Roll No												

PRESIDENCY UNIVERSITY

BENGALURU

SCHOOL OF COMMERCE

END TERM EXAMINATION – JAN 2023

Semester: SEMESTER I - 2022-23
Course Code: MAH 2001
Course Name: Financial Planning and Performance
Program: B.Com Honors

Date: 16-JAN-2023
Time: 1.00PM to 04.00PM
Max Marks: 100
Weightage: 50%

Instructions:

(i) ***Read the question carefully and answer all the questions***

Part A [Memory Recall Questions]

Answer all Questions. Each Question carries 2 marks **(10Qx2M=20)**

1. The primary purpose for allocating common costs to joint products is to determine:
   A) the variance between budgeted and actual common costs.
   B) the inventory cost of joint products for financial reporting.
   C) the selling price of a by-product.
   D) whether or not one of the joint products should be discontinued.

2. Which of the following is the correct order of preparing operating budgets?
   A) Sales budget, production budget, product cost budgets (including direct materials, direct labor, and factory overhead budgets), and cost of goods sold budget.
   B) Production budget, product cost budget (including direct materials, direct labor, and factory overhead budgets), cost of goods sold budget, and sales budget.
   C) Production budget, product cost budget (including direct materials, direct labor, and factory overhead budgets), sales budget, and cost of goods sold budget.
   D) Sales budget, cost of goods sold budget, production budget, and product costs budgets (including direct materials, direct labor, and factory overhead budgets).

3. A firm has budgeted sales for the next two periods of 50,000 units and 55,000 units, respectively. The firm maintains a policy that the ending-of-period inventory is 20% of the following period's forecasted sales. The policy is currently met. What is the budgeted production for period 1?

   A) 49,000 units.
   B) 50,000 units.
   C) 61,000 units.
   D) 51,000 units.

4. Which of the following correctly describes the materials purchase budget calculation?
   A) (Sales forecast (in units) × direct materials per unit × direct materials cost) + desired ending direct materials inventory − beginning direct materials inventory.
   B) (Sales forecast (in units) × direct materials per unit × direct materials cost) + beginning direct materials inventory − desired ending direct materials inventory.
   C) (Number of units to be produced × direct materials per unit × direct materials cost) + beginning direct materials inventory − desired ending direct materials inventory.
   D) (Number of units to be produced × direct materials per unit × direct materials cost) + desired ending direct materials inventory − beginning direct materials inventory.

5. Which one of the following items is the last schedule to be prepared in the normal budget preparation process?

   A) selling expense budget.
   B) cost of goods sold budget.
   C) manufacturing overhead budget.
   D) cash budget.

6. The direct materials budget is often broken down into:

   A) a direct materials mix budget and a direct materials yield budget.
   B) a direct materials usage budget and a direct materials purchase budget.
   C) a direct materials mix budget and a direct materials purchase budget.
   D) a direct materials yield budget and a direct materials usage budget.

7. In order to analyze sales as a function of advertising expenses, the sales manager of Smith Company developed a simple regression model. The model included the following equation, which was based on 32 monthly observations of sales and advertising expenses with a related coefficient of determination of 0.90.

   $S = \$10,000 + \$2.50A$

   S = sales

   A = advertising expenses

   If Smith Company's advertising expenses in one month amounted to $1,000, the related point estimate of sales would be:

   A) $12,500.
   B) $12,250.
   C) $2,500.
   D) $11,250.

8. A beverage stand can sell either soft drinks or coffee on any given day. If the stand sells soft drinks and the weather is hot, it will make $2,500; if the weather is cold, the profit will be $1,000. If the stand sells coffee and the weather is hot, it will make $1,900; if the weather is cold, the profit will be $2,000. The probability of cold weather on a given day at this time is 60 percent.
   The expected payoff for selling coffee is:
   A) $2,200.
   B) $3,900.
   C) $1,960.
   D) $1,360.
9. Propeller Inc. plans to manufacture a newly designed high-technology propeller for airplanes. Propeller forecasts that as workers gain experience, they will need less time to complete the job. Based on prior experience, Propeller estimates a 70% cumulative learning curve and has projected the following costs.

Cumulative Number of Units Produced	Manufacturing Projections	
	Average Cost Per Unit	Total Costs
1	$20,000	$20,000
2	$14,000	$28,000

   If Propeller produces eight units, the average manufacturing cost per unit will be:
   A) $9,800.
   B) $1,647.
   C) $14,000.
   D) $6,860.
10. The regression equation is Y = a + bX. Which of the following is true?
   A) b represents the amount of Y when X = 0.
   B) X represents the dependent variable.
   C) b represents fixed cost per unit.
   D) a represents the amount of Y when X = 0.

Part B [Thought Provoking Questions]

Answer all Questions. Each Question carries 10 marks. (4Qx10M=40)

11. Taylor Corporation is determining the cost behavior of several items in order to budget for the upcoming year. Past trends have indicated the following dollars were spent at three different levels of output.

	Unit Levels		
	10,000	12,000	15,000
Cost A	$25,000	$29,000	$35,000
Cost B	10,000	15,000	15,000
Cost C	15,000	18,000	22,500

In establishing a budget for 14,000 units, how should Taylor should treat Costs A, B, and C; Semi Variable, Variable or Fixed. Show the workings clearly.

12. Fitzpatrick Corporation uses a joint manufacturing process in the production of two products, Gummo and Xylo. Each batch in the joint manufacturing process yields 5,000 pounds of an intermediate material, Valdene, at a cost of $20,000.

Each batch of Gummo uses 60% of the Valdene and incurs $10,000 of separate costs. The resulting 3,000 pounds of Gummo sells for $10 per pound.

The remaining Valdene is used in the production of Xylo which incurs $12,000 of separable costs per batch. Each batch of Xylo yields 2,000 pounds and sells for $12 per pound.

Fitzpatrick uses the net realizable value method to allocate the joint material costs. The company is debating whether or not to process Xylo further into a new product, Zinten, which would incur an additional $4,000 in costs and sell for $15 per pound. If Zinten is produced, what will be the impact on income.

13. What is the cost of goods sold for a manufacturing company that has the following data?

- Beginning work-in-process inventory of $5,000
- Ending work-in-process inventory of $15,000
- Total manufacturing costs of $110,000
- $20,000 in beginning finished goods inventory
- $30,000 in ending finished goods inventory

14. Tempo Company produces three products from a joint process. The three products are sold after further processing as there is no market for any of the products at the split-off point. Joint costs per batch are $315,000. Other product information is shown here:

	Product A	Product B	Product C
Units produced per batch	20,000	30,000	50,000
Further processing and marketing cost per unit	$ 0.70	$ 3.00	$ 1.72
Final sales value per unit	5.00	6.00	7.00

If Tempo uses the net realizable value(NRV) method of allocating joint costs, how much of the joint costs will be allocated to each unit of Product C?

Part C [Problem Solving Questions]

Answer all the parts. **(2Qx20M=40)**

15. a) Tucariz Company processes Duo into two joint products, Big and Mini. Duo is purchased in 1,000 gallon drums for $2,000. Processing costs are $3,000 to process the 1,000 gallons of Duo into 800 gallons of Big and 200 gallons of Mini. The selling price is $9 per gallon for Big and $4 per gallon for Mini. The 800 gallons of Big can be processed further into 600 gallons of Giant if $1,000 of additional processing costs are incurred. Giant can be sold for $17 per gallon. If the net-realizable-value method were used to allocate costs to the joint products, what will be the total cost of producing Giant.

15. b) A lumber products company incurs $140,000 in costs to produce 100,000 board-feet of finished lumber that sells for $1/board-foot and 50,000 board-feet of plywood that sells for $0.50/board-foot (sales value at split-off). Using the sales value at split-off method, what is the cost per board-foot for each joint product?

16. a) B.G. Barns, Inc. uses the percentage of sales method to forecast its pro-forma financial statements. Based on historical financial statements, the following relationships can be established between several items and sales:

- Cost of Goods Sold (COGS) is 65% of sales
- Selling and administrative (S&A) Expense is 15% of sales
- Cash and equivalents is 6% of sales
- Accounts receivable is 8% of sales
- Inventories are 24% of sales
- Net fixed assets are 32% of sales
- Accounts payable is 15% of sales
- Accruals are 10% of sales

B.G. Barnes is projecting a sales revenue growth of 13% in the upcoming year. The company currently has 20,000 shares of common stock outstanding and it plans on maintaining its dividend policy of paying out 30% of its net income as dividends. It is currently paying 6% interest on its notes payable ($3,000 note) and 8% on its long-term debt ($17,500 bond). The company has a 40% tax rate.

Based on the above information, assume current year sales are $125,000, calculate the Operating Income on the upcoming year's pro forma income statement?

16. b) Playtime Toys estimates that it will sell 200,000 dolls during the coming year. The beginning inventory is 12,000 dolls; the target ending inventory is 15,000 dolls. Each doll requires two shoes which are purchased from an outside supplier. The beginning inventory of shoes is 20,000; the target ending inventory is 18,000 shoes. Calculate the number of shoes that should be purchased during the year.

16. c) Tidwell Corporation sells a single product for $20 per unit. All sales are on account, with 60% collected in the month of sale and 40% collected in the following month. A schedule of cash collections for January through March of the coming year reveals the following receipts for the period:

	Cash Receipts		
	January	February	March
December receivables	$ 32,000		
From January sales	54,000	$ 36,000	
From February sales		66,000	$ 44,000
From March sales			72,000

Other information includes:

- Inventories are maintained at 30% of the following month's sales.
- Tidwell desires to keep a minimum cash balance of $15,000. Total payments in January are expected to be $106,500, which excludes $12,000 of depreciation expense. Any required borrowings are in multiples of $1,000.
- The December 31 balance sheet for the preceding year revealed a cash balance of $24,900.

Calculate the financing needed in January to maintain the firm's minimum cash balance.

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