



1<sup>a</sup> sessione 2018  
Sezione A  
Settore Industriale  
Prova pratica  
18 luglio 2018

**Il candidato esegua a scelta una delle seguenti prove:**

**Tema 1:**

Le informazioni di seguito riportate servono per preparare il *master budget* per il primo trimestre a venire di un distributore all'ingrosso di beni di consumo. Ti è stata data la responsabilità di tutte le attività di pianificazione e definizione del *budget*.

N.B.: l'azienda è statunitense; i dati sono pertanto espressi in inglese.

**Current assets as of December 31:**

Cash .....	\$6,000
Accounts receivable .....	\$36,000
Inventory .....	\$9,800
Buildings and equipment, net .....	\$110,885
Accounts payable .....	\$32,550
Capital stock .....	\$100,000
Retained earnings .....	\$30,135

- a. The gross margin is 30% of sales. (In other words, cost of goods sold is 70% of sales.)
- b. Actual and budgeted sales data are as follows:

December (actual) .....	\$60,000
January .....	\$70,000
February .....	\$80,000
March .....	\$85,000
April .....	\$55,000

- c. Sales are 40% for cash and 60% on credit. Credit sales are collected in the month following sales. The accounts receivable at December 31 are the result of December credit sales.
- d. Each month's ending inventory should equal 20% of the following month's budgeted cost of goods sold.
- e. One-quarter of a month's inventory purchases is paid for in the month of purchase; the other three-quarters is paid for in the following month. The accounts payable at December 31 are the result of December purchases of inventory.
- f. Monthly selling & administrative expenses are as follows: commissions, \$12,000; rent, \$1,800; other expenses (excluding depreciation), 8% of sales. Assume that these expenses are paid monthly.

Depreciation is \$2,400 for the quarter and includes depreciation on new assets acquired during the quarter.

- g. Equipment will be acquired for cash: \$3,000 in January and \$8,000 in February.
- h. Management would like to maintain a minimum cash balance of \$5,000 at the end of each month. The company has an agreement with a local bank that allows the company to borrow in increments of \$1,000 at the beginning of each month, up to a total loan balance of \$50,000. The interest rate on these loans is 1% per month, and for simplicity, we will assume that interest is not compounded. The company would, as far as it is able, repay the loan plus accumulated interest at the end of the quarter.

Per preparare il *master budget* si elaborino:

1. Il prospetto degli incassi dalle vendite, per mese e in totale
2. Il *budget* degli acquisti per mese e in totale
3. Il prospetto delle uscite per acquisti per mese e in totale
4. Il prospetto delle uscite per costi di vendita e amministrativi
5. Il *budget* di cassa, per mese e in totale
6. Il conto economico previsionale secondo uno schema a *full costing*, per totale, relativamente al trimestre considerato
7. Lo stato patrimoniale previsionale al 31 marzo

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## Tema 2 :

Le tabelle di seguito riportate sono la base per il processo di transizione da un sistema di contabilità tradizionale a un sistema *activity-based costing* alla Precision Manufacturing Inc. che realizza due prodotti, l'EX300 e il TX500.

N.B.: trattandosi di un'azienda statunitense la lingua correntemente usata è l'inglese.

1. L'“*absorption costing income statement*” per l'esercizio considerato

Precision Manufacturing Inc. Income Statement	
Sales .....	\$1,700,000
Cost of goods sold .....	<u>1,200,000</u>
Gross margin .....	500,000
Selling and administrative expenses .....	<u>550,000</u>
Net operating loss .....	<u><u>\$ (50,000)</u></u>

2. PMI produced and sold 60,000 units of EX300 at a price of \$20 per unit and 12,500 units of TX500 at a price of \$40 per unit. The company's traditional cost system allocates manufacturing overhead to products using a plantwide overhead rate and direct labor dollars as the allocation base. Additional information relating to the company's two product lines is shown below:

	EX300	TX500	Total
Direct materials .....	\$366,325	\$162,550	\$ 528,875
Direct labor .....	\$120,000	\$42,500	162,500
Manufacturing overhead . . .			<u>508,625</u>
Cost of goods sold .....			<u><u>\$1,200,000</u></u>

3. The desired activity-based costing system will be used to evaluate the profitability of its products.
4. PMI's ABC implementation team concluded that \$50,000 and \$100,000 of the company's advertising expenses could be directly traced to EX300 and TX500, respectively. The remainder of the selling and administrative expenses was organization-sustaining in nature.
5. The ABC team also distributed the company's manufacturing overhead to four activities as shown below:

Activity Cost Pool (and Activity Measure)	Manufacturing Overhead	Activity		
		EX300	TX500	Total
Machining (machine-hours) . . . . .	\$198,250	90,000	62,500	152,500
Setups (setup hours) . . . . .	150,000	75	300	375
Product-sustaining (number of products) . . .	100,000	1	1	2
Other (organization-sustaining costs) . . . . .	60,375	NA	NA	NA
Total manufacturing overhead cost . . . . .	<u>\$508,625</u>			

Per attuare il piano di transizione si richiede di:

1. Calcolare il margine di prodotto per EX300 e TX500 secondo il metodo tradizionale
2. Calcolare il margine di prodotto per EX300 e TX500 secondo il metodo *activity-based*
3. Preparare un prospetto che compari i costi assegnati ai due prodotti secondo i due metodi, spiegando perché differiscono.

Nota: per la comparazione dei costi assegnati ci si avvalga dello schema seguente:

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**GLI ELABORATI PRODOTTI DOVRANNO ESSERE REDATTI IN FORMA CHIARA ED ORDINATA. LA CAPACITÀ DI SINTESI, L'ORDINE E LA CHIAREZZA, COSTITUIRANNO ELEMENTI DI VALUTAZIONE.**

	EX300		TX500		Total
	(a)	(a) ÷ (c)	(b)	(b) ÷ (c)	(c)
Traditional Cost System	Amount	%	Amount	%	Amount
Direct materials .....					
Direct labor .....					
Manufacturing overhead .....					
Total cost assigned to products .....					
Selling and administrative .....					
Total cost.....					
Activity-Based Costing System					
Direct costs:					
Direct materials .....					
Direct labor .....					
Advertising expense .....					
Indirect costs:					
Machining.....					
Setups .....					
Product sustaining .....					
Total cost assigned to products .....					
Costs not assigned to products:					
Selling and administrative.....					
Other .....					
Total cost.....					