Summative Assessment Outline

Financial Planning and Control

Competency Name: Financial Planning and Control

Competency Statement: Demonstrate knowledge and application of the 3 key steps of financial planning – 1 forecasting the firm's short-term and long-term financial needs; 2 developing budgets to meet those needs, and 3 establishing financial controls to see if the company is achieving its goal.

Summative Assessment Submission Title: Financial Planning and Control Accounting Problems **Competency Objectives:**

- 1. Develop a forecast of short- and long-term financing needs and pro forma financial statements.
- 2. Prepare a budget and use variance analysis to evaluate performance.
- 3. Demonstrate knowledge of standard costing and variances.
- 4. Perform profitability and cost analyses of businesses and business segments.
- 5. Construct a balanced scorecard for strategic planning and control purposes considering both quantitative and qualitative data.

Program Learning Outcomes: N/A Institutional Learning Outcomes: N/A

Purpose of this Assessment

The final assessment for this competency is to complete a series of comprehensive financial accounting problems that address budgeting, forecasting, standard costing, variance analysis, profitability, and cost analysis using a balance scorecard.

Items Required for Submission

A comprehensive solution set to a selection of managerial accounting problems that involve:

- Preparing Forecasting/Proforma Statements
- Preparing Capital Budgets

- · Generating Operating Budgets
- Demonstrating a knowledge of standard costing and variances
- Performing profitability and cost analyses of businesses and business segments
- Constructing a balanced scorecard for strategic planning and control purposes, considering both quantitative and qualitative data

Step ONE: Preparation

In order to prepare for this assignment, it is important to carefully review the entire scenario for each problem found in Appendix A. When reviewing each problem, the following questions should be considered:

- 1. What possible tasks are required?
- 2. What you will need to complete the problem?
- 3. What formulas will you need?
- 4. What resources from this competency might you reference to successfully complete this problem?
- 5. Think about possible plans of action for what steps you will take—what strategies will you use to tackle each problem?

Step TWO: Perform Calculations & Explain Methods

For each problem (found in Appendix A):

- 1. Use your plan of action to solve each problem, clearly outlining the procedures used, providing a concise explanation of each step, labeling relevant formulas, and showing worked out calculations and complete solutions. You may use an Excel spreadsheet or a calculator to help you perform the necessary calculations, but all corresponding work must be shown completely.
- 2. Answer all questions posed in the problem; if applicable, analyze and evaluate your results and provide a contextual explanation of the solutions you obtained.
- 3. Review your calculations and solutions and make sure that an external viewer would be able to follow your methodology and make sense of your calculations and corresponding explanations. Make certain that you have completed all steps of each problem.

Step THREE: Complete Checklist for Submission

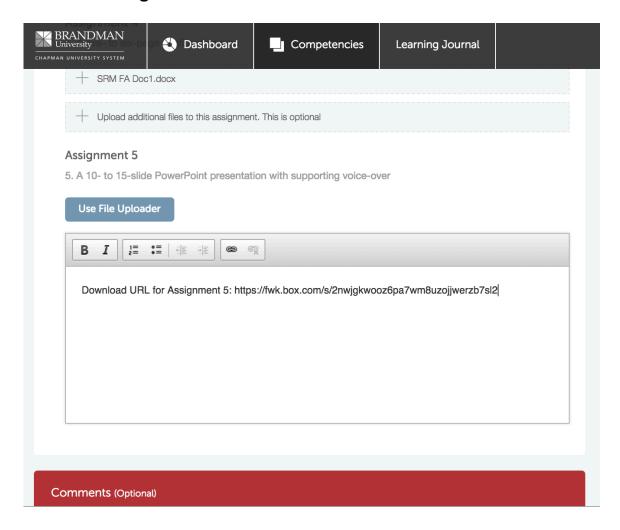
Before you submit, check to see if you believe you have met the criteria noted below.

Did you....

- ✓ Answer all parts of each question completely and accurately?
- ✓ Provide clear and accurate steps, calculations, and solutions?
- ✓ Include an insightful analysis and evaluation of results where relevant?
- ✓ Provide a comprehensive and accurate description of each of the four areas of a balanced scorecard, an accurate and clear definition of a key performance indicator (KPI), and meaningful real world examples of KPIs for each balanced score card area?

Step FOUR: Submit Your Work

- Your completed final assessment documents should be submitted through the Final Assessment page of your competency.
- Please note, for files smaller than 10MB (i.e., most Word documents), use the corresponding "+UPLOAD STUDENT FILE" button to upload your final assessment assignments. For larger files of any type (i.e., voice-over PowerPoint files, videos, or image-heavy documents), please use the optional TEXT EDITOR to provide a URL where your grader can download your file.



• How you create a download URL is up to you, but various free online providers, including Google Drive, Box.com, or Dropbox, offer this service. Please make sure that the URL you provide can be accessed by anyone with the link. For further instructions on how to create public links for uploaded files, consult the support pages for your chosen provider.

Scoring Rubric for Summative Assessment:

Criterion	EMERGING (1)	DEVELOPING (2)	PROFICIENT (3)	EXEMPLARY (4)
Forecasting / Pro forma Statements	Does not answer all parts of each question completely and provides a weak analysis and evaluation of results where applicable.	Partially answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Mostly answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.
Capital Budgets	Does not answer all parts of each question completely and provides a weak analysis and evaluation of results where applicable.	Partially answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Mostly answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.
Operating Budgets	Does not answer all parts of each question completely and provides a weak analysis and evaluation of results where applicable.	Partially answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Mostly answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.
Standard Costing and Variances	Does not answer all parts of each question completely and provides a weak analysis and	Partially answers all parts of each question completely and accurately, showing and explaining all	Mostly answers all parts of each question completely and accurately, showing and explaining all steps,	Answers all parts of each question completely and accurately, showing and explaining all steps,

	evaluation of results where applicable.	steps, calculations, and solutions clearly, and insightfully analyzing and evaluating results where applicable.	calculations, and solutions clearly, and insightfully analyzing and evaluating results where applicable.	calculations, and solutions clearly, and insightfully analyzing and evaluating results where applicable.
Profitability and Cost Analysis	Does not answer all parts of each question completely and provides a weak analysis and evaluation of results where applicable.	Partially answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.	Mostly answers all parts of each question completely and accurately, showing and explaining all steps, calculations and solutions clearly, and insightfully analyzing and evaluating results where applicable.	Answers all parts of each question completely and accurately, showing and explaining all steps, calculations, and solutions clearly and insightfully analyzing and evaluating results where applicable.
Balanced Score Card	Provides a limited description of each of the four areas of a balanced scorecard, an inadequate definition of a KPI, and real world examples of KPIs that do not align to each balanced score card area.	Provides a mostly accurate description of each of the four areas of a balanced scorecard, a somewhat accurate definition of a KPI, and somewhat relevant real world examples of KPIs for each balanced score card area.	Provides an accurate description of each of the four areas of a balanced scorecard, an accurate definition of a KPI, and relevant real world examples of KPIs for each balanced score card area.	Provides a comprehensive and accurate description of each of the four areas of a balanced scorecard, an accurate and clear definition of a KPI, and meaningful real world examples of KPIs for each balanced score card area.

Appendix A: Managerial Accounting Problems

Problem #1: Proforma Statements

Prepare a common size income statement given the following information:

Revenues = \$100,000 COGS = \$43,000 SG&A = \$22,000 Depreciation = \$10,000

Interest Owed = \$5,000 Tax Rate = 40%

Problem #2: Proforma Statements

Prepare a pro forma income statement from the data and common size income statement from #1, assuming that the sales will grow by 5% and all expenses but interest and taxes will scale with sales.

Problem #3: Capital Budgets

Rambus Inc. would like to purchase a production machine for \$325,000. The machine is expected to have a life of three years, and a salvage value of \$50,000. Annual maintenance costs will total \$12,500. Annual savings are predicted to be \$112,500. The company's required rate of return is 12%.

Required:

Ignoring the time value of money, calculate the net cash inflow or outflow resulting from this investment opportunity.

Problem #4: Capital Budgets

Rambus Inc. would like to purchase a production machine for \$325,000. The machine is expected to have a life of three years, and a salvage value of \$50,000. Annual maintenance costs will total \$12,500. Annual savings are predicted to be \$112,500. The company's required rate of return is 12%.

Factors: Present Value of \$1

(r = 12%)					
1.0000					
0.8929					
0.7972					
0.7118					

Required:

- (1) Using the Present Value Factors for \$1, calculate the net present value of this investment (ignoring taxes).
- (2) Based on your answer in requirement 1, should Rambus purchase the production machine?

Problem #5: Capital Budgets

Lockwood Company would like to purchase a production machine for \$900,000. The machine is expected to have a life of five years, and a salvage value of \$100,000. Annual maintenance costs will total \$40,000. Annual savings are predicted to be \$350,000. The company only accepts projects that have a payback period of less than three years.

Required:

- (1) Calculate the **payback period** for this project rounded to the nearest month. Show your work.
- (2) Should the company accept this proposal? Explain.

Problem #6: Operating Budgets

Cathy's Cookies produces cookies for resale at local grocery stores. The company is currently in the process of establishing a master budget on a quarterly basis for this coming fiscal year, which ends December 31. Prior year quarterly sales were as follows (1 unit = 1 batch):

First quarter: 8,000 units Second quarter: 9,600 units Third quarter: 12,000

units

Fourth quarter: 10,400

units

Unit sales are expected to increase 20%, and each unit is expected to sell for \$5. Management prefers to maintain ending finished goods inventory equal to 15% of next quarter's sales. Assume finished goods inventory at the end of the fourth quarter budget period is estimated to be 2,000 units.

Required:

- (1) Prepare a sales budget for Cathy's Cookies.
- (2) Prepare a production budget for Cathy's Cookies.
- (3) What can you interpret about Cathy's Cookies Sales Budget? Trends?

Problem #7: Operating Budgets

Marker Products, Inc. sells all of its products on credit. The company expects to collect 65% of sales in the quarter of sale and 35% the quarter following the sale. Accounts receivable at the end of last year totaled \$3,000,000, all of which will be collected in the first quarter of the coming year. Marker's sales budget shows the following projected sales revenues:

Quarter 1: \$8,800,000 Quarter 2: \$11,000,000 Quarter 3: \$11,440,000 Quarter 4: \$10,560,000

Required:

Prepare a budget for cash collections from sales for each of the four quarters.

Problem #8: Standard Costing and Variances

Jake's Cheese Company produces gourmet cheese for resale at local grocery stores. The master budget indicates that the company expects to use 3.0 pounds of direct materials for each unit produced at a cost of \$8.00 per pound (one unit = one batch of cheese). Each unit produced will require 0.50 direct labor hours at a cost of \$10.00 per hour. Variable manufacturing overhead is applied based on direct labor hours at a rate of \$5.00 per hour. Last year's sales were expected to total 50,000 units. Jake just received last year's actual results showing sales of 45,000 units.

Required:

- (1) Calculate the standard cost per unit for direct materials, direct labor, and variable manufacturing overhead.
- (2) Prepare a flexible budget based on actual sales for direct materials, direct labor, and variable manufacturing overhead.

Problem #9: Standard Costing & Variances

Jake's Cheese Company produces gourmet cheese for resale at local grocery stores. Jake's expected to use 3.0 pounds of direct materials to produce one unit (batch) of product at a cost of \$8 per pound. Actual results are in for last year, which indicates 45,000 batches of cheese were sold. The company purchased 160,000 pounds of materials at \$7.50 per pound, and used 145,000 pounds in production.

Required:

- (1) Calculate the materials price variance.
- (2) Calculate the materials quantity variance.
- (3) Suggest several possible reasons for the materials price and quantity variances calculated in requirements (1) and (2).

Problem #10: Standard Costing & Variances

Jake's Cheese Company produces gourmet cheese for resale at local grocery stores. Jake's expected to use 0.50 direct labor hours to produce one unit (batch) of product at a cost of \$10 per hour. Actual results are in for last year, which indicates 45,000 batches of cheese were sold. The company's direct labor workforce worked 27,500 hours at \$9 per hour.

Required:

- (1) Calculate the labor rate variance.
- (2) Calculate the labor efficiency variance.
- (3) Suggest several possible reasons for the labor rate and efficiency variances.

Problem #11: Standard Costing & Variances

Jake's cheese Company produces gourmet cheese for resale at local grocery stores. Jake's expected to use 0.50 direct labor hours to produce one unit (batch) of product, and the variable overhead rate is \$5.00 per hour. Actual results are in for last year, which indicates 45,000 batches of cheese were produced and sold. The company's direct labor workforce worked 27,500 hours, and variable overhead costs totaled \$144,000.

Required:

- (1) Calculate the variable overhead spending variance.
- (2) Calculate the variable overhead efficiency variance.
- (3) Suggest several possible reasons for the variable overhead spending and efficiency variances.

Problem #12: Profitability & Cost Analysis

Car Deals Inc. has two divisions: New Cars and Used Cars. The following segmented financial information is for the most recent fiscal year:

	New Cars Division	Used Cars Division
Sales	\$9,000,000	\$18,000,000
Cost of goods sold	3,300,000	8,700,000
Allocated overhead	1,050,000	2,550,000
Selling and administrative expenses	585,000	630,000

The New Cars division had average operating assets totaling \$17,400,000 for the year, and the Used Cars division had average operating assets of \$22,800,000. Assume the cost of capital rate is 15%, and the company's tax rate is 40%.

Required:

- a. Prepare a segmented income statement, including the profit margin ratio for each division at the bottom of the segmented income statement.
- b. Calculate return on investment (ROI) for each division.
- c. Calculate residual income for each division.
- d. Summarize the answers to parts a, b, and c. What does this information tell you about each division?

Problem #13: Balanced Scorecard

- a. List the four areas of a balanced scorecard. Describe each area clearly and concisely.
- b. Define a KPI
- c. Pick a real world company and give an example of a KPI for each balanced scorecard area for that company.