逢甲大學101學年度碩士班招生考試試題 編號：022 科目代碼：

科目	成本及管理會計	適用系所	會計學系	時間	100 分鐘

※請務必在答案卷作答區內作答。

一、Multiple Choices (30%)

1. East Company manufactures several different products. Unit costs associated with Product ORD22 are as follows: direct materials of \$50, direct manufacturing labor of \$8, variable manufacturing overhead of \$10, fixed manufacturing overhead of \$32, sales commissions of \$5 (2% of sales) and administrative salaries of \$16. What are the variable costs per unit associated with Product ORD22?
(A) \$60. (B) \$89. (C) \$121. (D) \$73.

2. Feng Chia University is planning to hold a fundraising banquet at a local club. It has two options for the banquet:
OPTION 1: fixed rental cost of \$1,000 with \$12 per person for food.
OPTION 2: fixed rental cost of \$3,000 with \$8 per person for food.
Feng Chia University has budgeted \$1,800 for administrative and marketing expenses. It plans to hire a band which will cost another \$800. Tickets are expected to be \$30 per person. Which option provides the greatest degree of operating leverage if 600 people attend?
(A) Option 1. (B) Option 2.
(C) Both options provide equal degrees of operating leverage.
(D) Operating leverage is indeterminable.

3. West Company used a budgeted indirect-cost rate for its manufacturing operations, the amount allocated (\$200,000) was different from the actual amount incurred (\$225,000). Ending balances in the relevant accounts are Work-in-Process in total of \$10,000, Finished Goods in total of \$20,000, and Cost of Goods Sold in total of \$170,000. What is the journal entry used to write off the difference between allocated and actual overhead using the proration approach based on ending balances in the relevant accounts?

(A) Manufacturing Overhead Allocated	200,000	
Work-in-Process Control	10,000	
Finished Goods Control	20,000	
Manufacturing Overhead Control		230,000

(B) Manufacturing Overhead Allocated	225,000	
Work-in-Process Control		1,250
Finished Goods Control		2,500
Cost of Goods Sold		21,250
Manufacturing Overhead Control		200,000

(C) Manufacturing Overhead Control	225,000	
Work-in-Process Control		1,250
Finished Goods Control		2,500
Cost of Goods Sold		21,250
Manufacturing Overhead Allocated		200,000

(D) Manufacturing Overhead Allocated	200,000	
Work-in-Process Control	1,250	
Finished Goods Control	2,500	
Cost of Goods Sold	21,250	
Manufacturing Overhead Control		225,000

4. South Company has the following information for the current year:

Beginning fixed manufacturing overhead in inventory	$190,000
Fixed manufacturing overhead in production	750,000
Ending fixed manufacturing overhead in inventory	50,000
Beginning variable manufacturing overhead in inventory	20,000
Variable manufacturing overhead in production	100,000
Ending variable manufacturing overhead in inventory	30,000

What is the difference between operating incomes under absorption costing and variable costing?
(A) $140,000. (B) $100,000. (C) $80,000. (D) $10,000.

5. North Company has two sources of funds: long-term debt with a market and book value of $5 million issued at an interest rate of 12%, and equity capital that has a market value of $4 million (book value of $2 million). North Company's cost of equity capital is 12%, while the tax rate is 25%. One division of North has the following financial measures for the current year: total assets of $2,000,000, current liabilities of $100,000, operating income of $480,000. What is the Economic Value Added (EVA) for the division?
(A) $127,870. (B) $163,730. (C) $196,800. (D) $360,000.

6. Maxwell Company considers to acquire a new machine to replace its present machine. The new machine would cost $90,000, has a 5-year life, and no estimated salvage value. Variable operating costs of using new machine would be $100,000 per year. The present machine has a book value of $50,000 and a remaining life of 5 years. Its disposal value now is $5,000, but it would be zero after 5 years. Variable operating costs of using present machine would be $125,000 per year. Ignore income taxes. Considering the 5 years in total, what would be the difference in profit before income taxes by acquiring the new machine as opposed to retaining the present one?
(A) $10,000 decrease. (B) $15,000 decrease. (C) $35,000 increase. (D) $40,000 increase.

二、Beta Company is a retail distributor for computer hardware and software and support services. The cash sales is 30% of total revenues, another 30% of total revenues are paid by credit card and the remaining 40% of total revenues are sales on account. The cash sales and cash from credit card sales are received in the month of the sale. The credit card sales are subject to a 5% charge deducted at the time of the daily deposit. The cash receipts for sales on account are 65% in the month following the sale and 32% in the second month after the sale. The remaining accounts receivables are estimated to be uncollectible.

Beta's month-end inventory requirements for computer hardware units are 25% of the next month's sales. A one-month lead time is required for delivery from the manufacturer. Orders for computer hardware units are placed on the 25th of each month to assure that they will be in the store by the first day of the month needed. The purchase price for the hardware units is 60% of the selling price.

The company's sales forecasts for the first four months of 2012 are as follows:

Month	Hardware Sales		Software Sales and Support	Total Revenues
	Units	Amounts		
January	135	$540,000	$310,000	$850,000
February	125	500,000	280,000	780,000
March	115	460,000	290,000	750,000
April	95	380,000	240,000	620,000

Required:

1. Calculate the cash that Beta expects to collect during April 2012. **(10%)**
2. Calculate (a) the units and (b) the amount that the company places an order for computer hardware on January 25, 2012. **(10%)**

三、From a particular joint process, Gusher Company produces three products--Kerosene, Gasoline, and Fuel Oil. Each product may be sold at the point of split-off or processed further. Additional processing requires no special facilities, and the production costs of further processing are entirely variable and traceable to the products involved. In 2012, these products were processed beyond split-off. Joint production costs for the year were $60,000. Sales values and costs needed to evaluate Gusher's 2012 production policy follow:

			Additional Costs and Sales Values if Processed Further	
Product	Gallons Produced	Sales Values at Split-Off	Sales Values	Added Costs
Kerosene	6,000	$25,000	$42,000	$12,000
Gasoline	4,000	41,000	45,000	6,000
Fuel Oil	2,000	24,000	32,000	8,000

Joint costs are allocated to the products based on the percentage of the individual product's sales value to the total sales value of all products.

Required:

1. For gallons of Kerosene, compute the unit production cost most relevant to a "sell" or "process further" decision. **(7%)**
2. Determine which products the company should subject to additional processing in order to maximize profits. **(18%)**

四、Armstrong-Glenn (A-G) Inc. is preparing to bid on the construction of seven additional rocket carrier frames for launching communication satellites. Under a special contract, the company has already built one frame with the following costs:

Materials	$ 800,000
Labor (60,000 hrs.)	750,000
Variable overhead:	
50% of direct labor cost	375,000
On the basis of materials used	150,000
Total	$ 2,075,000

Variable overhead based on materials used represents materials storage cost. For seven frames, this cost would be $1,050,000. The company was informed that the maximum acceptable bid is $2,000,000 per unit. However, A-G will not place a bid unless it can recover its costs plus a $600,000 gross profit per frame. An 80% learning curve is in effect.

Required:

1. Determine the total direct labor hours required for all eight frames. **(6%)**
2. Determine the total cost for the seven frames covered by the new bid. **(7%)**
3. Determine the profit (or loss) per unit if a bid of $2,000,000 per frame is offered. (Round all amounts to the nearest whole dollar.) **(6%)**
4. Should A-G accept the contract at a bid price of $2,000,000 per frame? **(6%)**