逢甲大學114學年度碩士班考試入學試題

編號：04　　科目代碼：202

科目	成本及管理會計	適用系所	會計學系	時間	90分鐘

※請務必在答案卷作答區內作答。　　

一、**Multiple Choices (40%)**

1. Rally Synthesis Inc. manufactures and sells 100 bottles per day. Fixed costs are $22,000 and the variable costs for manufacturing 100 bottles are $30,000. Each bottle is sold for $1,200. How would the daily profit be affected if the daily volume of sales drop by 10%?
   A) profits are reduced by $9,000
   B) profits are reduced by $3,000
   C) profits are reduced by $12,000
   D) profits are reduced by $59,000

2. Sales total $430,000 when variable costs total $300,000 and fixed costs total $90,000. The breakeven point in sales dollars is: (Round interim calculations to two decimal places and the final answer to the nearest dollar.)
   A) $300,000
   B) $433,333
   C) $1,000,000
   D) $621,111

3. Which of the following is a reason that has accelerated the demand for refinements to the costing system?
   A) The declining demand for customized products has led managers to decrease the variety of products and services their companies offer.
   B) The use of product and process technology has led to an increase in indirect costs and a decrease in direct costs.
   C) The increased of automated processes has led to the increase in direct manufacturing cost leading to a decrease in break-even point.
   D) The increasing competition in product markets has led to an increase in contribution margin resulting in a decrease of break-even point.

4. Which of the following statements is true of contribution-margin format of the income statement?
   A) It is used for absorption costing.
   B) It distinguishes between variable and fixed costs in its format.
   C) It distinguishes manufacturing costs from nonmanufacturing costs.
   D) It calculates gross margin.

5. An example of a denominator reason for calculating annual indirect-cost rates includes:
   A) budgeted annual indirect costs divided by actual quantity of cost-allocation base
   B) semi-annual insurance payments in March and September
   C) higher levels of output demanded during the fall months
   D) prepaid rent in January for the months January through June

6. How does the sales value at split-off method allocate joint costs?
   A) allocates joint costs to joint products on the basis of the relative total sales value at the split-off point

B) allocates joint costs to joint products on the basis of a comparable physical measure at the split-off point
C) allocates joint costs to joint products on the basis of relative NRV
D) allocates joint costs to joint products in a way that each product has an identical gross-margin percentage

7. Planet Design Services, Inc., is considering replacing a machine. The following data are available:

	Old Machine	Replacement Machine
Original cost	$650,000	$540,000
Useful life in years	10	5
Current age in years	5	0
Book value	$380,000	—
Disposal value now	$162,000	—
Disposal value in 5 years	0	0
Annual cash operating costs	$108,000	$60,000

The difference of total relevant costs between keeping the old machine and replacing the old machine is:
A) $920,000 in favor of keeping the old machine
B) $138,000 in favor of keeping the old machine
C) $920,000 in favor of replacing the old machine
D) $138,000 in favor of replacing the old machine

8. A product costs $600 to manufacture and $20 to market and $10 to distribute (ship to customers.) R&D costs are allocated at $40 per unit. Based on a targeted rate of return, manager uses a mark-up of 30%. What is the prospective selling price based on a Cost-Plus pricing approach?
A) $780
B) $806
C) $819
D) $871

9. W.T. Engine Company manufactures part ACT107 used in several of its engine models. Monthly production costs for 1,100 units are as follows:

Direct materials	$44,000
Direct labor	9,500
Variable overhead costs	33,500
Fixed factory overhead	19,000
Total costs	$106,000

It is estimated that 6% of the fixed overhead costs assigned to ACT107 will no longer be incurred if the company purchases ACT107 from the outside supplier. W.T Engine Company has the option of purchasing the part from an outside supplier at $96.75 per unit.

If the company accepts the offer from the outside supplier, the monthly avoidable costs (costs that will no longer be incurred) total:
A) $88,140
B) $87,000
C) $106,000
D) $107,140

10. Buzz's Educational Software Outlet sells two or more of the video games as a single package. Managers are keenly interested in individual product-profitability figures. Information pertaining to three bundled products and the stand-alone prices is as follows:

	Stand-Alone Selling Price	Cost	Package	Packaged Price
Reading Fun	$24	$3.60	1. Reading Fun & Math Fun	$46
Math Fun	$32	$4.05	2. Reading Fun & Analysis	$60
Analysis	$50	$5.00	3. All three	$82

Using the incremental method for revenue allocation, what amount of revenue will be allocated to Math Fun in the third package (All three)? Assume Reading Fun is the primary product, followed by Math Fun, and then Analysis.

A) $19.71
B) $26.29
C) $22.00
D) $24.00

二、COB, Inc., is a small business that Zanella developed while in college. She began hand knitting shawls for her dorm friends to wear while studying. As demand grew, she hired some workers and began to manage the operation. Zanella's shawls require wool and labor. She experiments with the type of wool that she uses, and she has great variety in the shawls she produces. Zanella has bimodal turnover in her labor. She has some employees who have been with her for a very long time and others who are new and inexperienced.

Zanella uses standard costing for her shawls. She expects that a typical shawl should take 3 hours to produce, and the standard wage rate is $9.00 per hour. An average shawl uses 13 skeins of wool. Zanella shops around for good deals and expects to pay $3.40 per skein.

Zanella uses a just-in-time inventory system, as she has clients tell her what type and color of wool they would like her to use.

For the month of April, Zanella's workers produced 200 shawls using 580 hours and 3,500 skeins of wool. Zanella bought wool for $9,000 (and used the entire quantity) and incurred labor costs of $5,520.

Required:

a. Calculate the price and efficiency variances for the wool and the price and efficiency variances for direct manufacturing labor. (8%)
b. Record the journal entries for the variances incurred. (6%)

三、FCU Inc., produces dance shoes for stores all over the world. While the pairs of shoes are boxed individually, they are crated and shipped in batches. The shipping department records both variable direct batch-level costs and fixed batch-level overhead costs. The following information pertains to shipping department costs for 2024.

	Static-Budget Amounts	Actual Results
Pairs of shoes shipped	300,000	270,000
Average number of pairs of shoes per crate	15	10
Packing hours per crate	1 hour	1.2 hours
Variable direct cost per hour	$20	$18
Fixed overhead cost	60,000	62,000

Required:

a. For variable direct batch-level costs, compute the price and efficiency variances. (4%)
b. For fixed overhead costs, compute the spending and the production-volume variances. (4%)

四、ACCU Outfitters, a manufacturer of fly fishing flies, uses a normal-costing system with a single overhead cost pool and direct labor cost as the cost-allocation base. The following data are for 2024:

Budgeted manufacturing overhead costs	$1,210,000
Overhead allocation base	Direct Labor Cost
Budgeted direct labor cost	$550,000
Actual manufacturing overhead costs incurred	$1,200,500
Actual direct labor cost	$562,200

Manufacturing overhead allocated data and the ending balances (before proration of under- or overallocated overhead) in each account are as follows:

	Mfg OH Allocated	**2024 End-of-Year Balance**
Cost of Goods Sold	$841,051	$2,100,000
Finished Goods Control	272,105	600,000
Work-in-Process Control	123,684	300,000

Compute the under- or overallocated manufacturing overhead of ACCU Outfitters in 2024. Adjust for this amount using the following:

Required:

a. Write-off to Cost of Goods Sold (2%)
b. Proration based on ending balances (before proration) in Work-in-Process Control, Finished Goods Control, and Cost of Goods Sold (6%)

五、Feng Chia Company is a manufacturer of kitchen utensils. It produces all of its products in one department. The information for the current month is as follows:

Beginning work in process	40,000 units
Units started	52,000 units
Units completed	73,000 units
Ending work in process	16,000 units
Spoilage	3,000 units

Beginning work-in-process direct materials	$30,000
Beginning work-in-process conversion	$ 8,000
Direct materials added during month	$126,400
Conversion added during month	$60,480

Beginning work in process was 25% complete as to conversion. Direct materials are added at the beginning of the process, while conversion costs are added evenly during the process. Ending work-in-process was 60% complete. All spoilage is normal and is detected at the end of the process. Suppose spoilage is recognized and the weighted-average method is used.

Required:

a. What is the direct material cost per equivalent unit? (4%)
b. What is the conversion cost per equivalent unit? (4%)
c. What is the total costs of good units completed and transferred out (including normal spoilage)? (4%)
d. What is the total costs assigned to the work-in-process ending inventory? (4%)

六、Hartley Corp has two service departments, S1 and S2, and two production departments, P1 and P2.

The data for March were as follows:

		Services provided to:			
Activity	Costs	S1	S2	P1	P2
S1	$100,000		10%	40%	50%
S2	$80,000	20%		55%	25%
	Fixed Costs				
P1	$400,000				
P2	$500,000				

Required: Using the reciprocal method,

a. Set up algebraic equations in linear form for each activity (S1, S2, P1, and P2). (4%)
b. Determine total costs for the production departments, P1 and P2, by solving the equations from part (a). (*Round the final answer to the nearest dollar.*) (10%)