

**AC 202 Management Accounting: Midterm Examination Review Sheet
(Monday, March 12, 2018, 09.00-11.00 hrs.)**

Notes:

1. To receive a partial credit for an imperfect answer or result, you must show the process of arriving at the final answer or result. (Remember: I cannot guess what you are thinking, let me know your thought process for at least a partial credit.)
2. *If you are unsure how to understand a question, write down your assumptions regarding the question in the answer sheet.*
3. Abbreviations can be used in the exam, i.e., BWIP, DM, FG.

The exam has 2 parts. Total scores = 100 points (40% of your grade)

Part 1: Cost Classification (24 points)

Part 2: 5 problem-solving questions (76 points)

*** * * Neither journal entry nor T-accounts are tested. * * ***

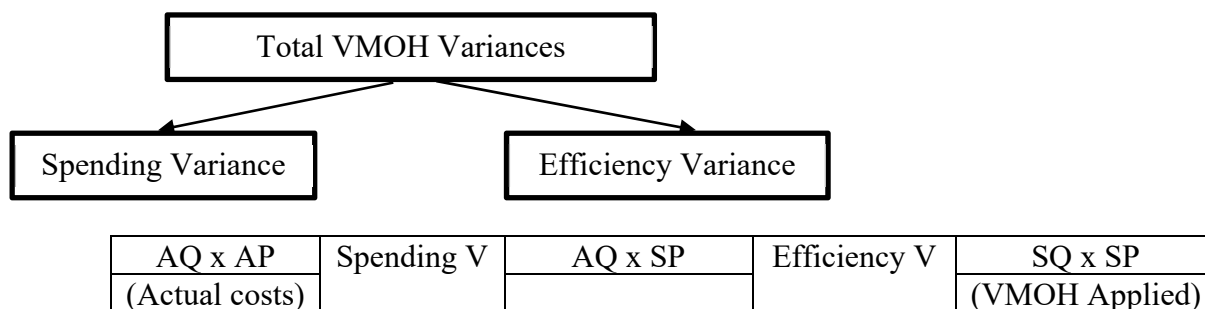
Topic 1: Overview of Managerial Accounting & Cost Concepts

- You should be able to distinguish between manufacturing costs and nonmanufacturing (or period) costs of manufacturing firms.
- Costs of manufacturing firms:
 - Manufacturing costs include DM, DL & MOH costs. Manufacturing costs are regarded as assets when incurred and then become cost of goods sold (expense) when products are sold.
 - Prime cost is a term referring to DM and DL. Conversion cost is a term referring to DL and MOH.
 - Nonmanufacturing costs (or operating expenses) are period costs and are recorded as expenses of the accounting period in which they are incurred.
- For financial accounting purposes, costs are classified as either
 - product costs (or inventoriable costs) → DM, DL & MOH
 - period costs → nonmanufacturing costs
- When we assign costs to the cost objects, we can classify those costs as either direct costs and indirect costs.
 - Direct costs can be easily and conveniently traced to the particular cost object.
 - Indirect costs cannot be traced to a cost object in an economically feasible way.
- When we consider how costs react to changes in the level of activity, we can classify those costs as either variable costs and fixed costs.
 - Fixed cost remains constant, in total, regardless of changes in the level of activity.
 - Variable cost varies, in total, in direct proportion to changes in the level of activity.
- $DM\ used = Beg.\ DM + DM\ purchases - End.\ DM$
- $COGM = Beg.\ WIP + DM\ used + DL + MOH - End.\ WIP$
- $COGS = Beg.\ FG + Cost\ of\ Goods\ Manufactured\ (COGM) - End.\ FG$
- $Gross\ margin = Sales - COGS$
- $Operating\ income = Gross\ margin - operating\ expenses$

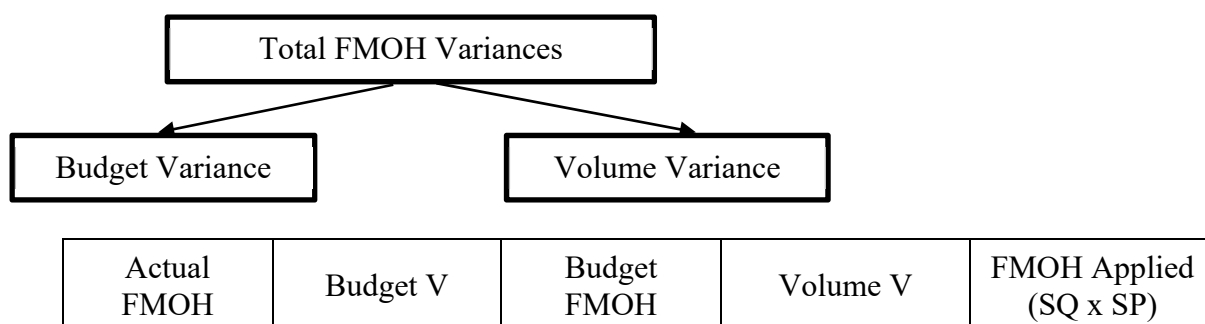
Topic 2: Job Order Costing

- You should be able to calculate the cost of the job (using normal costing and plantwide overhead rate).
 - $Predetermined\ MOH\ rate = Total\ budgeted\ MOH / Total\ budgeted\ allocation\ bases$
 - $MOH\ Applied = Predetermined\ MOH\ rate \times Actual\ allocation\ base\ of\ each\ job$

- VMOH variances:



- FMOH variances:



Part 1: Cost Classification

Classify each of the following costs as either

- direct or indirect costs
- fixed or variable costs with respect to the number of units produced
- product or period costs

Example: ABC Co. manufactures two types of Products, X and Y.

Required: Classify each of the following cost items as:

- Variable or fixed costs** with respect to how the total costs change as the total number of products of each type assembled (or sold) changes.
- Direct or indirect costs** with respect to the total number of products of each type assembled or sold (X or Y).
- Product or period costs**

Transaction	a. Variable or Fixed	b. Direct or Indirect	c. Product or Period
<u>Example:</u> Materials used to produce product X.	V	D	Prod
Wages paid to assembly-line workers (paid on hourly basis). Separate assembly lines are used for each type of product.			
Depreciation on equipment used for quality testing of both products (straight-line method)			
Sales commission paid on unit sold basis (\$1 per unit of X and \$2 per unit of Y)			
Advertising expense (for both products)			

Transaction	a. Variable or Fixed	b. Direct or Indirect	c. Product or Period
Salary of the plant manager			
Salary of the accounting department manager			
Electricity used for the machines at the plant			
Delivery expense (Costs incurred to deliver products to customers, paid on per unit basis. Since the costs are immaterial, it's not cost-beneficial to trace the costs directly to each product.)			
Freight costs of materials shipped from supplier to the plant, paid on distance basis. (Since the costs are immaterial, it's not cost-beneficial to trace the costs directly to each product.)			
Depreciation on the sales office (straight-line method)			
Annual fire-insurance policy cost for the plant.			
Research and development costs of product Y			
Materials used to produce X and Y together. (Since the costs are immaterial, it's not cost-beneficial to trace the costs directly to each product.)			
The costs of key chains incurred to give away to each customer that purchases product X (1 unit of X per 1 key chain)			

Part 2: 5 problem-solving questions

Q.1 Cost Concepts

- a) Compute cost of goods sold
- b) Compute manufacturing overhead costs
- c) Compute cost of goods manufactured
- d) Compute period costs

Q.2 Job Order Costing & ABC (See Ex # 4)

- a) Compute the unit cost of the product using plantwide overhead rate
- b) Compute the unit cost of the product using activity-based costing
- c) Explain why the company should use selected cost driver to allocate costs in question (Hint: explain about cost hierarchy)

Q.3 Process costing (See Ex # 3)

1. Compute physical units.
2. Compute the equivalent units (EU) for direct materials and conversion costs.
3. Compute cost per equivalent unit for direct materials and conversion costs.

Q.4 DM & DL Variances

- Calculate DM price variance and indicate whether it is favorable (F) or unfavorable (U)
- Calculate DM quantity variance and indicate whether it is F or U

- You should be able to explain why the variance in (a) and (b) is F or U
- You should be able to tell about the person who will be responsible for variances

Q.5 MOH Variances → No calculation

There are four types of manufacturing overhead variances: VMOH spending variance, VMOH efficiency variance, FMOH budget variance and FMOH volume variance. Identify the result of the following causes into appropriate MOH variance. Also state that the variance is favorable or unfavorable.

	Causes:	F or U	Name of variance
a)	When the company actually produced more units of product than expected, this would result in →	F	FMOH volume variance
b)	?	?