capacity and produces and sells 10,000 units per annum. The other relevant information were-
S.P. Rs.20, Materials Rs.10, Labour Rs.3 and overheads Rs.5 (60% fixed).

The marketing manager informs that the sales may be increased to 50% capacity level but the selling price will have to be reduced by 3% accompanied by a similar fall in the prices of materials. The sales may be increased to 90% if selling price is reduced by 5% with a similar fall in materials cost.

You are required to comment whether it would be profitable for the firm to change its capacity utilization. **8**

- b) A company manufacturing two products X and Y has the following profitability statement:

	X	Y	Total
Sales	10000	4000	14000
Direct Materials	1500	1000	2500
Direct Labour	3000	1000	4000
Variable Overheads	2000	1000	3000
Fixed Overheads	1250	1250	2500
Net Profit	2250	(250)	2000

It has been the practice of the firm to allocate fixed costs equally between X and Y. The following proposals have been made by the accountant for your consideration:

- i) Discontinue product Y.
- ii) Reduce the price of Y by 20%, which is expected to increase its demand by 40%.

You are required to evaluate each of the above proposals and give your recommendation. **8**

OR

- a) Distinguish between absorption costing technique and marginal costing technique of income determination. **4**
- b) A Company engaged in plantation activities has 200 hectares of virgin land which can be used for growing jointly or individually tea, coffee and Cardamom. The relevant information were as given below:

	Tea	Coffee	Cardamom
Yield (Kgs.)	2000	500	100
Selling Price per Kg.	20	40	250
Costs per Kg.			
Labour charges	8	10	120
Packing costs	2	2	10
Other costs	4	1	20
Maximum Area (hectares) to be cultivated	160	50	30
Minimum Area (hectares) to be cultivated	120	30	10
Fixed overheads p.a.			Rs.18, 00,000

The policy of the company is to produce all the three kinds of products.
Calculate the most profitable product mix and the maximum profit,
which can be achieved.

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