2020 年 6 月 CFA 一级百题预测

4. Financial Statement Analysis

4.1. The Role of Financial Reporting

4.1.1. 重要知识点

4.1.1.1. Role of financial reporting

- Financial statement analysis definition
  - Use financial reports prepared by companies, combined with other information, to evaluate the past, current, and potential performance and financial position of a company for the purpose of **making investment, credit, and other economic decisions**.
- The role of financial reporting by companies is to **provide information** about a company's performance, financial position, and changes in financial position that is useful to a wide range of users in making economic decisions.

4.1.2. 基础题

Q-1. Providing information about the performance and financial position of companies so that users can make economic decisions best describes the role of:

A. auditing.

B. financial reporting.

C. financial statement analysis.

4.2. Other Information Sources of Financial Statements

4.2.1. 重要知识点

4.2.1.1. Financial notes and supplementary schedules

- Notes and FSs are an integral part of the complete set of financial statements. Since it is important to understand different accounting choices between comparable, sometimes need to make necessary adjustments so that the financial statement data used are more comparable.
- **The notes** provide information that is essential to understanding the information provided in the primary statements, which clarify the explanatory information about every line item (or almost every line item) on the balance sheet and income statement
- **Note disclosures** include information about the following
  - Accounting policies, methods, and estimates;
  - Financial instruments and risks arising from financial instruments;

- Commitments and contingencies;
- Denominated currency;
- Compliance of law & legal proceedings;
- Related-party transactions;
- Subsequent events (i.e., events that occur after the balance sheet date);
- Business acquisitions and disposals;
- Rounded figures & minor discrepancies;
- Operating segments' performance.

4.2.1.2. Management's discussion and analysis (MD&A)

- **General contents (publicly held companies):** nature of the business, past results, material uncertainty and future outlook.
- **Characteristic:** MD&A is a good for understanding information in the financial statements. In particular, the forward-looking disclosures in an MD&A, can be useful in projecting a company's future performance.
- Those **content elements** include
  - The nature of the business;
  - Management's objectives and strategies;
  - The company's significant resources, risks, and relationships;
  - Results of operations;
  - Critical performance measures.

4.2.1.3. SEC requires listed companies to provide an MD&A and specifies the content.

- Form S-1
  - Registration statement filed prior to initial public offerings.
- Form 10-K
  - Financial statements reported annually.
- Form 10-Q
  - Financial statements reported quarterly.
- Form DEF-14A
  - Proxy statements.
- Form 8-K
  - Major events as acquisitions or disposals of corporate assets, corporate governance and management changes.
- Form 144
  - Notice of the proposed sale of restricted securities or securities held by an affiliate of the issuer.
- Forms 3,4,5
  - Report beneficial ownership of securities.

4.2.1.4. Other sources of information

- **Proxy statements**
  - Management compensation; stock performance; potential conflict of interests;
  - Matters that are to be put to a vote at the company's annual (or special) meeting of shareholders.
- **Interim reports**
  - Provided by the company either semiannually or quarterly, depending on the applicable regulatory requirements.
  - Interim reports generally present the four basic financial statements and condensed notes but are not audited.
  - These interim reports provide updated information on a company's performance and financial position since the last annual period.
- **Earnings announcements**
  - Followed by a conference call in which the company's senior executives
  - Describe the company's performance and answer questions posed by conference call participants.
- **External information**
  - Economy, the industry, the company, and peer (comparable) companies;
  - Helpful in assessing the company's future.

4.2.2. 基础题

Q-2. Compared with the management discussion and analysis (MD&A), notes to the financial tatements are the most appropriate source for:

A. a comprehensive description of all of the entity's accounting policy choices.

B. information on capital expenditures and how they support the entity's strategic direction.

C. aspects of accounting policy choices most important to understanding the financial statements.

Q-3. Assume U.S. GAAP applies unless otherwise noted. An analyst would find information about nature of the business, past results, material uncertainty and future outlook in:

A. notes to the financial statements.

B. management discussion and analysis.

C. financial statements.

Q-4. Which of the following reports is least likely to be filed with the US SEC?

A. Annual report

B. Form 10- K

C. Proxy statement

4.3. Audits of Financial Statements

4.3.1. 重要知识点

4.3.1.1. Audits of financial statements

- **定义：**Audit refers to the process that an independent accounting firm examined the company's financial statements to ensure their accordance with specified auditing standards.
- **理解：**Audits provide **reasonable assurance** that the financial statements are fairly presented, meaning that there is a high degree of probability that they are free of material error, fraud or illegal acts. Also, the auditors must also express an opinion on the company's internal control systems.
- Audit report 有四种类型分别是: unqualified opinion, qualified opinion, adverse opinion, disclaimer of opinion
  - **Unqualified (clean) opinion:** the financial statements are compliance with applicable accounting standards;
  - **Qualified opinion:** the statements contains several exceptions or limitations from accounting principles and the explanations of these deviations will be presented for users to determine their importance;
  - **Adverse opinion:** the statements are unfairly presented and contains material deviations from accounting standards;
  - **Disclaimer of opinion:** the limitations of financial statements hinder the auditor's ability to express an opinion.

4.3.2. 基础题

Q-5. Assume U.S. GAAP applies unless otherwise noted. Which of the following statements best describes the level of accuracy provided by a standard audit report?

A. There is reasonable assurance that the financial statements contain no errors.

B. There is full assurance that the financial statements are free of material errors.

C. There is reasonable assurance that the financial statements are fairly presented.

Q-6. In the audit report, an additional paragraph that explains an exception to an accounting standard is best described as a(n):

A. adverse opinion.

B. qualified opinion.

C. disclaimer of opinion.

4.4. Steps in the Financial Statement Analysis Framework

4.4.1. 重要知识点

4.4.1.1. Steps in the financial statement analysis framework: 6 个步骤 （目标、收集、处理、分析、结论、回顾）

Phase	Sources of info	Output
Articulate the purpose and context of the analysis	● Nature ● Needs & concern ● Guidelines	● Statement of purposes and objectives ● A list of specific questions ● Timetable & budgeted resources
Collect data	● Financial data ● Discussion ● Visits	● Organized F/S ● Financial data tables ● Complete questionnaires
Process data	● Data from previous phase	● Adjusted F/S ● Common–size statements ● Ratios & Forecasts
Analyze/interpret the processed data	● Input data ● Processed data	● Analytical results
Conclusions & recommendations	● Analytical results	● Analytical reports ● Recommendation
Follow up	● Periodically repeating	● Updated reports & recommendations

4.4.2. 基础题

Q-7. During the process data phase of financial statement analysis, an analyst will most likely develop a:

A. statement of purpose.

B. common- size balance sheet.

C. statement of cash flows.

4.5. The Flow of Information in an Accounting System

4.5.1. 重要知识点

4.5.1.1. 报表制作几个步骤（从日记账到报表）

- General Journal: record all the transactions, classifying them into related account **in the order of their dates** and adjusting the specific amount (日记账);
- General ledger: lists all journal entries by their dates and sorts the entries in the general journal **by account** (分类账);
- Initial trial balance/adjusted trial balance: prepared at the end of the accounting period shows the amount in each account; records adjustment at the end of the period that changes the amount in the accounts listed in initial trial balance;
- Financial statements: the account balances presented in adjusted trial balance are then presented in financial statements.

4.5.2. 基础题

Q-8. The collection of all business transactions sorted by account in an accounting system is referred to as:

A. a trial balance.

B. a general ledger.

C. a general journal.

4.6. Related Issues in Financial Statements

4.6.1. 重要知识点

4.6.1.1. 四个报表之间的关系（需要新加知识点）

Financial position	Financial performance	Change in financial position
The balanc e sheet	The income statement	The cash flow statement
Assets = liabilities + owner's equity	• Revenue • Expenses ↓ Net income	• Operating cash flows • Investing cash flows • Financing cash flows ↓ Net cash inflow or outflow for the financial year

The statement of changes in owner’s equity

4.6.1.2. Financial statement elements

- **Financial statement elements are the major classifications of assets, liabilities, owners' equity, revenues, and expenses.**
  - **Assets** are resources **controlled by an enterprise** as a result of **past events** and from which **future economic benefits** to the enterprise are expected to flow. Examples: cash, inventory, receivables, etc.
  - **Liabilities** are present **obligations** of an enterprise **arising from past events**, the settlement of which is expected to result in **an outflow of resources** of a company. Examples: accounts payable, financial liabilities, etc.
  - **Owners' equity** is the excess of assets over liabilities; the **residual interest** of shareholders in the asset of an entity after deducting the entity’s liability. Owners' equity includes: capital, retained earnings, other comprehensive income, etc.
  - **Income is** the increases in economic benefits in the form of inflows or enhancements of assets, or decreases of liabilities that result in an increase in equity (other than increases resulting from contributions by owners).
  - **Expenses are** outflows of economic resources or increases in liabilities that result in decreases in equity (other than decreases because of distributions

to owners). Exapmle: cost of goods sold (COGS), selling, general, and administrative expenses (SG&A), etc.

Elements	Definition		Relationship
Assets	✧ Current assets ✧ Non–current assets(Long-lived assets)	The Balance sheet	Assets = liabilities + owner's equity Owner's equity = Contributed capital +Beginning retained earning +Net income (current year) -Dividend (current year) +Other comprehensive income
Liabilities	✧ Current liabilities ✧ Non–current liabilities (Long-term liabilities)		
Owner's equity	✧ Capital ✧ Additional paid-in capital ✧ Retained earnings ✧ Other comprehensive income		
Revenue	✧ Sales ✧ Investment income ✧ Gains	The income statement	Revenue – expenses = net income (current year)
Expenses	✧ Cost of good sold ✧ Other expense ✧ Losses		

4.6.2. 基础题

Q-9. Assume U.S. GAAP applies unless otherwise noted. Which of the following is *least likely* to be classified as a financial statement element?

A. Revenue.

B. Liability.

C. Net income.

Q-10. Which of the following best describes a component of the income statement?

A. Amounts that a company owes its vendors for purchases of goods and services

B. Outflows or depletions of assets in the course of a business's activities

C. Obligations from past events that are expected to result in an outflow of economic benefits

4.7. Accounting Equation

4.7.1. 重要知识点

4.7.1.1. Accounting equation 掌握公式：

- Assets = Liabilities + Owners' equity
- Assets = Liabilities + Contributed Capital + Ending retained Earnings + accumulated OCI
- Assets = Liabilities + Contributed Capital + Beginning Retained Earnings + Revenue – Expenses – Dividends + accumulated OCI

4.7.2. 基础题

Q-11. At the start of a month, a retailer paid $10,000 in cash for candies. He sold $4,000 worth of candies for $6,000 during the month. The *most likely* effect of these transactions on the retailer's accounting equation for the month is that assets will:

A. be unchanged.

B. decrease by $4,000.

C. increase by $2,000.

Q-12. For Argo Company, at the beginning of its current financial year, its capital contributed by owners has a balance of $12,000, and its retained earnings has a balance of $5,000.

During the financial year, the following events occur in Argo:

Net income earned	$5,000
Interest paid on debt	$800
Realized gain from cash flow hedging derivatives	$1,000
Repayment of long-term debt	$1,500
Proceeds from shares issued	$1,200
Dividends paid	$500
Taxes paid	$600

So at the end o f the financial year, the owners' equity is closest to:

A. 20,400

B. 21,900

C. 22,700

Q-13. An analyst has compiled the following information on a company:

	£ '000s
Revenues for the year	24,000

Total expenses for the year	20,300
Total current assets at year-end	18,400
Total non-current assets at year-end	25,500
Investments	700
Share capital at the beginning of the year	4,000
Proceeds from shares issued during the year	1,000
Retained earnings at the beginning of the year	17,700
Total liabilities at year-end	18,800

The amount of dividends declared (£ '000s) during the year is closest to:

A. 1,150.

B. 900.

C. 1,300.

Q-14. What is the *most likely* effect on the accounting equation when a company purchases office equipment with cash?

A. Assets increase and liabilities increase

B. Assets decrease and owners' equity decreases

C. No effect on the accounting equation

Q-15. The following information is available for a company ($):

December 31, 2011:	
Total assets	100,000
Net income for the year	4,000
Dividends paid	0
Assets are equally financed with debt and equity	
50% of the equity comes from contributed capital	
December 31, 2012	
Total assets	92,000
Net income (loss) for the year	(3,000)
No new debt or equity issued or repurchased	

In 2012, the company most likely:

A. paid a dividend of $1,000.

B. did not pay a dividend because it incurred a loss.

C. paid a dividend of $5,000.

4.8. Accruals and Other Adjustments in Preparing Financial Statements

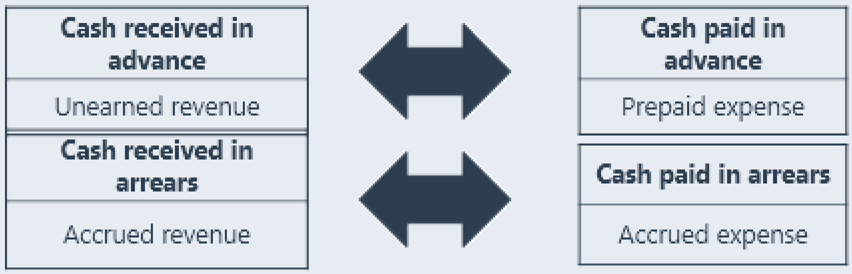
4.8.1. 重要知识点

4.8.1.1. 掌握以下几种权责发生制 (accrual basis):

- 权责发生制是以权利和责任的发生来决定收入和费用归属期的一项原则。

4.8.1.2. 收入应与为取得该收入所发生的费用、成本相匹配，以正确计算在该会计期间所获得的净损益。

4.8.1.3. 除了基本概念以外还需要掌握几个名词



- **Unearned revenue 或 deferred revenue (liability):** The firm receives cash before it provides a good or service to customers
- **Unbilled revenue 或 accrued revenue (asset):** If the revenue is earned, and it is just that the billing debt has not raised the bill, then you should take up the revenue under accrued receivables and for most purposes, they should be the same as accounts receivables.(未开票前，称为 unbilled；开票后，从 unbilled 转为 A/R)。
- **Prepaid expenses (asset):** The firm pays cash ahead of time for unanticipated expense.
- **Accrued expenses (liability):** An expense that is incurred, but not yet paid for, during a given accounting period.

4.8.2. 基础题

Q-16. Before adjusting accounting entries, a liability and a cash has been occurred in the balance sheet. This process is *most likely* to be:

A. an unearned revenue.

B. a prepaid expense.

C. an accrued expense.

Q-17. When, at the end of an accounting period, a revenue has been recognized in the financial statements but no billing has occurred and no cash has been received, the accrual is to:

A. unbilled (accrued) revenue, an asset.

B. deferred revenue, an asset.

C. unbilled (accrued) revenue, a liability.

Q-18. In accrual accounting, if an adjusting entry results in the reduction of an asset and the recording of an expense, the originating entry recorded was *most likely* a(n):

A. accrued expense.

B. deferred revenue.

C. prepaid expense.

Q-19. Which of the following statements is most accurate?

A. Accrued revenue arises when a company receives cash prior to earning the revenue.

B. Accrued expenses arise when a company incurs expenses that have not yet been paid as of the end of the accounting period.

C. A valuation adjustment for an asset converts its historical cost to its depreciated value.

4.9. IASB Conceptual Framework

4.9.1. 重要知识点

4.9.1.1. Objectives

- **The objective to provide financial information** the provision of financial information that is useful to current and potential providers of resources in making decisions.

4.9.1.2. Qualitative characteristics of financial statement under IASB

- **Fundamental qualitative characteristics**
  - **Relevance: Information is relevant if it would potentially affect or make a difference in user's decisions.**

- Predictive value. Useful in making forecast;
- Confirmatory value. Useful to evaluate past decisions or forecasts;
- Materiality. Omission or misstatement of information could influence users' decisions. Materiality is a function of the nature and/or magnitude of the information.

- **Faithful representation: Information is relevant if it would potentially affect or make a difference in user's decisions.**
  - Complete: all information necessary is depicted.
  - Neutral: no bias.
  - Free from error: no errors of commissions or omission in the description of the economic phenomenon.

- **Four enchancing qualitative characteristics**
  - **Comparability** requires the measurement and report of financial information are similar in different firms. Comparability helps analysts identify and analyze the real economic differences across companies and time periods.
  - **Verifiability** means that different knowledgeable and independent observers would agree that the information presented faithfully represents the economic phenomena it purports to represent.
  - **Timeliness** means timely information is available to decision makers prior to their decisions.
  - **Understandability** means users should be able to readily understand the information. Clear and concise presentation of information enhances understandability.

4.9.1.3. Constraints on financial statement

- **Relevant vs. timely**: There is a trade off between relevant and timely.
- **Cost vs. benefits:** The benefit users gain from the information should be greater than the cost of presenting it.
- **Non-quantifiable:** Non-quantifiable information (reputation, brand loyalty, capacity for innovation, etc.) cannot be captured directly in financial statements.

4.9.1.4. General features for preparing financial statements

- Fair presentation;
- Going concern;
- Accrual basis;
- Materiality and aggregation;
- No offsetting;
- Frequency of reporting;
- Comparative information;

- Consistency of presentation.

4.9.1.5. U.S. GAAP & IFRS

- Standard-setting bodies: make the rules, such as FASB——U.S. GAAP; IASB——IFRS.
- Regulatory authorities: enforce the rules
  - SEC——美国
  - FSA——英国
- 国际组织
  - International Organization of Securities Commissions (IOSCO)
- Barriers of universally accept standard (两个准则制定机构；三个监管机构；business groups 的施压)。

4.9.1.6. Barriers to coherent of financial reporting framework

- **Valuation**: Measurement bases for valuation that require little judgment, such as historical cost, may be less relevant than a basis like fair value that requires more judgment.
- **Standard-setting approach**
  - **Principles-based:** require the preparations of financial reports and auditors to exercise considerable judgment in financial reporting — IFRS.
  - **Rules-based:** establishes specific rules for each element or transaction — U.S. GAAP.
  - The common conceptual framework is moving toward an **objectives-oriented approach.**

4.9.2. 基础题

Q-20. According to the International Accounting Standards Board's Conceptual Framework for Financial Reporting, the two fundamental qualitative characteristics that make financial information useful are best described as:

A. timeliness and accrual accounting.

B. understandability and verifiability.

C. relevance and faithful representation.

Q-21. A core objective of the International Organization of Securities Commissions is to:

A. eliminate systematic risk.

B. protect users of financial statements.

C. ensure that markets are fair, efficient, and transparent.

Q-22. Under the International Accounting Standards Board's (IASB's) Conceptual Framework, one of the qualitative characteristics of useful financial information is that different knowledgeable users would agree that the information is a faithful representation of the economic events that it is intended to represent. This characteristic is best described as:

A. comparability.

B. verifiability.

C. understandability.

Q-23. Which of the following is *least likely* to be an acceptable approach for accounting standard setting bodies to use when developing accounting standards?

A. Objectives-oriented

B. Rules-based

C. Revenue/expense-based

4.10. Revenue Recognize Criteria: General Principle

4.10.1. 重要知识点

4.10.1.1. Revenues (sales)

- Generated from selling goods or service in routine business activities.
- **Net Revenue** = Revenue - adjustments (e.g., cash discounts, volume discounts, or estimated returns);

4.10.1.2. Expenses are outflows of economic resources or increases in liabilities that result in decreases in equity (other than decreases because of distribution to owners); reductions in net assets associated with the creation of revenues.

- Expenses are grouped together by their nature or function
  - By nature: e.g., depreciation expenses are displayed in one account regardless of whether they come from manufacturing or administration.
  - By Function: e.g., cost of goods sold is composed of all manufacturing costs, such as raw materials, depreciation, labor, etc.

4.10.1.3. Gross profit is the amount of revenue available after subtracting the costs of delivering goods or services.

- **Operating profit or operating income:** operating profit results from deducting operating expenses such as selling, general, administer active, and research and development expenses from gross profit.

4.10.1.4. The standard describes the application of five steps in recognizing revenue

- Identify the contract(s) with a customer;
- Identify the separate or distinct performance obligations in the contract;
- Determine the transaction price;
- Allocate the transaction price to the performance obligations in the contract;
- Recognize revenue when (or as) the entity satisfies a performance obligation.

4.10.2. 基础题

Q-24. An example of an expense classification by function is:

A. tax expense.

B. interest expense.

C. cost of goods sold.

Q-25. The following information for the current year is available for a company that prepares its financial statements in accordance with U.S. GAAP.

	in $'000s
Revenue	14,000
Cost of goods sold	8,400
Other operating expenses	1,000
Restructuring costs	500
Interest expense	400

The company's operating profit (in $000s) is closest to:

A. 3,700.

B. 4,100.

C. 4,600.

Q-26. Net revenue *most likely* refers to revenue minus:

A. volume discounts and estimated returns.

B. revenues attributable to non-controlling interests.

C. estimates of warranty expense.

Q-27. In applying the principles of expense recognition, companies should:

A. record any estimates of uncollectible amounts as a direct reduction of revenues.

B. exclude costs of intangible assets with indefinite useful lives.

C. recognize credit losses on customer receivables when defaults occur.

Q-28. The converged revenue recognition standards (issued by the International Accounting Standards Board and the Financial Accounting Standards Board in May 2014) are best described as differing from pre- converged US GAAP in that they:

A. align the recognition of revenue with the customer's fulfillment of payment obligations.

B. provide extensive additional guidance for specific industries and transactions.

C. provide a principles- based approach applicable to many types of revenue-generating activities.

4.11. Non-Recurring Items

4.11.1. 重要知识点

4.11.1.1. Non-recurring items 分为三种

- **Above the line-unusual or infrequent items (nonrecurring items)**
  - Unusual in nature or infrequent in occurrence. Not both.
  - Reported "**above the line**" and presented on a **pretax basis**.
  - Example
    - G/L from the sale of assets or part of a business;
    - Impairments;
    - Write-offs, write-downs, and restructuring costs.
- **Below the line**
  - Discontinued operations (presented on net of tax).
    - When a company disposes of or establishes a plan to dispose of one of its component operations and will have no further involvement in the operation, the income statement reports separately the effect of this disposal as a "discontinued" operation under both IFRS and US GAAP.
      - Reported separately in the income statement
      - Net of tax, after income from continuing operations
      - On the measurement date, the company will accrue any estimated loss during the phase-out period and any estimated loss on the sale of the business. Any expected gain on the disposal cannot be reported until after the sale is completed.

4.11.1.2. Accounting changes: 包括 changes in accounting principles, changes in accounting estimates.

- **Changes in accounting principles 需要追溯调整**，即 retrospective, 放在 R/E beginning（在美国准则下这一条已经不再显示了，现在来自于这里的变动全部直接调整期初留存收益）。
- **Changes in accounting estimates** 一般是由于有了新的信息所导致的估计调整。**不需要追溯调整**，只考虑以后，即 prospective.
- **Error adjustment is recorded in prior period adjustment,也要求追溯调整。**

4.11.2. 基础题

Q-29. Under US GAAP, a company planning to change one of its accounting policies has to adjust the financial statements *most likely* in a manner:

A. retrospective.

B. prospective.

C. cumulative.

Q-30. Which of the following statement is *least likely* a non-operating item for a manufacturing company?

A. Receiving dividends from investments classified as available-for-sale.

B. Paying interest on subordinated debentures.

C. Recording bad debt expense for accounts receivables.

4.12. Basic EPS and Dilutive EPS

4.12.1. 重要知识点

4.12.1.1. EPS 掌握计算：

- **公式**
  - **Basic EPS**

$$\text{Basic EPS}=\frac{\text{Net income-preferred dividednds}}{\text{Weighted average number of common shares outstanding}}$$

  - **Diluted EPS**

$$\text{Dilutive EPS}=\frac{\text{Adjusted income available for common shares}}{\text{Weighted avg. common \& potential common shares outstanding}}$$

$$=\frac{\begin{bmatrix}\text{NI}\\ \text{- div}_{\text{preferred}}\end{bmatrix}+\left[\text{div}_{\substack{\text{convertible}\\ \text{preferred}}}\right]+\left[\text{interest}_{\substack{\text{convertible}\\ \text{debt}}}\right](1-t)}{WACSO+\left[\text{shares}_{\substack{\text{conversion of}\\ \text{conv. pfd. shares}}}\right]+\left[\text{shares}_{\substack{\text{conversion of}\\ \text{conv. debt}}}\right]+\left[\text{shares}_{\substack{\text{issuable from}\\ \text{stock opt.}}}\right]}$$

◆ 在有 stock option 时，如果平均的市场价格>执行价 X，则用 treasury stock method。

➢ **计算 Diluted EPS 步骤**

- Firstly, calculate basic EPS
- Then, to identify dilutive securities
- In the end, to calculate diluted EPS
- Diluted EPS is no higher than basic EPS

➢ **关键**

- 考试中经常出现的是 weighted average number of common shares outstanding，要记得 stock dividend 和 stock split 要追溯处理，stock new issue 和 repurchase 只要时间加权

- Dilutive EPS 的计算，就是 convertible bond，convertible preferred stock 和 stock option，warrant 是否会让 basic EPS 稀释。对于各自可稀释性债券分子，分母需要考虑什么，一定要记熟

- 如果公司有 option 或者 warrant 的情况下，计算的 Dilutive EPS 用的是 treasury stock method，如果在考试中遇到这个称法不要觉得陌生，其实不影响计算的过程。事实上，treasury stock method 的意思是假设公司使用收入的期权实行费用来回购股票，抵消一部分稀释。 当期权执行价格低于股票市场平均价格，该期权是稀释的。

◆ 注意，在计算可转债带来的稀释时，不要忽略税盾。

◆ **Treasury stock 投票权问题** :treasury stock has no voting rights and does not receive dividends.

4.12.2. 基础题

Q-31. For 2009, Flamingo Products had net income of $1,000,000. At 1 January 2009, there were 1,000,000 shares outstanding. On 1 July 2009, the company issued 100,000 new shares for $20 per share. The company paid $200,000 in dividends to common shareholders. What is Flamingo's basic earnings per share for 2009?

A. $0.80.

B. $0.91.

C. $0.95.

Q-32. Assume U.S. GAAP applies unless otherwise noted. An analyst gathered the following information about a company:

Shares of common stock	1,000,000
Net income for the year	$1,500,000
Par value of convertible bonds with a 4% coupon rate	$10,000,000
Par value of cumulative preferred stock with a 7% dividend rate	$2,000,000
Tax rate	30%

The bonds were issued at par and can be converted into 300,000 common shares. All securities were outstanding for the entire year. Dilutive earnings per share for the company are *closest* to:

A. $1.05.

B. $1.26.

C. $1.36.

Q-33. An analyst collected data about a company as follows:

Net income	$1,000,000.00
Debt outstanding with a coupon rate of 4%	$5,000,000.00
Preferred stocks with dividend rate of 4%	$1,000,000.00
Tax rate	35%
Average weighted number of shares issued	500,000

The preferred stock can be converted into 10,000 common stocks, while the debt is not convertible. The dilutive earnings per share is *closest* to:

A. 1.92.

B. 1.96.

C. 2.01.

Q-34. Cell Services Inc. (CSI) had 1,000,000 average shares outstanding during all of 2009. During 2009, CSI also had 10,000 options outstanding with exercise prices of $10 each. The average stock price of CSI during 2009 was $15. For purposes of computing diluted earnings per share, how many shares would be used in the denominator?

A. 1,003,333.

B. 1,006,667.

C. 1,010,000.

Q-35. An analyst gathered the following information about a company:

- 1,000,000 common shares outstanding from the beginning of the year.
- Earnings of $1,250,000.
- 1,000 preferred stocks, which pay fixed dividend of 7% each year, and its face value is $1000 for each preferred stock
- For preferred stocks, 700 preferred stocks can be converted into 25 shares each, and these stocks are outstanding as of the beginning of the year.
- The tax rate is 40%.

The company's diluted EPS is closest to:

A. $1.21.

B. $1.18.

C. $1.25.

Q-36. In order to compute the diluted EPS for the company, which one of the security will least likely to influence the numerator?

A. Convertible debt

B. Convertible preferred stocks

C. Stock options

4.13. Comprehensive Income

4.13.1. 重要知识点

Comprehensive income 的基本了解

4.13.1.1. 全面综合收益 comprehensive Income: <u>all changes in equity except for owner</u>

contributions and distributions, 单列在 NI 后面的，不放在 I/S 中。

4.13.1.2. CI=NI + other comprehensive income（在股东权益变动表中也包含这些项目, IFRS 下没有 CI，但有 OCI）。

4.13.1.3. Other comprehensive income 4+1 项内容

- Foreign currency translation adjustment on a foreign subsidiary;
- Unrealized G/L on derivatives contracts accounted for as cash flow hedges;
- Unrealized G/L on available for sale (FVTOCI) securities;
- Certain costs of a company's defined benefit post-retirement plans that are not recognized in the current period.
- (Solely for IFRS) changes in the value in excess of historical cost of long lived assets measured using the revaluation model rather than the cost model.

4.13.1.4. Accumulated other comprehensive income aggregates past and current OCI 并显示在 B/S 中的 equity 中（IFRS 没有明确规定在 B/S 中列出 Accumulated other comprehensive income 的数额）。

4.13.1.5. The statement of changes in equity

- A summary of all transactions within the equity accounts

4.13.2. 基础题

Q-37. An analyst gathered following information after adjustments at the end of a fiscal year about a listed company.

Available-for-sale securities	$130,000
Unearned revenues	$75,000
Common stock, $1 par value	$400,000
Preferred stock, $100 par value	$140,000
Additional paid in capital	50,000
Retained earnings	$847,000
Accumulated other comprehensive income	$38,000

The historical cost of the marketable securities was $105,000. The company's total shareholder's equity is *closest* to:

A. $1,475,000.

B. $1,584,000.

C. $1,659,000.

Q-38. Assume U.S. GAAP applies unless otherwise noted. Where are the unrealized gains and losses arising from changes in the market value of available-for-sale securities reported under U.S. GAAP and IFRS? They are reported in:

	U.S. GAAP	**IFRS**
A.	equity	equity
B.	equity	income statement
C.	income statement	equity

Q-39. The following information is from a company's accounting records:

	€ millions
Revenues for the year	25,000
Total expenses for the year	20,000
Unrealized Gains from available-for-sale securities	2,950
Loss on foreign currency translation adjustments on a foreign subsidiary	650
Dividends paid	1,000

The company's total comprehensive income (in € millions) is *closest* to:

A. 2,300.

B. 6,300.

C. 7,300.

Q-40. Other comprehensive income is *least likely* to include gains or losses on:

A. the sale or disposal of discontinued operations.

B. the translation of foreign currency–denominated subsidiary financial statements.

C. derivative contracts accounted for as hedges.

Q-41. The following data are available on a company for the current year:

Metric	£ thousands
Comprehensive income	246,000
Dividends paid	60,000
Ending retained earnings	821,000
Opening retained earnings	580,000

The company will most likely report other comprehensive income (OCI) (in £ thousands) as a:

A. loss of 55,000.

B. gain of 186,000.

C. gain of 301,000.

4.14. Understanding Balance Sheet

4.14.1. 重要知识点

4.14.1.1. 掌握 balance sheet 里面的知识点：

- **Assets**
  - Provide **probable future economic benefits controlled** by an entity as a **result of previous transactions**.
  - Current and Non-current assets (Long-lived assets)
- **Liabilities**
  - Are **obligations** owed by an entity from **previous transactions** that are expected to result in an **outflow of economic benefits in the future**.
  - Current and non-current liabilities (long-term liabilities).
- **Stockholders' equity**
  - Residual interest in assets that remains after subtracting a firm's liabilities

4.14.1.2. Uses and limitations of the balance sheet in financial analysis.

- The balance sheet discloses what an entity owns(or controls), what it owes, and what the owners' claim at the specific point of time.
  - Liquidity is the company's ability to meet its short-term commitment.
  - Solvency refers to a company's ability to meet its financial obligations over the longer term.

4.14.1.3. Shareholders' equity:

Capital	Common stock, preferred stock
Additional paid-in-capital	Capital in excess of par i.e. premium
Treasury stock	✧ Stock has been reacquired by the issuing firm but not yet retired ✧ No voting rights, no dividend
Retained earnings	✧ Net Income-dividend
Accumulated other comprehensive income	✧ Foreign currency translation adjustment on a foreign subsidiary ✧ Unrealized G/L on derivatives contracts accounted for as cash flow hedges ✧ Unrealized G/L on available for sale securities ✧ Certain costs of a company's defined benefit

	post-retirement plans that are not recognized in the current period ✧ (Solely for IFRS) changes in the value in excess of historical cost of long lived assects measured using the revaluation model rather than the cost model.
Minority interest (MI)	✧ Group accounting

4.14.2. 基础题

Q-42. Resources controlled by a company as a result of past events are:

A. equity.

B. assets.

C. liabilities.

Q-43. Which of the following statements about balance sheets is most accurate? For balance sheets prepared under:

A. IFRS, a classified balance sheet must present current assets before non-current assets.

B. US GAAP, intangibles must be valued at historical cost.

C. IFRS, a commercial real estate company should use a liquidity based presentation.

Q-44. Which of the following statements is most accurate?

A. A classified balance sheet arises when in an auditor's opinion the financial statements materially depart from accounting standards and are not presented fairly.

B. Non-controlling interest on the balance sheet represents a position the company owns in other companies.

C. Treasury stock is non-voting and receives no dividends.

Q-45. Under IFRS which of the following balance sheet presentation formats is most acceptable? Classifying assets and liabilities:

A. into operating, investing, and financing categories.

B. as monetary vs. non-monetary.

C. in liquidity order.

4.15. Accounting Treatment to Marketable Securities

4.15.1. 重要知识点

金融资产和负债的计量

4.15.1.1. 判断证券所属的种类，held-to-maturity, trading securities 还是 available-to-sale, 并了解这三种证券不同的 accounting treatment（考试常考）：

Category	Measurement	Unrealized/realized gains or losses
Held-to-maturity (amortized cost)	Amortized cost	Unrealized: not reported Realized: reported in I/S
Trading securities (FVTPL)	Fair value	Unrealized: reported in I/S Realized: reported in I/S
Available-to-sale (FVTOCI)	Fair value	Unrealized: reported in equity (OCI) Realized: reported in I/S

- Dividend and interest income and realized gains and losses are recognized in the income statement for all three classifications of securities.

4.15.1.2. 三种 marketable securities 在 U.S.GAAP 与 IFRS 下基本一致：对于 Realized gain/loss 在 I/S 中确认；对于 AFS，Unrealized G/L 在 OCI 中确认；对于 trading，Unrealized G/L 在 I/S 中确认。两者唯一的差别是，对于 Debt AFS，在 IFRS 下，对于汇率变化的影响在 I/S 中确认；在 GAAP 下，对于汇率变化的影响全部在 OCI 中确认。

4.15.2. 基础题

Q-46. Which of the following is the least appropriate accounting treatment for marketable securities under IAS No. 39?

	Category	Measurement Method	Realized Gains &Losses Reported In
A.	Trading	Fair Value	Income Statement
B.	Available for sale	Fair Value	Equity
C.	Held to Maturity	Amortized Cost	Income Statement

Q-47. The following information is from a company's investment portfolio:

Investment Classification	Held-to-maturity
Market value, 31 Dec 2009	$ 17,000
Cost/Amortized cost 31 Dec 2009	22,000
Market value, 31 Dec 2010	10,000
Cost/Amortized cost 31 Dec 2010	20,000

If the investment is reclassified as available-for-sale as of 31 December 2010, the carrying value of the company's investment portfolio reported on the balance sheet would *most likely*:

A. remain the same.

B. decrease by $10,000.

C. decrease by $12,000.

Q-48. The realized gain of available-for-sales should be calculated in:

A. income statement.

B. equity.

C. balance sheet.

Q-49. A company issued bonds in 2012 that mature in 2022. The measurement basis that will most likely be used on the 2012 balance sheet for the bonds is:

A. amortized cost.

B. market value.

C. Historical cost.

4.16. Calculation of Bad Debt

4.16.1. 重要知识点

4.16.1.1. 掌握 bad debt 的计算：

Beginning balance allowance

\+ Bad expenses

\- write-offs of bad debt allowance

= Ending balance allowance

- Bad debt 会增加 allowance for doubtful accounts（contra-assets accounts）
- Bad debt 注销会减少 gross receivable and allowance account

4.16.2. 基础题

Q-50. Based on the above information about a company's trade receivables, the bad debt expense (in millions) for 2014 is closest to:

(£ millions)	2014	2013
Accounts receivables, gross	6,620	4,840
Allowance for doubtful accounts	92	56

Write-offs during the year	84	42

A. £36.

B. £84.

C. £120.

4.17. Classification of Different Activities in Cash Flow Statement

4.17.1. 重要知识点

理解各种 activities 的区分：

4.17.1.1. 三种 activities

- **Operating activities** 和**每天的运营**相关的现金流的流进流出
- **Investing activities** 和由于**投资**引起的购买或出售相关
- **Financing activities** 包含长期借钱，还钱，发新股，回购，分红（不包括付息），但是对于金融公司，这些都属于 operating activities

Item	U.S. GAAP	IFRS
Interest received	CFO	CFO or <u>CFI</u>
Interest paid	CFO	<u>CFO</u> or CFF
Dividend received	CFO	CFO or <u>CFI</u>
Dividend paid	CFF	CFO or <u>CFF</u>
Taxes paid	CFO	<u>CFO</u>, CFI or CFF

4.17.1.2. 特别注意公司的主营业务和投资产品的主要性质

- 如果是银行，存款和贷款就是 operating activities，因为本身就是银行的主营业务
- 如果投资的产品持有期很短，高流动性，或者本身就是以交易为目的，就不考虑在 Investing activities 当中

4.17.2. 基础题

Q-51. Assume U.S. GAAP applies unless otherwise noted. The sale of a building for cash would be classified as what type of activity on the cash flow statement?

A. Operating.

B. Investing.

C. Financing.

Q-52. A conversion of a face value $1 million convertible bond for $1 million of common stock would most likely be:

A. reported as a $1 million investing cash inflow and outflow.

B. reported as a $1 million financing cash outflow and inflow.

C. reported as supplementary information to the cash flow statement.

Q-53. Purchasing other companies' long-term bonds should be classified as:

A. operating activities.

B. investing activities.

C. financing activities.

Q-54. In 2011, a software company recorded unearned revenue related to a software license that it will recognize as revenue during 2012. Ignoring income taxes, this recognition of the software revenue will *most likely* have which of the following effects on cash from operations in 2012?

A. No effect

B. A decrease

C. An increase

Q-55. Assume GAAP applied to both companies. All else equal, company A pays more interest and less common dividends than company B. Company B is *most likely* to have earnings per share (EPS) and cash flow from financing (CFF) and that are:

	EPS	CFF
A.	Higher	The same
B.	The same	Lower
C.	Higher	Lower

Q-56. In the statement of cash flows, interest paid by a company is most likely included in:

A. either the operating or financing section under US GAAP.

B. either the operating or financing section under IFRS.

C. only the financing section under both IFRS and US GAAP.

4.18. Calculation of CFO: Direct Method and Indirect Method

4.18.1. 重要知识点

CFO 掌握概念及公式：

4.18.1.1. CFO 计算方式：直接法和间接法，熟练掌握 2 种方法（公式)

4.18.1.2. Both IFRS and US GAAP 都鼓励使用直接法，但都可以使用间接法。在 US GAAP 下，直接法下必须披露间接法，IFRS 没有这样的要求；如果用间接法，没有要求披露直接法。

4.18.1.3. CFO 理解：firstly, 考题中会出现计算是无疑的；secondly，考题中会考核考生对 CFO 和 NI 之间关系的掌握；lastly，CFO 和 working capital 之间的关系，有时也会成为考核点。

4.18.1.4. CFO 间接法&间接法

Cash collection = net sales
Cash inputs =-COGS (+Dep)
Cash expenses =-operating expenses
Cash interest =-interest expenses
Cash taxes = - income tax expenses

-ΔA/R + Δunearned revenue
-Δinventories + ΔA/P
+ΔO/P + Δaccruals
+ ΔI/P+ payable+(-) amortization of bond discount(premium)
+ ΔT/P + ΔDTL-ΔDTA

Net income
+ Depreciation
+Loss/-Gain not relating to operating activities

- Δ working capital (excluding cash, loan, dividend payables and N/P)

Δ=Ending value-beginning value

4.18.2. 基础题

Q-57. A firm reports sales of €50,000 for the year ended 31 December 2012. Its accounts receivable balances were €6,000 at 1 January 2012 and €7,500 at 31 December 2012. The company's cash collections from sales for 2012 is closest to:

A. €48,500.

B. €51,500.

C. €42,500.

Q-58. An analyst gathered the following information from a company's 2010 financial statements (in $ millions):

Year Ended 31 December	2009	2010
Net sales	245.8	254.6
Cost of goods sold (D&A excluded)	168.3	175.9
Accounts receivable	73.2	68.3
Inventory	39.0	47.8
Accounts payable	20.3	22.9

Based only on the information above, the company's 2010 statement of cash flows in the direct format would include amounts (in $ millions) for cash received from customers and cash paid to suppliers, respectively, that are *closest* to:

	cash received from customers	cash paid to suppliers
A.	249.7	169.7
B.	259.5	174.5
C.	259.5	182.1

Q-59. Under GAAP, an analyst gathered the following information from a company's financial statements. Using indirect method, the company's operating cash flows are *closest* to:

Net income	$240
Decrease in inventory	$40
Depreciation	$50
Increase in account receivables	$20
Decrease in wages payable	$10
Increase in unearned revenues	$30
Increase in PP&E	$70
Gains from the sale of a segment	$4

A. $197.

B. $270.

C. $326.

Q-60. An analyst gathered the following information from a company's 2010 financial statements (in $ millions):

Balances as of Year Ended 31 December	2009	2010

Retained earnings	120	145
Accounts receivable	38	43
Inventory	45	48
Accounts payable	36	29

In 2010, the company declared and paid cash dividends of $10 million and recorded depreciation expense in the amount of $25 million. The company considers dividends paid a financing activity. The company's 2010 cash flow from operations (in $ millions) was *closest* to:

A. 25.

B. 45.

C. 75.

Q-61. Based on the following information for Star Inc., what are the total net adjustments that the company would make to net income in order to derive operating cash flow?

Income Statement Item	Year End 12/31/2010
Net income	$20 million
Depreciation	$2 million

Balance Sheet Item	Year end 12/31/2009	Year end 12/31/2010
Accounts receivable	$25 million	$22 million
Inventory	$10 million	$14 million
Accounts payable	$8 million	$13 million

A. Add $2 million.

B. Add $6 million.

C. Subtract $6 million.

Q-62. The following items are from a company's cash flow statement.

Classification of Cash Flow	Description	Amount
Operating activities	Cash received from customers	110,000
Investing activities	Interest and dividends received	200,000
Financing activities	Net repayment of revolving credit loan	24,000

Which of the following standards and formats did the company *most likely* use in the preparation for its financial statements?

A. IFRS, indirect format.

B. Either IFRS or US GAAP, direct format.

C. IFRS, direct format.

Q-63. Which of the following is *most likely* a benefit of the direct method for reporting cash flow from operating activities? Compared with the indirect method, the direct method:

A. provides insight on differences between net income and operating cash flows.

B. mirrors the forecasting approach normally used by analysts.

C. provides details on the specific sources of operating receipts and payments.

Q-64. The following annual financial data are available for a company:

	£ millions
Beginning interest payable	90.4
Cash paid for interest	103.3
Ending interest payable	84.5

Interest expense for the year is closest to:

A. 71.6.

B. 97.4.

C. 109.2.

4.19. Calculation of CFI and CFF

4.19.1. 重要知识点

4.19.1.1. CFI 和 CFF 掌握理解及公式

- **理解：** CFI consist of the inflows and outflows of cash resulting from the acquisition or disposal of long-term assets and certain investments.

+CF	-CF
Sale proceeds from debt & equity investments	Acquisition of debt & equity investment
Sale proceeds from fixed assets	Acquisition of fixed assets
Principal received from loans made to others	Loans made to others

- Gain or loss = proceeds received – disposal NBV
- $BV_{end} = BV_{Begin}$ + purchase – Disposal BV – depreciation

4.19.1.2. CFF: cash inflows and outflows due to changes in capital structure; CFF consist of the inflows and outflows of borrowing, repayment, new issue, repurchase, div paid.

- Dividend paid = - Dividend declared + Δ dividend payables
- Opening R/E + Net Income – Dividend declared = Ending R/E

+CF	-CF
Proceeds from issuing stocks	Payments to reacquire stock
Principal amounts of debt issued	Principal paid on debt
	Dividends paid to shareholders

4.19.2. 基础题

Q-65. Silverago Incorporated, an international metals company, reported a loss on the sale of equipment of $2 million in 2010. In addition, the company's income statement shows depreciation expense of $8 million and the cash flow statement shows capital expenditure of $10 million, all of which was for the purchase of new equipment. Using the following information from the comparative balance sheets, how much cash did the company receive from the equipment sale?

Balance Sheet Item	**12/31/2009**	**12/31/2010**	**Change**
Equipment	$100 million	$105 million	$5 million
Accumulated depreciation—equipment	$40 million	$46 million	$6 million

A. $1 million.

B. $2 million.

C. $3 million.

Q-66. Assume U.S. GAAP applies unless otherwise noted. Jaderong Plinkett Stores reported net income of $25 million, which equals the company's comprehensive income. The company has no outstanding debt. Using the following information from the comparative balance sheets (in millions), what should the company report in the financing section of the statement of cash flows?

Balances sheet item	12/31/2005	12/31/2006	change
Common stock	$100	$102	$2
Additional paid-in capital common stock	$100	$140	$40
Retained earnings	$100	$115	$15
Total stockholders' equity	$300	$357	$57

A. Issuance of common stock $42 million; dividends paid of $10 million.

B. Issuance of common stock $38 million; dividends paid of $10 million.

C. Issuance of common stock $42 million; dividends paid of $40 million.

Q-67. Assume U.S. GAAP applies unless otherwise noted. At the end of the year, a company sold equipment for $40,000 cash. The company paid $100,000 for the equipment several years ago and had accumulated depreciation of $60,000 for the equipment at the time of sale. All else equal, the equipment sale will result in the company's cash flow from:

A. investing activities decreasing by $10,000.

B. investing activities increasing by $40,000.

C. operating activities being $40,000 more than net income.

Q-68. Genite Company has occurred some events during 2017, as it is shown in the table below:

	$'000s
Purchase of securities for trading purposes	380
Proceeds from the sale of trading securities	540
Proceeds from issuance of bonds	660
Purchase of 20% of shares of an affiliated company	355

On the 2010 statement of cash flows, the company's cash flow from investing activities (in '000s) is *closest* to:

A. -$355.

B. -$195.

C. $355.

Q-69. In 20X8, a company recorded several transactions under U.S. GAAP. The company purchased a new machine to update its manufacturing line for $150,000. During the year, $140,000 of convertible preferred stocks were exercised; $24,000 dividends were received; and $42,000 dividends were paid. The mortgage payment of the company includes $34,000 of principal. The investing cash flows and the financing cash flows of the company were *closest* to:

	CFI	CFF
A.	($10,000)	($42,000)
B.	($150,000)	($42,000)
C.	($150,000)	($76,000)

Q-70. A company recorded the following events during 2014:

	$ thousands
Purchase of securities for trading purpose	240
Proceeds from the sale of trading securities	300
Proceeds from issuance of bonds	500
Purchase of 30% of the shares of an affiliated company	275

On the 2014 statement of cash flows, the company's net cash flow from investing activities (in thousands) is closest to:

A. $285.

B. –$275.

C. –$215.

4.20. FCFE and FCFF

4.20.1. 重要知识点

4.20.1.1. FCFE & FCFF:（需要重点掌握，经常考到）

- **Formula**
  - FCFF = EBIT×(1-tax rate) + NCC – FCInv - WCInv
  - FCFF = NI + NCC + [Int× (1 - tax rate)] – FCInv – WCInv
  - FCFF = CFO + Int×(1-t) - FCInv
  - FCFE = CFO – FCInv + Net borrowing
  - FCFE = FCFF – Int (1- tax rate)+ net borrowing

4.20.2. 基础题

Q-71. Assume U.S. GAAP applies unless otherwise noted. An analyst gathered the following annual information ($ millions) about a company that pays no dividends and has no debt:

Net income	91.6
Depreciation	36.4
Loss on sale of equipment	3.2
Decrease in accounts receivable	8.4
Increase in inventories	10.8
Increase in accounts payable	9
Capital expenditures	14.6
Proceeds from issuance of new shares	17

The company's annual free cash flow to equity ($ millions) is *closest* to:

A. 106.2.

B. 116.8.

C. 123.2.

Q-72. An analyst is planning to make a valuation on a privately held company by using a FCF Model. In order to determine the free cash flow to all capital suppliers, he collected the following data (in million):

Operating cash flow	1000
Interest paid	60
Investment in working capital	160
Investment in fixed asset	120
Tax rate	25%

The free cash flow the analyst is planning to determine is *closest* to:

A. 880.

B. 762.

C. 925.

Q-73. If a company capitalizes an expenditure related to capital assets instead of expensing it, ignoring taxes, the company will most likely report:

A. the same free cash flow to the firm (FCFF) in that period.

B. a lower cash flow per share in that period.

C. a higher earnings per share in future periods.

Q-74. The following selected data are available for a firm:

	\$ millions
Net income	90.0
Non-cash charges	15.2
Interest expense	28.0
Capital expenditures	34.3
Working capital expenditures	13.0

If the firm's tax rate is 40%, the free cash flow to the firm (FCFF) is closest to:

A. 57.9.

B. 74.7.

C. 87.7.

Q-75. When calculating free cash flow to equity, which of the following items should be subtracted from free cash flow to firm?

A. Dividend paid

B. Net borrowing

C. Interest paid

4.21. Financial Analysis Techniques

4.21.1. 重要知识点

4.21.1.1. Financial analysis techniques

- Common-size statement: identify different methods to create common-size income statement and common-size balance sheet.
- **Profitability ratios**
  - $\text{net profit margin} = \frac{\text{net income}}{\text{revenue}}$
  - $\text{gross profit margin} = \frac{\text{gross profit}}{\text{revenue}}$
  - $\text{operating profit margin} = \frac{\text{operating income}}{\text{revenue}} = \frac{\text{EBIT}}{\text{revenue}}$
  - $\text{ROE (return on equity)} = \frac{\text{net income}}{\text{average equity}}$
  - $\text{ROA (return on asset)} = \frac{\text{net income}}{\text{average assets}}$

    Or $\text{ROA (return on asset)} = \frac{\text{net income+interest (1−t)}}{\text{average assets}}$
- **Activity ratio (measure asset utilization): the closer these ratios to the industrial average, the better.**
  - $\text{receivable turnover} = \frac{\text{annual sales}}{\text{average receivables}}$

    $\text{days of receivables collection} = \frac{365}{\text{receivables turnover}}$ (average time to collect account receivables)
  - $\text{inventory turnover} = \frac{\text{COGS}}{\text{average inventory}}$

    $\text{days of inventory on hand} = \frac{365}{\text{inventory turnover}}$ (average time from purchase to sale of the inventory)
  - $\text{payables turnover} = \frac{\text{purchase}}{\text{average account payables}}$

    $\text{days of payable} = \frac{365}{\text{payables turnover}}$
  - **operating cycle**= days of receivables collection + days of inventory on hand
  - **Cash convertion cycle**= days of receivables collection + days of inventory on hand – number of days of payables

- **The higher cash conversion cycle, the higher the days of inventory and sales outstanding and the shorter payable period.（重点掌握）**
- $\text{total asset turnover} = \frac{\text{revenue}}{\text{average total assets}}$

➢ **Liquidity ratio (measure liquidity): the higher the ratios, the better solvency the company in the short run.**

- $\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$
- $\text{quick ratio} = \frac{\text{cash+marketable securities+receivables}}{\text{current liabilities}}$
- $\text{cash ratio} = \frac{\text{cash+marketable securities}}{\text{current liabilities}}$

➢ **Solvency ratio (measure leverage): the higher the ratios, the higher default risks of the company.**

- Leverage
  - Long-term debt-to-equity ratio= $\frac{\text{total long-term debt}}{\text{total equity}}$
  - debt-to-equity ratio= $\frac{\text{total debt}}{\text{total equity}}$
  - $\text{total debt ratio} = \frac{\text{total debt}}{\text{total assets}}$
  - $\text{financial leverage} = \frac{\text{total assets}}{\text{total equity}}$
- Coverage
  - $\text{interest coverage ratio} = \frac{\text{EBIT}}{\text{interest}}$
  - $\text{fixed charge coverage ratio} = \frac{\text{EBIT+lease payment}}{\text{interest+lease payment}}$

➢ **DuPont system of analysis 杜邦分因素分析法是十分重要的，3 因素和 5 因素都要掌握，尤其是 5 因素分析。**

- 3 因素分析
  - $\text{ROE} = \frac{\text{net income}}{\text{sales}} \times \frac{\text{sales}}{\text{assets}} \times \frac{\text{assets}}{\text{equity}}$
  - $\text{ROE} = \text{profit margin} \times \text{asset turnover} \times \text{financial leverage}$
- 5 因素分析
  - $\text{ROE} = \frac{\text{net income}}{\text{EBT}} \times \frac{\text{EBT}}{\text{EBIT}} \times \frac{\text{EBIT}}{\text{revenue}} \times \frac{\text{revenue}}{\text{assets}} \times \frac{\text{assets}}{\text{equity}}$

- ROE = tax burden × interest burden × EBIT margin × asset turnover × financial leverage

■ **杜邦分析的内容有可能和权益里的内容一起考，通过 ROE retention rate, 来计算 g，进而使用 DDM 进行估值。**

- $g = ROE \times \text{retention ratio} = ROE \times (1 - DPR)$

4.21.1.2. Formula of coverage ratio

Cash flow interest coverage ratio= (CFO + interest paid + taxes paid) / interest paid

Other cash flow ratio 的公式总结如下：

Other cash flow ratios	
Performance ratios	Calculation
Cash flow to revenue	CFO/ Revenue
Cash return on assets	CFO/ Average total assets
Cash return on equity	CFO / Average total equity
Cash to income	CFO/ Operating income
Cash flow per share	(CFO– Preferred dividends) / Weighted average NO. of common shares

Other cash flow ratios	
Coverage ratio	Calculation
Debt coverage	CFO / Total debt
Interest coverage	(CFO + Interest paid + Taxes paid)/Interest paid
Reinvestment	CFO / Cash paid for long-term assets
Debt payment	CFO / Cash paid for long-term debt repayment
Dividend payment	CFO/ dividend paid
Investing and financing	CFO/Cash outflows from investing and financing activities

4.21.1.3. Common-size

- **Common-sized I/S ratios** ---- item in the income statement account / revenues (net sales)
- **Common-sized B/S ratios** ---- item in the balance sheet account / total assets
- **Common-sized CF/S ratio:**
  - Item in the CF statement account / revenues
  - CF outflow / total outflows OR CF inflow / total inflows

- **Common-size** 一般有横向比较（公司间），纵向比较（年份间），体现 trend.

4.21.2. 基础题

Q-76. Marcus Lee is examining the solvency of Apex Manufacturing and has collected the following data (in millions of euros):

	2015	2014	2013
Total debt	€4,000	€3,800	€3,500
Total equity	€8,000	€9,000	€10,000

Which of the following would be the most appropriate conclusion for Lee?

A. The company is becoming increasingly less solvent, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.50 from 2013 to 2015.

B. The company is becoming less liquid, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.30 from 2013 to 2015.

C. The company is becoming increasingly more liquid, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.50 from 2013 to 2015.

Q-77. For a manufacturing company, when it experience higher receivables turnover and longer payables period, its cash conversion cycle is *most likely* to:

A. increase.

B. decrease.

C. remain unchanged.

Q-78. The following table provides selected information of GF Company and the common size data of the industry where GF Company conducts business.

	Company (£)	Common Size Industry Data (% of sales)
EBIT	88,000	30.0
Pretax profit	65,800	21.6
Net income	45,700	14.1
Sales	525,000	100.0
Total assets	558,750	158.0
Total equity	332,355	89.2
ROE	13.75%	15.81%

The inferior ROE of GF compared to that of the industry is *most likely* due to the company's:

A. tax burden ratio.

B. interest burden ratio.

C. financial leverage ratio.

Q-79. The following selected balance sheet and ratio data are available for a company:

	2017	**2016**
Cash and cash equivalents	196.0	
Marketable securities	778.4	
Accounts receivables	24.0	
Other current assets	240.2	
Total current assets	1238.6	
Deferred revenues	170.0	
Other current liabilities	184.6	
Total current liabilities	354.6	
Cash ratio		2.26
Quick ratio		2.96
Current ratio		3.26

Which of the following ratios decreased between 2016 and 2017?

A. Cash

B. Quick

C. Current

Q-80. Income statements for two companies (A and B) and the common-sized income statement for the industry are provided below:

All $ figures in ’000s	Company A	Company B	Industry
Sales	$ 21,000	$ 16,500	100.0%
Cost of goods sold	12,706	10,478	63.8%
Selling, general, and administrative expenses	5,250	4,042	24.8%
Interest expense	1,680	1,072	7.0%
Pretax earnings	1,364	908	4.4%
Taxes	410	290	1.6%
Net earnings	$ 954	$ 618	2.8%

The best conclusion an analyst can make is that:

A. Company B's interest rate is the industry average.

B. both companies' tax rates are higher than the industry average.

C. Company A earns a higher gross margin than both Company B and the industry.

Q-81. The current ratio for an industry is 3.3. Data for a firm in the industry is presented below:

As at December 31	£ 000
Cash	400
Accounts receivable	700
Inventory	2,500
Accounts payable	600
Taxes payable	400
Installment loan payable, due in three equal annual payments on June 30.	1200

Using the current ratio, when compared with the industry, the firm is best described as being:

A. as liquid.

B. less liquid.

C. more liquid.

Q-82. The following financial data is available for a company:

Return on assets (ROA)	3.8%
Total asset turnover	1.82
Financial leverage	1.65
Dividend payout ratio	47.1%

The company's sustainable growth rate is closest to:

A. 3.00%.

B. 3.32%.

C. 3.78%.

Q-83. Selected information for a company is provided below.

	\$ millions
Sales	9,600
Cost of goods sold	5,760
Purchase	5,880

Average receivables	1,250
Average inventory	1,420
Average payables	290

The company’s cash conversion cycle (in days) is closest to:

A. 84.

B. 120.

C. 138.

Q-84. A company’s most recent balance sheet shows the following values (NZ$ thousands):

Accounts payable	3,800
Long-term debt	5,590
Other long-term liabilities	800
Common stock	1,200
Retained earnings	1,810

The company’s debt- to- capital ratio is closest to:

A. 0.77

B. 1.86

C. 0.65

Q-85. Which of the following statements about cash flow ratios is most valid?

A. Reinvestment ratio measures a firm’s ability to acquire assets with investing cash flows.

B. Debt payment ratio measures a firm’s ability to pay debts with operating cash flows.

C. Interest coverage ratio is calculated as operating cash flow divided by interest payments.

Q-86. A company's balance sheet at the end of the year shows the following:

Current Assets	
Cash and cash equivalents	$5,900
Marketable securities	1,460
Notes and accounts receivable, trade	11,480
Less allowance for doubtful accounts and sales returns	(1,300)
Inventories	2,640
Other current assets	3,700
Total current assets	$23,880
Current Liabilities	
Accounts payable and other accrued liabilities	$10,200

Current portion of borrowings	3,640
Other current liabilities	5,120
Total current liabilities	$18,960

The company's quick ratio is closest to:

A. 1.26.

B. 0.93.

C. 0.99.

Q-87. The analytical tool that would be most appropriate for an analyst to use to identify the percentage of a company's assets that are liquid is the:

A. current ratio.

B. common-size balance sheet.

C. cash ratio.

Q-88. The following common-size income statement data and tax rates are available on a company.

Financial Item	Current Year (%)
Revenues	100
Cost of goods sold	37.6
Interest expense	3.0
Research expenses	4.3
Selling and general expenses	31.9
Income tax rate	20%
Prior Year's Profitability Ratios	
Gross profit margin	61.5%
Operating profit margin	25.8%
Net profit margin	17.8%

The profitability ratio that had the largest absolute increase in value in the current year is the**:**

A. operating profit margin.

B. net profit margin.

C. gross profit margin.

Q-89. The following data is available on a company:

	($ millions)

Total assets	290
Total revenues	564
Total expenses	482
Research & development expenses	24

Under a common-size analysis, the value used for research & development expenses is closest to:

A. 8.3%.

B. 4.3%.

C. 5.0%.

Q-90. An increase in which of the following items would most likely result in an increase in a company's quick ratio, all else being held equal?

A. Receivables

B. Current liabilities

C. Inventory

4.22. Valuation of Inventory

4.22.1. 重要知识点

Inventory 掌握公式及两种方法的比较：

4.22.1.1. Inventory BASE 法则

- Purchases = ending inventory - beginning inventory + COGS
- Beginning inventory = COGS - purchases + ending inventory
- Ending inventory = beginning inventory + purchases - COGS

4.22.1.2. Product cost vs periodic cost

- 判断标准：存货是否达到了可销售状态
- **Capitalized cost (product cost) include:** （重点掌握，很有可能考）
  - Purchase cost - trade discounts and rebates;
  - Conversion costs (e.g. labor and overhead);
  - Other costs required to make inventory in use.
- **Expensed cost (period cost):**
  - Abnormal waste of materials, labor, or overhead;
  - Storage costs (unless required as part of production);
  - Administrative and selling expenses.

4.22.1.3. Inventory valuation method

- **Specific identification:** match COGS and historical cost for each unit sold.
- **Last in first out (LIFO):** The newest goods purchased (or manufactured) are sold first and the oldest goods purchased (or manufactured), including beginning inventory, remain in ending inventory. (Only allowed under U.S. GAAP)
- **First in first out (FIFO):** The oldest goods purchased (or manufactured) are sold first and the newest goods purchased (or manufactured) remain in ending inventory.
- **Weighted average (AVCO):** The average cost of the goods available for sale (beginning inventory plus purchase, conversion, and other costs) during the accounting period to the units that are sold as well as to the units in ending inventory.

4.22.1.4. Periodic system VS perpetual system

Periodic	Perpetual
✧ "Purchase" account; ✧ Balances of inventory and COGS are reported at the end of accounting period.	✧ Balances of inventory and COGS are reported continuously.
✧ Same result for FIFO & Specific identification method; ✧ Different result for LIFO & AVCO.	

- LIFO provides the most useful estimate of COGS
- FIFO provides the most useful estimate of inventory value

4.22.2. 基础题

Q-91. After reviewing the inventory records for Argo, the following cost related to inventory were incurred:

Fixed production overhead	$450,000
Direct material purchased	$225,000
Direct labour cost	$135,000
Storage costs incurred during production	$25,000
Storage cost incurred before deliver to customers	$12,500
Normal waste costs	$7,500
Abnormal waste costs	$30,000

The inventory value capitalized in the balance sheet of Argo is closest to:

A. $810,000.

B. $842,500

C. $885,000.

Q-92. Zimt AG uses the FIFO method, and Nutmeg Inc. uses the LIFO method. Compared to the cost of replacing the inventory, during periods of rising prices, the cost of sales reported by:

A. Zimt is too low.

B. Nutmeg is too low.

C. Nutmeg is too high.

Q-93. One reason that the last- in, first- out (LIFO) inventory valuation method is widely used in the United States is most likely that it:

A. results in higher reported gross profit.

B. is available under both US GAAP and International Financial Reporting Standards.

C. results in higher operating cash flows.

Q-94. A firm that prepares its financial statements according to US GAAP and uses a periodic inventory system had the following transactions during the year:

Date	Activity	Tons (000s)	$ per Ton
	Beginning inventory	1	600
February	Purchase	5	650
May	Sale	2	700
August	Purchase	3	680
November	Sale	4	750

The cost of sales (in thousands) is *closest* to:

A. $5,890 using weighted average.

B. $4,080 using LIFO.

C. $3,850 using FIFO.

Q-95. Based on the following information in the table, what is the value of ending inventory for the first quarter if the company uses a perpetual LIFO inventory valuation method?

Date	Unit purchased	Purchasing price	Unit sold	Selling price
2 Jan	1000	$20		
17 Jan			500	$50
16 Feb	1000	$18		
3 Mar			1200	50

13 Mar	1000	$17		
23 Mar			500	50

A. $14,500

B. $15,000

C. $16,000

Q-96. Select information from a company that uses the FIFO inventory method is provided below.

Event	**Units**	**$/Unit**	**Total ($)**
Opening inventory	2,000	15	30,000
Purchase	500	15	7,600
Sales	1,100	24	26,400
Purchase	600	15	9,240
Sales	1,200	24	28,800
Ending inventory	800		

If the company used a perpetual system versus a periodic inventory system, the gross margin would *most likely* be:

A. lower.

B. higher.

C. the same.

Q-97. During a period of rising inventory costs, a company decides to change its inventory method from FIFO (first in, first out) to the weighted average cost method. Under the weighted average cost method, which of the following financial ratios will *most likely* be higher than under FIFO?

A. Debt-to-equity ratio

B. Current ratio

C. Number of days in inventory

Q-98. In a period of rising prices and stable inventory levels, which inventory valuation method will most likely result in the highest inventory turnover ratio, all else being equal?

A. Last- in, first- out (LIFO)

B. Weighted average cost

C. First- in, first- out (FIFO)

Q-99. Which of the following inventory valuation methods best matches the actual historical cost of the inventory items sold to their physical flow?

A. LIFO

B. FIFO

C. Specific identification

Q-100. Which inventory valuation has the same results under periodic and permanent system?

A. FIFO.

B. LIFO.

C. Weighted average method.

4.23. Adjustment of Valuation in Inventory

4.23.1. 重要知识点

4.23.1.1. Impairment of inventory

- **U.S. GAAP:**
  - Lower of cost or market;
    - If replacement cost (RC) > NRV, market = NRV
    - If replacement cost (RC) < NRV – normal profit margin, market = NRV – normal profit margin
    - If NRV – normal profit margin < RC < NRV, market = replacement cost
  - No write-up allowed under U.S.GAAP and no reversal after devaluation.
- **IFRS:**
  - Lower of cost or NRV;
  - NRV = sales price-selling cost;
  - Inventory can be written up but only limited to the loss recognized previously;
- Reporting inventory above the historical cost is only permitted under IFRS and U.S. GAAP in certain industries **such as agricultural and forest products, mineral ores, and precious metals.**

4.23.2. 基础题

Q-101. The carrying value of inventories reflects:

A. their original cost.

B. their current value.

C. the lower of original cost or net realizable value.

Q-102. A retailer that prepares its financial statements in accordance with IFRS has 100 office chairs in its inventory with a suggested retail price of $480 each. It paid on average $400 each to a supplier for these chairs. Demand for office chairs has been low for quite a while and the retailer estimates it can sell those chairs for $360 each if it offers free shipping to its customers at an average cost of $20 per chair. The supplier has also lowered its price to $320 in response to the low demand. The total carrying amount of these 100 office chairs on the retailer's balance sheet would be closest to:

A. $32,000.

B. $36,000.

C. $34,000.

Q-103. For a manufacturing company, its information is shown in the table below:

	$ million
Ending inventory (under FIFO)	4.3
NRV	4.1
Replacement cost	3.8
Normal profit margin	0.5

If the company is using International Financial Reporting Standards (IFRS) instead of US GAAP, its cost of goods sold (in millions) is most likely:

A. 0.3 higher

B. 0.3 lower

C. The same

Q-104. Carey Company adheres to U.S. GAAP, whereas Jonathan Company adheres to IFRS. It is *least likely* that:

A. Carey has reversed an inventory write-down.

B. Jonathan has reversed an inventory write-down.

C. Jonathan and carey both use the fifo inventory accounting method.

Q-105. Fernando's Pasta purchased inventory and later wrote it down. The current net realisable value is higher than the value when written down. Fernando's inventory balance will most likely be:

A. higher if it complies with IFRS.

B. higher if it complies with US GAAP.

C. the same under US GAAP and IFRS.

Q-106. A company that prepares its financial statements using IFRS wrote down its inventory value by €40,000 at the end of year 1. In year 2, prices increased and the same inventory at the end of the year was worth €60,000 more than its value at the end of the prior year. Which of the following statements is most accurate? In year 2, the company’s cost of sales:

A. decreased by €60,000.

B. decreased by €40,000.

C. was unaffected.

Q-107. Zimt AG wrote down the value of its inventory in 2007 and reversed the write-down in 2008. Compared to the results the company would have reported if the write-down had never occurred, reported 2008:

A. profit was overstated.

B. cash flow from operations was overstated.

C. year-end inventory balance was overstated.

Q-108. Zimt AG wrote down the value of its inventory in 2007 and reversed the write-down in 2008. Compared to the ratios that would have been calculated if the write-down had never occurred, Zimt's reported 2007:

A. current ratio was too high.

B. gross margin was too high.

C. inventory turnover was too high.

4.24. LIFO Conversion/Liquidation

4.24.1. 重要知识点

4.24.1.1. LIFO and FIFO 之间的转换

- **LIFO reserve**
  - The difference between the reported LIFO inventory carrying amount and the inventory amount that would have been reported if the FIFO method had been used.
  - LIFO reserve = FIFO inventory – LIFO inventory
- **LIFO to FIFO conversion**

- $INV_F = INV_L$ + LIFO reserve
- $COGS_F = COGS_L$ - △ LIFO reserve
- △LIFO reserve= LIFO $reserve_1$- LIFO $reserve_0$
- △NI = △LIFO reserve × (1-t)

4.24.1.2. LIFO liquidation

- LIFO liquidation incurs when purchased volume is less sales volume. Or, the decrease in volume or quantity of inventory:
  - In this case, the prices for goods being sold are no longer recent prices.
- Under LIFO liquidation, and if price is rising:
  - COGS does not reflect current costs;
  - LIFO reserve may decline.
- An analyst should adjust COGS for decrease in LIFO reserve.

4.24.2. 基础题

Q-109. A company selected LIFO method for its financial reports, and some information about its financial report is given below (in million):

Net revenue	120
COGS	70
Fixed cost	25
Change in LIFO reserve	15
Tax rate	30%

The company's net profit margin under FIFO method is *closest* to:

A. 14.58%.

B. 23.33%.

C. 33.33%.

Q-110. An investor collected a company's inventory data as follows:

	2017	2016
COGS	2,400	2,860
LIFO Reserve	1,600	1,640

If the company used FIFO method to recognize, what would the cost of goods sold be in 2017?

A. 2,440.

B. 2,400.

C. 2,360.

Q-111. Assume U.S. GAAP applies unless otherwise noted. Sipex Corporation uses the LIFO inventory method, but most of the other companies in Sipex industry use FIFO. To adjust Sipex's ending inventory to the FIFO method, the amount reported for Sipex's ending inventory should be:

A. increased by the ending balance in Sipex's LIFO reserve.

B. decreased by the ending balance in Sipex's LIFO reserve.

C. increased by the change in Sipex's LIFO reserve for that period.

Q-112. Assume U.S. GAAP applies unless otherwise noted. Sauerbraten Corp. reported 2017 sales ($ in millions) of $4,314 and cost of goods sold of $3,654. Inventories at year-end 2017 and 2016, respectively, were $1,106 and $1,124. The company uses the LIFO method for inventory valuation and discloses that if the FIFO inventory valuation method had been used, inventories would have been $126.6 million and $113.6 million higher in 2017 and 2016, respectively. Compared to the inventory turnover ratio reported, if Sauerbraten had exclusively used the FIFO method its inventory turnover ratio would have been closest to:

A. 2.95.

B. 3.28.

C. 3.49.

Q-113. An analyst can *most* accurately identify a LIFO liquidation by observing a(n):

A. increase in gross margin.

B. decrease in the LIFO reserve.

C. change in inventory out of line with change in sales.

4.25. Long-Term Asset: Capitalize VS Expense

4.25.1. 重要知识点

4.25.1.1. 资本化和费用化对财务报表的影响（重点掌握，经常考）

- **Net income:** 费用化的 NI 当期较低，以后较高；资本化的 NI 当期高，以后稍低，利润表随时间波动小。
- **Shareholder's equity 与 net income 的变化趋势相同。**
- **Cash flow:** 费用化的现金流支出归入 CFO，因而费用化的 CFO 低；资本化的现金流归入 CFI，所以资本化 CFI 低。

- **Financial ratios:** ROA/ROE 与 NI 同向变化，费用化当期 ROA/ROE 比较低，以后比较高，资本化当期 ROA/ROE 高，以后比较低，资本化 ROA/ROE 比较平稳。
- **Interest coverage ratio (EBIT/ interest expense):** 资本化前期 Interest coverage ratio 比较大，因为 interest expense 小，后期比较小，因为 EBIT 小；费用化前期 Interest coverage ratio 比较小，因为 interest expense 比较大，后期比较大，因为 EBIT 后期比较大。
- 如果问哪一种财务处理较保守、激进，相对应地，应该是**资本化激进，费用化保守。**

F/S	Items	Capitalizing	Expensing
B/S & ratios	Total assets	Higher	Reverse
	Shareholders' equity	Higher	
	Leverage ratios (debt/equity & debt/assets)	Lower	
I/S & ratios	Income volatility	Lower	
	Net income – first year (ROA & ROE)	Higher	
	Net income – later years (ROA & ROE)	Lower	
CFS	**Total cash flow**	**Same**	**Same**
	Cash flow from operating	Higher	Reverse
	Cash flow from investing	Lower	

4.25.1.2. Long-term asset 资本化费用化问题

- **判断标准**：长期资产是否达到了可使用状态
- **资本化部分**
  - Purchase price
  - Tax, freight and insurance
  - Delivery
  - Installation

- Testing
- Asset enhancement cost （特殊）

➢ 费用化

- Depreciation
- Repair and maintenance
- Staff training

4.25.1.3. Research and development cost 的资本化和费用化

➢ **一般的讲，企业本身开发的无形资产的费用应该费用化。**例外：R&D，software.

Type of Expenditure	**IFRS**	**U.S.GAAP**
Research	**Expense as incurred**	
Development	Capitalize if certain criteria are met.	Expense as incurred Except for: ● Costs to develop a software ● For sales to others ✓ Expensed as incurred; ✓ Once economic feasibility is established, subsequent production costs can be capitalized. ● For own internal use ✓ Expense until it is probable that the project will be completed and that the software will be used as intended; thereafter, capitalized.

4.25.1.4. 利息费用的资本化和费用化

➢ Interest that accrues during the construction of an asset (for a firm's own use or resale) must be capitalized (e.g., depreciation or COGS).

➢ **US GAAP 下不允许 netting 相关利息收入, IFRS 下要求 netting 相关利息收入**

Items / Impacts	Int. exp.	Income statement impacts	Net Income	Interest coverage ratio	CFI	CFO
Before completion	N/A	No	Higher	Higher? The same?	Understate	Overstate
After completion		Depreciation expense	Lower	Lower		

4.25.2. 基础题

Q-114. Trofferine S.A. incurred the following expenditure to purchase a towel and tissue roll machine: $21,800 purchase price including taxes, $400 for delivery of the machine, $600 for installation and testing of the machine, and $200 to train staff on maintaining the machine. In addition, the company paid a construction team $700 to reinforce the factory floor and ceiling joists to accommodate the machine's weight. The company also paid $3,000 to repair the factory roof (a repair expected to extend the useful life of the factory by five years) and $2,000 to have the exterior of the factory and adjoining offices repainted for maintenance reasons. The repainting neither extends the life of factory and offices nor improves their usability. The cost to be capitalised for

Trofferine for accounting purchase is closest to:

A. 26,700

B. 26,500

C. 28,700

Q-115. Holding all else constant, a company that develops intangible assets internally rather than purchasing them is most likely to report:

A. lower amounts of assets.

B. higher investing cash outflows.

C. lower operating cash outflows.

Q-116. Assume U.S. GAAP applies unless otherwise noted. Two companies are identical except for their accounting treatment of R&D costs. One company expenses all such costs immediately, while the other capitalizes a portion of the costs. Compared with the company that capitalizes costs, the company that expenses immediately will *least* *likely*:

A. earn a lower return on assets.

B. have lower financial leverage.

C. report lower cash flow from operations in the statement of cash flows.

Q-117. On 1 January, a company, which prepares its financial statements according to IFRS, arranged financing for the construction of a new plant. The company:

- borrowed NZ$10,000,000 at an interest rate of 7%,
- issued NZ$10,000,000 of preferred shares with a cumulative dividend rate of 5%
- temporarily invested NZ$4,000,000 of the loan proceeds for the first six months of construction and earned 6% on that amount.

The amount of financing costs to be capitalized (NZ$) to the cost of the plant in the first year is closest to:

A. 580,000.

B. 600,000.

C. 630,000.

Q-118. Two pharmaceutical companies, Company A and Company B, internally develop drugs and drug analytics software. Company A reports in accordance with IFRS whereas Company B reports in accordance with US GAAP. Which of the following statements is most accurate regarding the development costs of the drug patents and software development?

A. Company B can capitalize the development costs related to drug development if it meets certain criteria.

B. Both companies must expense all development costs related to these intangible assets.

C. Company A can capitalize the development costs related to software development if it meets certain criteria.

Q-119. A company purchased a warehouse for €70 million and incurred the following additional costs in getting the warehouse ready to use:

- €4.0 million for repairs to the building's roof and windows
- €1.0 million to modify the interior layout to meet their needs (moving walls and doors, inserting and removing partitions, etc.)
- €0.2 million on an orientation and training session for employees to familiarize them with the facility

The cost to be capitalized to the building account (in millions) is closest to:

A. €75.2.

B. €75.0.

C. €74.0.

Q-120. JOOVI Inc. has recently purchased and installed a new machine for its manufacturing plant. The company incurred the following costs:

Purchase price	$12,980
Freight and insurance	$1,200
Installation	$700
Testing	$100
Maintenance staff training costs	$500

The total cost of the machine to be shown on JOOVI's balance sheet is *closest* to:

A. $14,180.

B. $14,980.

C. $15,480.

4.26. Long-Term Asset: Depreciation Methods

4.26.1. 重要知识点

4.26.1.1. Tangible asset: 折旧就是一种将资产资本化的方式

- **Tangible asset** not used in the operations of the firm should be classified as investment assets.
- **Land 不必折旧、land improvement 需折旧、lease improvement 需折旧**
- **Depreciation**: the capitalized costs of long-lived tangible assets (other than land) with finite useful lives are allocated to subsequent periods as depreciation.
  - Carrying (book) value. (carrying value or net book value) = historical cost - accumulated depreciation.
  - Historical cost (gross investment in asset). The original acquisition cost of the asset including installation and transportation costs.
  - Depreciation can be classified as operating expense.
    - No current cash expenditures though (cash outflows occurred in the past);
    - Depreciation expenses cannot be ignored.

Depreciation

Straight-line	SL depreciation $= \dfrac{cost - residual\ value}{useful\ life}$
DDB	Depreciation expense = (2/asset life in years) × net book value at the beginning of year X
Units-of-production	unit of production depreciation $= \dfrac{original\ cost - salvage\ value}{life\ in\ unit\ output\ units}$ $\times\ output\ unit\ in\ period$

- Revaluation model (only IFRS)

4.26.1.2. Component depreciation

- IFRS: each components of an asset should be depreciated separately.
- GAAP: permit separate depreciation but seldom applied.

4.26.1.3. Intangible asset: amortize 摊销

- Intangible assets with finite-life are amortized over their useful lives, and intangible assets with infinite life are making impairment test annually;
- **Goodwill 不折旧，不摊销，只做 annual impairment test（还要掌握 goodwill 的定义）**
  - Under IFRS, goodwill 的减值，直接将账面价值与 Implied value 进行比较。

4.26.2. 基础题

Q-121. A financial analyst at BETTO S.A. is analyzing the result of the sale of a vehicle for 85,000 Argentine pesos (ARP) on 31 December 2009. The analyst compiles the following information about the vehicle:

Acquisition cost of the vehicle	ARP 100,000
Acquisition date	1 January 2007
Estimated residual value at acquisition date	ARP 10,000
Expected useful life	9 years
Depreciation method	Straight-line

The result of the sale of the vehicle is *most likely*:

A. a loss of ARP 15,000.

B. a gain of ARP 15,000.

C. a gain of ARP 18,333.

Q-122. All else being equal and ignoring tax effects, compared with using the straight-line method of depreciation, the use of an accelerated method of depreciation in the early years of an asset's life would *most likely* result in a decrease in the firm's:

A. cash flow from operations.

B. asset turnover ratio.

C. shareholders' equity.

Q-123. Depreciation expense under which of the following methods is least likely affected by the estimate of the useful life of the asset?

A. Double declining balance method

B. Straight- line method

C. Units- of- production method

Q-124. A company is purchasing a customer list that it expects will provide economic benefits for the next 5 years. The company chooses to use an accelerated amortization method. The choice will most likely result in an amortization expense that will be the:

A. highest in the fifth year.

B. highest in the first year.

C. same in all five years.

Q-125. An analyst has gathered the following information about a company's capital assets:

Year ending	2017	2016	2015
Property, plant, and equipment	€5,000	€5,000	€5,000
Accumulated depreciation	750	500	250
Net book value	4,250	4,500	4750

As of the end of 2017, the expected remaining life of the assets, in years, is closest to:

A. 6.

B. 17.

C. 20.

Q-126. At the start of the year, a company acquired new equipment at a cost of €100,000, estimated to have a three-year life and a residual value of €10,000. If the company depreciates the asset using the double declining balance method, the depreciation expense that the company will report for the third year is closest to:

A. €7,407.

B. €1,111.

C. €6,656.

Q-127. The following events occurred during the fiscal year for Senior company:

- Purchase a patent for its daily manufacturing at $540,000, and this will benefit the company for 3 years.
- An acquisition occurred during the fiscal year, and Senior company has realized a goodwill of $200,000 in its balance sheet, and the acquisition will benefit the Senior for about 8 years.
- A donation of $400,000 is made by the Senior, and the directors of the company believe that this donation will benefit the company by strengthening its reputation for the next 5 years

Based on the events above, the amortization cost the Senior company occur during the fiscal year is closest to:

A. $180,000.

B. $205,000.

C. $285,000.

Q-128. Using the following information, a Mexican corporation is computing the depreciation expense for a piece of manufacturing equipment that it purchased at the start of the current year. The company takes a full year's depreciation in the year of acquisition.

Cost of equipment	MXN2,000,000
Estimated residual value	MXN200,000
Expected useful life	10 years
Total productive capacity	5,000,000 units
Production during year	800,000 units

The depreciation expense (in MXN) will most likely be higher by:

A. 112,000, using the double-declining method compared with the units-of-production method.

B. 140,000, using the units-of-production method compared with the straight-line method.

C. 180,000, using the double-declining balance method compared with the straight-line method.

4.27. Long-Term Asset: Impairment & Revaluation Model

4.27.1. 重要知识点

4.27.1.1. Impairment test

Tangible assets	Intangible assets
✧ **Held for use** Impairment indicators ↓ Impairment test	✧ **Held for use** Goodwill & Other IA with indefinite useful life ↓ Annual impairment test
✧ **Held for sale** No depreciation Immediate impairment test If **Carrying value > NRV**	✧ **Held for sale** No amortization Immediate impairment test If **Carrying value > NRV**

4.27.1.2. Impairment under US GAAP

- **Step1 Recoverability test / Impairment test**

$$\left(\begin{array}{l}\text{carrying}\\ \text{value}\\ \text{of assets}\end{array}\right) > \left(\begin{array}{l}\text{undiscounted}\\ \text{future cash flows}\\ \text{generated by}\\ \text{the assets}\end{array}\right)$$

- **Step2 Loss measurement**

$$\left(\begin{array}{l}\text{carrying}\\ \text{value}\\ \text{of assets}\end{array}\right) - \left(\begin{array}{l}\text{fair market value}\\ \text{or}\\ \text{PV of future CF}\end{array}\right)$$

- **Cannot reverse the recognized loss**

4.27.1.3. Impairment under IFRS

$$\left(\begin{array}{l}\text{carrying}\\ \text{value}\\ \text{of assets}\end{array}\right) > \left(\begin{array}{l}\text{recoverable}\\ \text{amount}\end{array}\right)$$

↓

The higher of	
Fair value less cost to sell	Value in use i.e. the PV of its future cash flow from continued use

- **Under cost model,** impairment can reverse the loss, but write up is not allowed.
- **Under revaluation model,** revaluation gain will be recognized in equity. Revaluing the asset's value upward is even permitted under IFRS.

4.27.1.4. Impairment effect

- **PP&E** cost (asset) decrease & **NI** decrease (due to impairment expenses).
- But NI of next year will higher caused by lower PP&E level (PP&E 的 depreciation 在后续年度会降低).
- **Impairment 对 ratio 的影响：**在确认减值的当期，ROA，ROE 较小。在以后的几期，ROA, ROE 变大（decreased depreciation).
- The impact of valuing asset upward to financial ratios: low leverage (high asset), high ROA/ROE in the period of revaluation and low ROA/ROE in subsequent periods.

Impairment Effects	
Cash flow	--
Assets	↓
Equity	↓
Debt/equity ratio	↑
Current net income, ROA,ROE	↓
Future depreciation expense	↓
Future net income, ROA,ROE	↑
Future asset turnover ratios	↑

4.27.1.5. Revaluation

- Upward revaluation of assets will
  - Increase assets and equity → decrease leverage ratios (D/E)
  - Increase comprehensive income in the period the revaluation occur;
  - In subsequent periods
    - Higher depreciation expense and lower profitability;
    - Lower ROA and ROE.

4.27.1.6. Derecognition of asset

- **Sale of long-lived assets**
  - Report gains or losses (I/S) =sales proceed – carrying value of long-lived asset.

- **Retirement or abandonment of long-lived assets**
  - Remove carrying value (B/S);
  - Loss on the I/S.
- **Long-lived asset is exchanged**
  - G/L = fair value of the old asset (or fair value of new asset) - book value of the old asset.

4.27.2. 基础题

Q-129. Assume U.S. GAAP applies unless otherwise noted. An analyst determined the following information concerning Franklin, Inc.'s stamping machine:

Acquired	January 1, 1998
Cost	$22 million
Depreciation	straight line method
Estimated useful life	12 years
Salvage value	$4 million

As of December 31, 2004, the stamping machine is expected to generate $1,500,000 per year for five more years and will then be sold for $1,000,000. The stamping machine is:

A. impaired because its carrying value exceeds expected future cash flows.

B. impaired because expected salvage value has declined.

C. not impaired because annual expected revenue exceeds annual depreciation.

Q-130. The demand of products sold by Argo has been decreased due to the market place change for the company, and this decrease is not expected to recover to the previous condition in the forseeable future. The following information is provided by Argo about a customer list:

Item description	$ (thousands)
Carrying value amount	930,000
Undiscounted expected future cash flows	960,000
Present value of expected future cash flows	886,000
Fair value if sold	890,000
Costs to sell	7,000

Which of the following statements is most accurate? As an intangible asset with indifinate life, the customer list is impaired:

A. IFRS only.

B. U.S. GAAP only.

C. both IFRS and U.S. GAAP.

Q-131. At the end of the year, a company revalued its manufacturing facilities, increasing their carrying amount by 12%. There had been no prior downward revaluation of these facilities. The revaluation will most likely cause the company's:

A. return on assets to increase.

B. return on equity to decline.

C. net profit margin to increase.

Q-132. A Canadian printing company that prepares its financial statements according to IFRS has experienced a decline in the demand for its products. The following information (in Canadian dollars) relates to the company's printing equipment as of the current fiscal year end:

	C$
Carrying value of equipment (net book value)	50,000,000
Undiscounted expected future cash flows	45,000,000
Present value of expected future cash flows	42,000,000
Fair value	44,000,000
Costs to sell	4,000,000

The impairment loss (in C$) is closest to:

A. 6,000,000.

B. 8,000,000.

C. 10,000,000.

Q-133. An analyst is reviewing the intangible asset disclosure related to a company's warehouse. The intangible assets in the company have infinite useful life, and the analyst would most likely be able to determine:

A. amortization rate.

B. acquisition date.

C. purchase price.

Q-134. A company is selling a long-lived asset with a carrying amount of $140,000 for $160,000. The original cost of this asset was $240,000. In the year of sale, this event is *most likely* to be reported on the income statement as:

A. revenues of $160,000.

B. a gain of $20,000.

C. a loss of $80,000.

Q-135. A company that prepares its financial statements in accordance with International Financial Reporting Standards (IFRS) uses the revaluation model to value land. At the end of the current year, the value of land, newly acquired this year, has increased and will be adjusted on the balance sheet. This land is the only asset in its asset class for revaluation purposes. Which of the following statements is most accurate? In the current period, the revaluation of the land will:

A. increase return on assets.

B. decrease the debt-to-equity ratio.

C. increase return on sales.

4.28. Investment Property

4.28.1. 重要知识点

4.28.1.1. Investment property（注意 IFRS 和 GAAP 下的区别，重点掌握）

- **Under IFRS**, as property that is owned (or, in some cases, leased under a finance lease) for the purpose of earning rentals or capital appreciation or both.
  - **Cost model**
    - The cost model is identical to the cost model used for property, plant, and equipment.
  - **Fair value model**
    - The **fair value model** differs from the revaluation model used for property, plant, and equipment.
      - Under the revaluation model, whether an asset revaluation affects net income depends on whether the revaluation initially increases or decreases the carrying amount of the asset (surplus in owner’s equity);
      - Under investment property, all changes in the fair value of the asset affect net income (gain on income statement).
  - A company must apply one model (cost or fair value) to all of its investment property.
- **U.S. GAAP** classified investment property as normal long-lived assets.

4.28.2. 基础题

Q-136. An asset recorded at the fair value at purchase at 50 million. During year 2015, the value of the asset increased to 52 million, and the company wrote up the asset to the new market value. In 2016, the asset suffers an impairment and its fair value reduced to 51 million and the company recorded this 1 million loss in the income statement directly. Which of the following model is most likely to be used by the company to record the value of the asset?

A. Fair value model.

B. Revaluation model.

C. Historical cost model.

Q-137. For a company that prepares its financial statements under International Financial Reporting Standards (IFRS), for which of the following assets is it *most likely* that the company could report using the fair value model?

A. Houses built by the company for sale to customers

B. A building owned by the company and leased out to tenants

C. A building the company owns and uses to house its administrative activities

4.29. Income Taxes: DTA/ DTL

4.29.1. 重要知识点

4.29.1.1. Tax return terminology

- Taxable income;
- Taxes payable;
- Tax base
- Income tax paid;
- Tax loss carry forward.

4.29.1.2. Financial reporting terminology

- Accounting profit
- Income tax expense.
  - **Income tax expense = taxes payable + △ DTL - △DTA**
- Carrying value
- Deferred tax liabilities and deferred tax assets.
- Valuation allowance

4.29.1.3. Temperal difference and permanent difference

- **Temporary difference**
  - Difference will reverse
- **Permanent difference**
  - Difference will not reverse, thus no deferred tax issues.

4.29.1.4. Income approach

Deferred tax assets	Deferred tax liabilities
B/S amounts that result from an excess of tax payable over income tax expense are expected to be recovered from future operations.	B/S amounts that result from an excess of income tax expense over taxes payable are expected to result in future cash outflows.
Taxes payable > income tax expense	Taxes paybele < income tax expense

4.29.1.5. Balance sheet approach

- **Two steps for Deferred tax**
  - Step 1: identify DTL and DTA through a B/S approach;
  - Step 2: calculate deferred tax expense.
- **B/S approach**
  - Identify Accounting base and tax base for every asset and liability item on B/S.
  - Calculate the difference between two bases
    - For assets =
      accounting base-tax base
    - For liabilities =
      (-accounting base)-(-tax base)

Positive figure * tax rate = DTL
Negative figure * tax rate = DTA

4.29.1.6. U.S. GAAP vs. IFRS（相对重要的几个部分）

	IFRS	U.S.GAAP
Tax payable	将所得资产和所得税负债与其他资产和负债分开列报；	FAS109 要求，Tax payable 在 B/S 中确认为流动负债
Classification of DTA or DTL	Always non-current (net)	non-current /current
Tax rate to measure DTL or DTA	Use enacted or substantively enacted tax rate.	Use enacted tax rate
Recognition of deferred tax assets	Recognize the probable portion.	Recognize in full and then reduce by a valuation allowance, for the

		non-probable portion.
DTA valuation	Reverse is allowed	Reverse is prohibited

4.29.2. 基础题

Q-138. A company that prepares its financial statements in accordance with IFRS incurred and capitalized €4 million of development costs during the year. These costs were fully deductible immediately for tax purposes, but the company is depreciating them over two years for financial reporting purposes. The company has a long history of profitability, which is expected to continue. Which is the most appropriate way for an analyst to incorporate the differential tax treatment in his analysis? He should include it in:

A. liabilities when calculating the company's current ratio.

B. equity when calculating the company's return-on-equity ratio.

C. liabilities when calculating the company's debt-to-equity ratio.

Q-139. A company reported the following information of its tax related events.

(‘000)	2017	2016
Deferred tax assets	400	320
Deferred tax liabilities	900	720
Earnings before taxes	8,000	7,600
Income taxes at the statutory rate	2,400	2,280
Current income tax expense	2,000	1,800

The company’s income tax expense during 2017 is *closest* to:

A. $2,000.

B. $2,100.

C. $2,500.

Q-140. When accounting standards require recognition of an expense that is not permitted under tax laws, the result is a:

A. deferred tax liability.

B. temporary difference.

C. permanent difference.

Q-141. The following information is about a company equipment, which was purchased on 1

January 2007:

	Accounting Purposes	Tax Purposes
2007 Acquisition cost	$100,000	$100,000
Depreciation method	Straight-line	Double-declining balance method
Useful life	10 years	8 years
Salvage value	$20,000	$0
Tax rate	30%	30%

At the end of 2007, the balance sheet should occur:

A. $3,600 deferred tax liability.

B. $5,100 deferred tax asset.

C. $5,100 deferred tax liability.

Q-142. At the beginning of the year, a company purchased a fixed asset for $1,000,000 with no expected residual value. The company depreciates similar assets on a straight line basis over 10 years, whereas the tax authorities allow declining balance depreciation at the rate of 14% per year. In both cases, the company takes a full year's depreciation in the first year and the tax rate is 30%. Which of the following statements concerning this asset at the end of the year is most accurate?

A. The deferred tax asset is $10,000.

B. The temporary difference is $40,000.

C. The tax base is $1,000,000.

Q-143. The following data are available for a company's first year of operations:

Metric	£ Thousands
Earnings before tax reported on the income statement	5,280
Depreciation expense included in earnings before tax	9,000
Accounting expenses that are not deductible for tax purposes	4,260
Depreciation expense deductible for tax purposes in first year of operations	12,680
Corporate tax rate(forecst)	30%

Assume the current tax rate is 25%.The company's end-of-year balance sheet will *most likely* include (in thousands) a deferred tax

A. liability of £1,466.

B. liability of £1,104.

C. asset of £146.

Q-144. When certain expenditures result in tax credits that directly reduce taxes, the company will *most likely* record:

A. a deferred tax asset.

B. a deferred tax liability.

C. no deferred tax asset or liability.

Q-145. Which of the following statements most accurately describes a valuation allowance for deferred taxes? A valuation allowance is required under:

A. IFRS on revaluation of capital assets.

B. U.S. GAAP if there is doubt about recovering a deferred tax asset.

C. both IFRS and U.S. GAAP on tax differences arising from the translation of foreign operations.

Q-146. At the beginning of the year, a company purchased a fixed asset for $500,000 with no expected residual value. The company depreciates similar assets on a straight- line basis over 10 years, whereas the tax authorities allow declining balance depreciation at the rate of 15% per year. In both cases, the company takes a full year's depreciation in the first year. The tax rate is 40%. Which of the following statements concerning this asset at the end of the year is most accurate?

A. The tax base is $500,000.

B. The deferred tax asset is $10,000.

C. The temporary difference is $25,000.

Q-147. The following information is available about a company for its current fiscal year:

Accounting profit (earnings before taxes)	$500,000
Taxable income	$430,000
Tax rate	30%
Income taxes paid in year	$122,400
Deferred tax liability, start of year	$164,800
Deferred tax liability, end of year	$181,300

The income tax expense reported on the current year's statement of earnings is closest to:

A. $138,900.

B. $129,000.

C. $145,500.

4.30. Deferred Tax: Measurement

4.30.1. 重要知识点

4.30.1.1. 计算由于税率改变引起的 income tax expense 变化

- $\text{New DTA or DTL}=\dfrac{\text{old DTA or DTL}}{\text{old tax rate}}\times \text{new tax rate}$
- Income tax expense = tax payable + △DTL - △DTA
- Tax rate ↑ DTL↑ DTA↑
- Tax rate↓ DTL↓ DTA↓

4.30.1.2. Valuation allowance for DTA

- 当由于企业经营状况恶化，从而可能导致 DTA 未来无法回转时，要确认 Valuation allowance;
- Increasing the valuation allowance can decrease DTA, increase income tax expense and decrease net income. The net DTA can be reversed by decreasing valuation allowance, resulting in higher earing.

4.30.1.3. 在分析时，当分析师认为 DTL 不会回转时，DTL 全额视为 equity；会反转时，现值作为负债，剩余部分计入到 Equity，再计算 D/E。

4.30.1.4. Effective tax rates

$$\text{Effective tax rate} = \frac{\text{Income tax expense}}{\text{Pre - tax income (EBT)}}$$

4.30.1.5. Reversal of temporary difference

- **Treatment of DTL**
  - If unlikely to be reversed ➔treated as equity
  - If to be reversed ➔treated as true liability
  - If non-reversal/ reversal is uncertain ➔Ignored
- **Treatment of DTA**
  - If <50% probability to be reversed ➔valuation allowance is created

    $$\text{DTA} = \text{DTA-}\begin{pmatrix}\text{Valuation}\\ \text{Allowance}\end{pmatrix}$$

  - $\text{Asset}\downarrow \& \text{ Income}\downarrow$

4.30.2. 基础题

Q-148. Deferred tax liabilities should be treated as equity when:

A. they are not expected to reverse.

B. the timing of tax payments is uncertain.

C. the amount of tax payments is uncertain.

Q-149. Which of the following events will *most likely* result in a decrease in a valuation allowance for a deferred tax asset under U.S. GAAP? A(n):

A. reduction in tax rates.

B. extension in the tax loss carry-forward period.

C. decrease in interest rates.

Q-150. Zimt AG presents its financial statements in accordance with US GAAP. In 2007, Zimt discloses a valuation allowance of $1,101 against total deferred tax assets of $19,201. In 2006, Zimt disclosed a valuation allowance of $1,325 against total deferred tax assets of $17,325. The change in the valuation allowance *most likely* indicates that Zimt's:

A. deferred tax liabilities were reduced in 2007.

B. expectations of future earning power has increased.

C. expectations of future earning power has decreased.

Q-151. Assume U.S. GAAP applies unless otherwise noted. Fred Company has a deferred tax liability balance of $1,200,000 at the end of 2015. Tax rates increased from 30 percent to 40 percent in 2015. Fred Company should increase its tax liability account and also increase its:

A. 2015 income tax expense by $120,000.

B. 2015 income tax expense by $400,000.

C. income taxes payable by $400,000.

Q-152. When the tax authorities decided to reduce the tax rate, what will be the effect on a company's deferred tax asset and deferred tax liability respectively?

A. not be affected.

B. increase.

C. decrease.

Q-153. An analyst collected the following information of a company for its assets.

	2017	2016
Carrying amount for accounting purposes	£40,000	£45,000
Tax base for tax purposes	£32,000	£40,000
Tax rate	25%	30%

Which of the following statements best describes the effect of the change in the tax rate on the company's 2017 financial statements? The deferred tax liability:

A. increased by £500.

B. decreased by £400.

C. decreased by £1,600.

Q-154. Carnation Corporation had a deferred tax liability of $30,000 on January 1,20X2 that is expected to reverse in 20X4. In 20X2, Carnation generated pretax financial income of $300,000 and taxable income of $150,000 due to a difference in depreciation. The tax rate for 20X2 is 30% but Carnation enacted a reduction in tax rates on January 1, 20X3 to 25%, Carnation's income tax expense for 20X2 is closest to:

A. $75,000.

B. $77,500.

C. $82,500.

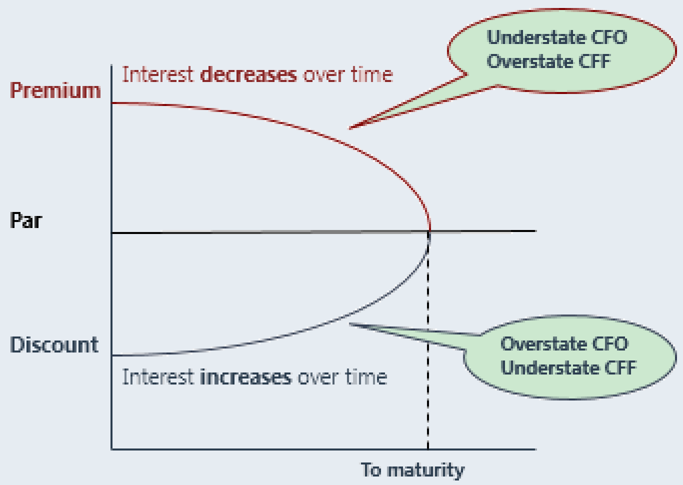
4.31. Valuation of Debt Security

4.31.1. 重要知识点

4.31.1.1. 报表记录：对于 discount bond, premium bond 的报表记录，特别掌握如何用实际利率法计算 int. exp（用 mkt. rate at issuance date）。

- Step 1: 计算 bond 的 PV
- Step 2: 计算 bond 第一期真正的 int. exp ,then 计算第一期结束的 carrying value
- Step 3: 根据第一期结束的 carrying value，计算 bond 第二期真正的 int. exp.
- 如此推导下去

4.31.1.2. Carrying value of bond on balance sheet



4.31.1.3. Amortization 对 CFO 间接法的影响

- **For premium bonds**
  - the total portion of coupon is treated as CFO in accounting basis.
  - For analytical purpose, CFO have to be the real interest expense, CFF have to be the coupon payment minus the interest expense.
  - Interest expense=coupon paid-premium amortization
- **For discount bond**
  - the total portion of coupon is treated as CFO in accounting basis.
  - For analytical purpose, CFO have to be the real interest expense, CFF have to be the difference between coupon payment and interest expense, but here **CFF treated as an inflow instead**.
  - Interest expense=coupon paid +discount amortization

4.31.1.4. 该表格需要重点掌握，考到的几率很大

Par bonds	Premium bonds	Discount bonds
Market rate=coupon rate Cash paid=CR.×Par	Market rate<coupon rate Interest expense = cash paid - amortization of premium	Market rate>coupon rate Interest expense = cash paid + amortization of discount
Interest expense is constant	Interest decreases over time	Interest increases over time
	CFO 低估；CFF 高估	CFO 高估；CFF 低估

4.31.2. 基础题

Q-155. Fairmont Golf issued fixed rate debt when interest rates were 6 percent. Rates have since risen to 7 percent. Using only the carrying amount (based on historical cost) reported on the balance sheet to analyze the company's financial position would *most* *likely* cause an analyst to:

A. overestimate fairmont's economic liabilities.

B. underestimate fairmont's economic liabilities.

C. underestimate fairmont's interest coverage ratio.

Q-156. Consolidated Enterprises issues €10 million face value, five-year bonds with a coupon rate of 6.5 percent. At the time of issuance, the market interest rate is 6.0 percent. Using the effective interest rate method of amortisation, the carrying value after one year will be closest to:

A. €10.17 million.

B. €10.21 million.

C. €10.28 million.

Q-157. On 1 January 2010 the market rate of interest on a company's bonds is 5 percent and it issues a bond with the following characteristics:

Face value	€50 million
Coupon rate, paid annually	4%
Maturity date	December 31,2019 (10 years)
Issue price	92.28

If the company uses IFRS, its interest expense (in millions) in 2010 is *closest* to:

A. €1.846.

B. €2.307.

C. €2.500.

Q-158. A company issued a $50,000 seven- year bond for $47,565. The bonds pay 9% per annum, and the yield to maturity at issue was 10%. The company uses the effective interest rate method to amortize any discounts or premiums on bonds. After the first year, the yield to maturity on bonds equivalent in risk and maturity to these bonds is 9%. The amount of the bond discount amortization recorded in the first year is closest to:

A. $257.

B. $0.

C. $348.

4.32. Other issues in Debt

4.32.1. 重要知识点

4.32.1.1. Early repayment of bond

- **Gain or loss on the extinguishment of debt (I/S):** The difference between the cash required to redeem the bonds and the carrying amount of the bonds.

4.32.1.2. Issuance cost

- **U.S. GAAP**
  - Capitalized in deferred charge (asset);
  - Amortized on a straight-line basis to the relevant expense (e.g., legal fees) over the life of the bonds.
- **IFRS**
  - Subtracted as an unamortized discount from measurement of the liability, bonds payable.
- Under IFRS and US GAAP, cash outflows related to bond issuance costs are included in the financing section of the statement of cash flows (usually netted against bond proceeds).
- **G/L on the extinguishment of debt should be eliminated from day-to-day income for analytical purpose.**
- CFS adjustments
  - CFO: + loss /- gain
  - CFF: cash paid to redeem the bond (cash outflows of financing activities)

4.32.1.3. Derecognition of debt

- **A firm may choose to redeem bonds before maturity**
  - Possible reasons
    - Interest rates reduction
    - Firm has generated surplus cash through operation
    - Funds from the issuance on the equity market is available
  - A gain or loss is recognized in I/S
    - G/L (I/S) = book value of bond – redemption price; In CFS, it is reported as CFF.

4.32.1.4. Debt covenants

- **Borrowing agreements (the bond indenture) often include restrictions called covenants that protect creditors by restricting activities of the borrower;**
- **Two types of restrictions**
  - Affirmative covenants: commit to do so from borrowers.
    - Timely payments of principal and interest;
    - Target financial ratios (such as the current, debt-to-equity, and interest

coverage ratios) unchanged;

- ◆ Use collateral in working order.

■ Negative covenants: commit not to do so from borrowers.

- ◆ Not to pay higher dividends or repurchase more shares;
- ◆ Not to borrow more;
- ◆ Not to engage in mergers and acquisitions.

4.32.1.5. For analytical purpose

- ➢ Stock price >conversion price, the convertible bond should be treated as equity;
- ➢ Stock price < conversion price, convertible bond should be treated as liability.

4.32.2. 基础题

Q-159. Oil Exploration LLC paid $45,000 in printing, legal fees, commissions, and other costs associated with its recent bond issue. It is *most likely* to record these costs on its financial statements as:

A. an asset under U.S. GAAP and reduction of the carrying value of the debt under IFRS.

B. a liability under U.S. GAAP and reduction of the carrying value of the debt under IFRS.

C. a cash outflow from investing activities under both U.S. GAAP and IFRS.

Q-160. On 1 January 2011, a company that prepares its financial statements according to International Financial Reporting Standards (IFRS) issued bonds with the following features:

- Face value: £20,000,000
- Term: Five years
- Coupon rate: 6% paid annually on 31 December
- Market rate at issue: 4%

The company carries all its bonds at cost. In December 2013, the market rate on similar bonds had increased to 5%, and the company decided to buy back (retire) the bonds after the coupon payment on 31 December. As a result, the gain on retirement reported on the 2013 income statement income is closest to:

A. £340,410.

B. £371,882.

C. £382,556.

Q-161. Which of the following is most likely a benefit of debt covenants for the borrower?

A. Limitations on the company’s ability to pay dividends

B. Restrictions on how the borrowed money may be invested

C. Reduction in the cost of borrowing

Q-162. Information about the coupon rates on the various long-term fixed-rate debt issues of a company can *most likely* be found in the:

A. non-current liabilities section of the balance sheet.

B. Management Discussion & Analysis (MD&A).

C. notes to the financial statements.

4.33. Financial Lease and Operating Lease: Lessee

4.33.1. 重要知识点

关于承租人和出租人的 lease

4.33.1.1. Capital lease 的条件 under US GAAP with specific conditions:

- Ownership of the leased asset transfers to the lessee at the end of the lease;
- The lease contains an option for the lessee to purchase the leased asset cheaply (bargain purchase option);
- The lease term is **75 percen**t or more of the useful life of the leased asset;
- The present value of lease payments is **90 percent** or more of the fair value of the leased asset.
- **A specialized nature.**

4.33.1.2. Accounting treatment for lease: lessee

	B/S	**I/S**	**CFS**
All IFRS lease and finance lease under US GAAP	Recognize "right-of-use" (ROU) asset and lease liability	Report depreciation expense on ROU asset	Reduction of lease liability -----CFF
		Report interest expense on lease liability	Interest payment----CFO or CFF (IFRS)
Operating lease (US GAAP)	Recognize "right-of-use" (ROU) asset and lease liability	Reporting single lease expense (a straight line allocation of lease cost)	Entire cash payment is CFO
Exceptions: short-term	No effect	Report rent expense	Rent payment------CFO

leases and leases where leased asset is low value (IFRS)			

4.33.1.3. 融资租赁和经营租赁对比

- **B/S：**
  - 期初 A=L=3170（未来租金折现求和的现值 PV）
  - 融资租赁：资产按折旧递减，负债端按 BASE 法则计
  - 经营租赁：资产与负债是相同数字，按 BASE 法则计，同融资租赁的负债数计算
- **I/S：**
  - 融资租赁：
    - 资产端：直线折旧法摊销，确认每年折旧费用=3170/4=792.5
    - 负债端：BASE 法则摊销，确认利息费用（A 列）
  - 经营租赁：
    - 全额确认租赁费用（S 列）
- CFS：**确认真实租金-1000**
  - 经营租赁：
    - CFO=-1000（S 列）；
  - 融资租赁：
    - CFO=-317（A 列），
    - CFF=-683 (1000-317)

4.33.2. 基础题

Q-163. Assume U.S. GAAP applies unless otherwise noted. At the beginning of the year, a lessee company enters into a new lease agreement that is correctly classified as a finance lease, with the following terms:

Annual lease payments due at the end of the year	$100,000
Lease term	5 years
Appropriate discount rate	12%
Depreciation method	straight-line basis
Estimated salvage value	$0

With respect to the effect of the lease on the company's financial statements in the first year of the lease, which of the following is most accurate? The reduction in the company's:

A. pretax income is $72,096.

B. cash flow from financing is $56,742.

C. cash flow from operations is $72,096.

Q-164. Compared to using a finance lease, a lessee that makes use of an operating lease will most likely report higher:

A. debt.

B. rent expense.

C. cash flow from operating activity.

Q-165. Under US GAAP, which of the following would require the lessee to classify a lease as a capital lease?

A. The term is 60% of the useful life of the asset.

B. The lease contains an option to purchase the asset at fair value.

C. The present value of the lease payments is 95% of the fair value.

Q-166. A lessee that enters into a finance lease will report the:

A. lease payable on its balance sheet.

B. full lease payment on its income statement.

C. full lease payment as an operating cash flow.

4.34. Financial Lease and Operating Lease: Lessor

4.34.1. 重要知识点

4.34.1.1. 出租人(lessor)：只要能区分 direct financing & sales type under US GAAP

- 判断是什么类型的 lease：对于出租人，lease 也分为两类—operating lease 和 capital lease.
- **对于 lessor, 判断 capital lease 的判断条件**
  - Firstly, 满足对于 lessee 是 capital lease;
  - Lessor must be reasonably assured of cash collection
  - Performed substantially under the lease
- **US GAAP 下，lessor 的 capital lease 又分为两种：** sales-type (PV> fair value of leased asset)和 direct-financing.
  - **记账区别**
    - Sales-type 在期初会确认一笔毛利 gross profit= PV of MLP – (Cost of assets – PV of salvage)；
    - Direct-financing 不确认毛利，而是把 PV of MLP 当做一笔借款借给承租人，将来收利息。
  - **期初现金流区别**
    - Sales-type 在期初有现金流；
    - Direct-financing 没有现金流。
  - **期中现金流区别**
    - Sales-type 和 direct-financing 有 CFO inflow，都是 int. revenue.

4.34.2. 基础题

Q-167. Under U.S. GAAP, a lessor's reported revenues at lease inception will be highest if the lease is classified as a(n):

A. sales-type lease.

B. operating lease.

C. direct financing lease.

Q-168. A manufacturer of jets also enters purchase and leaseback arrangements of used aircraft. The buy and leaseback arrangements are classified as operating leases, with the lease payments due in advance at the beginning of each period. The company depreciates these used aircraft on a straight-line basis over the life of the lease. The *most likely* effect on the manufacturer's financial statements of entering into one of these purchase and leaseback arrangements is an increase in its:

A. lease receivables.

B. EBIT by an amount equal to the lease payments.

C. capital assets.

4.35. Pension Plan

4.35.1. 重要知识点

4.35.1.1. Pension plans

- A pension is a form of deferred benefits paid to retired employees as a compensation of their services.
- **Defined contribution plan:** a company contributes an agreed-upon (defined) amount into the plan.
  - Contribution can be based on: employment years, age of the worker, wages, profit of the company, or a proportion of the work's contribution.
- **Defined benefit plan:** a company makes promises of future benefits to be paid to the employee during retirement.
  - Benefit can be based on the employee's service years and wages at, or near, retirement.

IFRS & U.S.GAAP			
B/S	$	I/S	$
PV of obligation	(X)	Interest cost	(X)
FV of plan asset	X	Current service cost	(X)
Overfunding/ (Underfunding)	X/(X)	Expected return	X
		Actuarial gain / (Loss)	X/(X)
		Total	X/(X)

Alternative treatment under IFRS			
B/S	$	I/S	$
PV of obligation	(X)	Interest cost	(X)
FV of plan asset	(X)	Current service cost	(X)

Overfunding/(Underfunding)	X/(X)	Expected return	X
Unrecognized actuarial (gain) / Loss	(X)/X	Total	X/(X)
Net asset /(Liability)	X/(X)		

4.35.1.2. 养老金对比

- **Defined contribution plan:** the employee assumes all the investment risk.
- **Defined benefit plan:** the employer assumes all the investment risk.

4.35.2. 基础题

Q-169. Penben Corporation has a defined benefit pension plan. At 31 December, its pension obligation is €10 million and pension assets are €9 million. Under either IFRS or US GAAP, the reporting on the balance sheet would be *closest* to which of the following?

A. €10 million is shown as a liability, and €9 million appears as an asset.

B. €1 million is shown as a net pension obligation.

C. Pension assets and obligations are not required to be shown on the balance sheet but only disclosed in footnotes.

Q-170. The following information is available from a company's current financial data, prepared according to US GAAP:

	$'000
Defined Contribution Plan:	
Contributions to defined contribution plan	2,000
Defined Benefit Plan:	
Contributions to defined benefit plan	3,000
Employees' service cost for the period	2,800
Interest expense accrued on the beginning pension obligation	400
Expected return on plan assets	800
Actuarial gains for the period	200

The pension expense (in $ thousands) reported in the current year is closest to:

A. 4,400.

B. 5,000.

C. 4,800.

4.36. Financial Reporting Quality

4.36.1. 重要知识点

4.36.1.1. Financial reporting quality

- A good financial reporting quality means the financial reports are under GAAP, decision-useful, sustainable, and adequate returns

4.36.1.2. Aggressive and conservative accounting

- **Conservative accounting**: it would delay reporting profits until the following period (so-called "hidden reserves");
- **Aggressive accounting**: it would increase the company's reported performance and financial position in the current period.

	Aggressive	**Conservative**
Current period cost	Capitalizing	Expensing
Useful life for depreciable assets	Longer time	Shorter time
Salvage values	Higher	Lower
Depreciation method	Straight line	Accelerated
Recognition of impairments	Delay recognition	Early recognition
Accrual of reserves for bad debt	Less	More
Valuation allowances for DTA	Smaller	Larger

4.36.1.3. Three conditions for issuing low quality reports

- Opportunity
  - Internal conditions can be
    - Poor internal controls;
    - Ineffective board of directors.
  - External conditions can be
    - Accounting standards that provide scope for divergent choices;
    - Minimal consequences for an inappropriate choice.
- Motivation
  - To meet or beat market expectations as reflected in analysts' forecasts and/or management's own forecasts;
  - Increase management compensation that is linked to increases in stock price or to reported earnings;
  - Career concerns and incentive compensation may motivate accounting choices;
  - Avoiding debt covenant violations can motivate managers to inflate earnings.

- Rationalization.
  - Rationalization is important because if an individual is concerned about a choice, he or she needs to be able to justify it to him- or herself.

4.36.1.4. Firms are motivated to manage

- **Earnings / Net income**
  - **Overstate net income**
    - Meet earnings expectation;
    - Remain in compliance with debt covenants;
    - Receive higher incentive compensation.
  - **Understate net income**
    - Obtain trade relief;
    - Negotiate favorable repayment term from creditors;
    - Negotiate favorable labor union contracts.
- **Balance sheet**
  - Overstating assets or understating liabilities to appear more solvent.
    - E.G. lower D/E ratio
  - Understating assets or overstating liabilities to enhance its performance ratios.
    - E.G. higher ROA, ROE, asset turnover ratio

4.36.1.5. The effects of different accounting methods

- Increase performance in the current period
  - Recognize revenue prematurely;
  - Use nonrecurring transactions to increase profits;
  - Defer expenses to later periods;
  - Measure and report assets at higher values;
  - Measure and report liabilities at lower values.
- Increase performance in a later period
  - Defer current income to a later period (save income for a "rainy day");
  - Recognize future expenses in a current period, setting the table for improving future performance.

4.36.1.6. 掌握几种财务警示信号及如何发现它们

- Aggressive revenue recognition
- Different growth rates of CFO and earnings
- Abnormal sales growth as compared to the economy, industry, or peers
- Abnormal inventory growth as compared to sales grow
- Boosting revenue with non-operating income and nonrecurring gains

- Delaying expense recognition
- Abnormal use of operating leases by lessees
- Hiding expenses by classifying them as extraordinary or nonrecurring

4.36.2. 基础题

Q-171. The quality of earnings is *most likely* comprimised by which of the following misconducts of a reported company?

A. reported an account called deferred customer acquisition costs for the very first time as an asset.

B. Reduced the expected useful life of a machine from 12 years to 7 years.

C. Reported an equipment as long-term capital lease instead of purchasing it as an asset.

Q-172. Accounting choices within GAAP that decrease reported performance in the current period and may increase performance in later periods are most likely examples of:

A. aggressive accounting.

B. conservative accounting.

C. earnings that are not sustainable.

Q-173. Assume U.S. GAAP applies unless otherwise noted. In 2008, a company reported net income of $200 million and cash flow from operations of $120 million. All else equal, the *most likely* explanation for the difference between net income and cash flow from operations in 2008 is that the company:

A. tightened credit policies and increased collection efforts during the year.

B. sold a long-term investment for an amount equal to book value at the end of the year.

C. increased raw materials inventory in anticipation of increased sales at the end of the year.

Q-174. Which of the following conditions conducive to issuing low- quality financial reports is most likely a result of poor internal controls?

A. Rationalization

B. Opportunity

C. Motivation

4.37. 进阶题

Q-1. During the proccess of securitization of accounts receivables, a nonfinancial company receives proceeds less than the book value. The transaction is *most likely* to increase:

A. net income.

B. cash from financing activities.

C. cash from operations.

Q-2. Which of the following statements is most accurate regarding cash flow statements prepared under IFRS and U.S. GAAP?

A. Under U.S. GAAP, bank overdrafts should be classified as a financing cash flow.

B. Under IFRS, interest paid can be reported either as an operating or an investing cash flow.

C. Both the direct and indirect formats of cash flow statements are allowed under IFRS and U.S. GAAP, but indirect is encouraged under IFRS only.

Q-3. Which of the following transactions is *least likely* to increase reported operating cash flow for the period?

A. Financing of payables.

B. Securitization of receivables.

C. Exercise of employee stock options.

Q-4. Wally Ltd purchased a patent and the company has capitalised this expense. If tax is ignored, compared to expensing the cost, Wally will *most likely* to report:

A. Lower EPS in that period.

B. Lower CFI in that period.

C. Lower CFO in that period.

Q-5. Using the following information, a Mexican corporation is computing the depreciation expense for a piece of manufacturing equipment that it purchased at the start of the current year. The company takes a full year's depreciation in the year of acquisition.

Cost of equipment	MXN4,000,000
Estimated residual value	MXN400,000
Expected useful life	10 years
Total productive capacity	5,000,000 units
Production during year	800,000 units

The depreciation expense (in MXN) will *most likely* be higher by:

A. 224,000, using the double-declining method compared with the units-of-production method.

B. 280,000, using the units-of-production method compared with the straight-line method.

C. 360,000, using the double-declining balance method compared with the straight-line method.

Q-6. In early January 2015, an analyst sees a news release that a company he follows (which reports under US GAAP) will be forced to reduce output from one of its major product lines at its highly specialized ceramics plant in response to a new technology introduced by its major competitor. The table summarizes information and estimates that the analyst has gathered from various sources about the plant and its future prospects.

Selected Information Related to the Ceramics Production Plant End of 2014 ($ thousands)	
Carrying amount of plant	3,208
Undiscounted expected future net cash flows	2,700
Present value of expected future net cash flows	2,100
Fair value of plant	2,450
Revised estimate of useful life	4 years
Depreciation method	Straight line
Revised estimate of residual value	$400

If the above information and estimates prove accurate, the depreciation expense that should be reported for 2015 related to the plant will be closest to:

A. $426 thousand.

B. $612 thousand.

C. $512.5 thousand.

Q-7. A company prepares its financial statements according to U.S. GAAP and leased a piece of equipment on 1 January 2012. Information relevant to the transaction is as follows:

1. Five annual lease payments of $25,000, with the first payment due 1 January 2012.
2. Interest rate on similar company debt is currently 8%.
3. The fair value of the equipment is $115,000.
4. Useful life of the equipment is seven years.
5. The company depreciates other equipment in the same asset class on a straight-line basis.

The total expense related to the lease on the company's 2012 income statement will be *closest* to:

A. $22,024.

B. $25,000.

C. $28,185.

Q-8. Assume U.S. GAAP applies unless otherwise noted. Madison Inc. is planning a bond issue. They are considering issuing either a straight coupon bond or a coupon bond with warrants attached. The proceeds from either Issue would be the same. What will be the effect on their interest expense and balance sheet liability if they issue the bonds with warrants as compared to the straight bonds? For the bonds with warrants

	The interest expense will be	The balance sheet liability will be
A.	lower	lower
B.	lower	higher
C.	higher	lower

Q-9. Assume U.S. GAAP applies unless otherwise noted. Charles McKinmon, CFA is analyzing the financial statements of Computers On Credit, Inc. (COC). COC has sold $60 million of accounts receivable for proceeds of $50 million, and McKinmon wishes to treat the transaction as collateralized borrowing. McKinmon's financial statement adjustments will *most likely* include adding:

A. $50 million to accounts receivable.

B. $50 million to cash flows from financing activity.

C. $50 million to cash flows from operating activity.

Q-10. Lazlo Ltd, a European-based telecommunications provider, follows IFRS and capitalizes new product development costs. During 2007 they spent €25 million on new product development and reported an amortization expense related to a prior year's new product development of €10 million. Other Information related to 2007 is as follows:

	in € millions
Net income	225
Average assets	1,875
Cash flow from operations	290

An analyst would like to compare Lazlo with a U.S.-based telecommunications provider and has decided to adjust their financial statements to U.S. GAAP. Under U.S. GAAP, and ignoring tax effects, the return on assets (ROA) and cash flow from operations (CFO) for Lazlo would be *closest* to (millions):

	ROA	CFO
A.	10.7%	€265
B.	10.7%	€275
C.	11.2%	€265

Q-11. When analyzing a company that prepares its financial statements according to U.S. GAAP, calculating the price/tangible book value ratio instead of the price/book value ratio is most appropriate if it:

A. grows primarily through acquisitions.

B. develops its patents and processes internally.

C. invests a substantial amount in new capital assets.

Q-12. On 1 January 2010, Elegant Fragrances Company issues £1,000,000 face value, five-year bonds with annual interest payments of £55,000 to be paid each 31 December. The market interest rate is 6.0 percent. Using the effective interest rate method of amortization, Elegant Fragrances is *most likely* to record:

A. an interest expense of £55,000 on its 2010 income statement.

B. a liability of 982,674 on the 31 December 2010 balance sheet.

C. a £58,736 cash outflow from operating activity on the 2010 statement of cash flows.

Q-13. The following data are available for a company and its industry:

Company Common-Size Balance Sheet As at 31 December 2010	
Assets	(%)
Cash & Short-Term Investments	42.1
Accounts Receivable	9.5
Inventory	0.8
Total Current Assets	52.4
Net Property, Plant, and Equipment	4.0
Goodwill	40.8
Other Long-Term Assets	2.8
Total Assets	100.0

Liabilities and Shareholders' Equity	
Short-Term Debt	1.5

Accrued Liabilities and Accounts Payable	18.0
Total Current Liabilities	19.5
Long-Term Debt	20.0
Other Long-Term Liabilities	7.5
Total Liabilities	47.0
Total Stockholders' Equity	53.0
Total Liabilities & Shareholders' Equity	100.0

Data for comparison	Industry
Current ratio	3.2
Debt-to-equity	55.0%
Long-term debt-to-equity	42.0%

Which of the following statements about the company is most appropriate? The company:

A. operates in the manufacturing industry.

B. has made significant acquisitions in the past.

C. has higher financial leverage than the industry.

Q-14. A company reports that to maintain good relations with its suppliers, it has entered into a financing arrangement with a bank whereby it will periodically have the bank pay its suppliers the amounts owed and it will then repay the bank in the following period. The motivation for the company's behavior is *most likely* to:

A. improve its current ratio.

B. improve its relations with its suppliers.

C. manage the timing of operating cash flows.

Q-15. Under IFRS, Company A capitalized €2 million of development costs for accounting purpose, while the tax authority required the amount to be expensed immediately. On the company's financial statements, the capitalized cost would be depreciated over two years. The compnay is expected to continue earning positive profits. For analytical purpose, a fianncial analyst should incorporate the difference due to tax treatment in the balance sheet as:

A. liabilities when calculating the company's current ratio.

B. liabilities when calculating the company's debt-to-equity ratio.

C. equity when calculating the company's return on equity ratio.

Q-16. Given the following financial statement data, calculate the net operating cycle for this company.

	In Millions ($)
Credit sales	40,000
Cost of goods sold	30,000
Accounts receivable	3,000
Inventory–Beginning balance	1,500
Inventory–Ending balance	2,000
Accounts payable	4,000

The net operating cycle of this company is *closest* to:

A. 3.8 days.

B. 24.3 days.

C. 51.7 days.

Q-17. Strongsville Fabricators Inc. uses the FIFO method for inventory valuation. Assuming a rising costs environment and other factors held constant, Strongsville's price-to-earning and price-to-book multiples relative to those for another company that uses the LIFO method for inventory valuation would be:

	Price-to-earnings Multiple	Price-to-book Multiple
A.	overstated	overstated
B.	overstated	understated
C.	understated	understated

Q-18. A company whose objective is to maximize income had spent $2,000,000 for a machine with two significant components as indicated below. The machine is expected to have an overall useful life of 10 years and the company uses the straight line method of depreciation.

Component	Cost	Useful Life
A	$1,000,000	10 years
B	$1,000,000	5 years

The depreciation expense for the first year computed under IFRS compared with under U.S. GAAP will *most likely* be:

A. the same.

B. $100,000 lower.

C. $100,000 higher.

Q-19. A company has recently revalued one of its depreciable properties and estimates that its remaining useful life will be another 10 years. The applicable tax rate for all years is 40%, and the revaluation of the property is not recognized for tax purposes. Details related to this asset are provided in the following table:

(millions)	Accounting Purposes	Tax Purposes
Original Values and Estimates		
Acquisition cost in 2014	£4,000	£4,000
Depreciation, straight line	10 years	5 years
Accumulated depreciation, end of 2016	£1,200	£2,400
Net balance, end of 2016	£2,800	£1,600
Re-estimated Values and Estimates, Start of 2017		
Revaluation balance, start of 2017	£5,000	Not applicable
New estimated life	10 years	

The deferred tax liability related to this asset (in millions) as at the end of 2017 is closest to:

A. £600.

B. £1,620.

C. £930.

Q-20. An analyst is forecasting gross profit of the three following companies. He uses the five-year average gross margins and forecasts sales using an internal model.

- Company 1's products currently enjoy healthy margins because of its technological edge. New technologies typically replace old ones every two years in this industry.
- Company 2 has been offering the same products throughout the period, and the demand and cost structures for its products have not experienced any significant changes.
- Company 3 has recently restructured its product offerings focusing on high margin products only.

For which of the three companies will the forecast of gross profit be most reliable? Company:

A. 1.

B. 2.

C. 3.

Q-21. The following financial information is available at the end of the year.

Security	**Authorized**	**Issued and Outstanding**	**Other Features**
Common stock	1,000,000	500,000	Currently pays a dividend of $2 per share.
Preferred stock, Series A	100,000	24,000	Nonconvertible, cumulative; pays a dividend of $8 per share.
Preferred stock, Series B	100,000	60,000	Convertible; pays a dividend of $15 per share. Each share is convertible into 5 common shares.
Additional information:			
Reported income for the year		$2,000,000	

The diluted EPS (earnings per share) is closest to:

A. $2.26.

B. $2.08.

C. $1.82.

Solutions

If you have people you love, allow them to be free beings. Give and don't expect. Advise, but don't order. Ask, but never demand. It might sound simple, but it is a lesson that may take a lifetime to truly practice. It is the secret to true Love. To truly practice it, you must sincerely feel no expectations from those who you love, and yet an unconditional caring.

如果你有爱的人，允许他们自由随意的存在。给予而不指望；建议而不命令；请求而不要求；可能听起来简单，但这需要一辈子去实践。这就是真爱的秘诀。真正去实践它，你必须对那些你爱的人没有期望，并给予无条件的关爱。

4. Financial Statement Analysis

4.1. 基础题

Q-1. Solution: B.

The role of financial reporting by companies is to provide information about a company's performance, financial position, and changes in financial position that is useful to a wide range of users in making economic decisions.

The role of financial statement analysis is to use financial reports prepared by companies, combined with other information, to evaluate the past, current, and potential performance and financial position of a company for the purpose of making investment, credit, and other economic decisions.

Q-2. Solution: A.

The notes provide a comprehensive description of all of the entity's accounting policies, irrespective of whether judgment was required or whether the policies are important in understanding the financial statement.

Q-3. Solution: B.

Management must highlight any favorable or unfavorable trends and identify significant events and uncertainties that affect the company's liquidity, capital resources, and results of operations. The MD&A must also provide information about the effects of inflation, changing prices, or other material events and uncertainties that may cause the future operating results and financial condition to materially depart from the current reported financial information. In addition, the MD&A must provide information about off-balance-sheet obligations and about contractual commitments such as purchase obligations.

Q-4. Solution: A.

The annual report is not a requirement of the SEC.

B is incorrect. The 10- K is required by the SEC

C is incorrect. A proxy statement is required by the SEC

Q-5. Solution: C.

Audits provide reasonable assurance that the financial statements are fairly presented, meaning that there is a high degree of probability that they are free of material error, fraud or illegal acts.

Q-6. Solution: B.

A qualified opinion is one in which there is some scope limitation or exception to accounting standards that is described in additional explanatory paragraphs.

Q-7. Solution: B.

During the process data phase, an analyst will produce a variety of reports and documents based on the information collected. These may include common- size statements, ratios and graphs, forecasts, adjusted statements, and analytical results.

A is incorrect. The statement of purpose is prepared during the articulation phase.

C is incorrect. The statement of cash flows is a source of information for the analyst.

Q-8. Solution: B.

The general ledger is the collection of all business transactions sorted by account in an accounting system. The general journal is the collection of all business activities sorted by date.

Q-9. Solution: C.

Net income is not an element of the financial statements, but the net result of revenues less expenses. The elements are: assets, liabilities, owners' equity, revenue and expenses.

Q-10. Solution: B.

B is correct. Expenses are a component of the income statement and are defined as outflows, asset depletions, and liabilities incurred in the course of a business's activities.

A is incorrect. Accounts payable is a liability, a component of the balance sheet, and is defined as amounts that a company owes its vendors for purchases of goods and services.

C is incorrect. Liabilities are a component of the balance sheet and are defined as obligations from past events that on settlement are expected to result in an outflow of economic benefits

Q-11. Solution: C.

Buying \$10,000 of candies will decrease cash by \$10,000 and increase inventory by \$10,000. Selling \$4,000 of candies for \$6,000 will decrease inventory by \$4,000 and increase either cash (if cash is collected in the same accounting period) or accounts receivable (if sold on credit) by \$6,000. The combined effect is an increase of \$2,000 in assets.

Q-12. Solution: C.

Start-of-year capital contributed by owners	\$12,000
Additional shares issued	1,200
Initial retained earnings	5,000
Net income	5,000
Dividends paid	(500)
Ending owners' equity	\$22,700

Q-13. Solution: C.

Total assets = Current assets + Non-current assets = 18,400 + 25,500	Total assets = 43,900
Assets = Liabilities + Equity → 43,900 = 18,800 + Equity	Equity = 25,100
Equity = Share capital + Ending retained earnings → 25,100 = (4,000 + 1,000) + Ending retained earnings	Ending retained earnings = 20,100
Ending Retained earnings = Beginning retained earnings + Net income – Dividends → 20,100 = 17,700 + (24,000 – 20,300) – dividends	Dividends = 1,300

Q-14. Solution: C.

There would be no effect on the accounting equation because the company has exchanged one asset for another. Cash has decreased and office equipment, a capital asset, has increased.

Q-15. Solution: C.

	2011 ($)	2012 ($)
Total assets (given)	100,000	92,000
Total debt (50% in 2011, no change in 2012)	50,000	50,000
Total equity (Total assets – Total debt)	50,000	42,000
Equity Components		
Contributed capital (50% of equity in 2011, no change in 2012)	25,000	25,000
Retained earnings (solved for): Total equity – Contributed capital	25,000	17,000
Retained earnings = Opening RE + Net income –Dividends		
2012 Retained earnings = 17,000 = 25,000 –3,000 – Dividends		
Dividends = 5,000		

Q-16. Solution: A.

The process has recognized as a liability, with cash has been received, but the transaction haven't occurred. So this should be recognized as an unearned revenue.

Q-17. Solution: A.

When cash is to be received after revenue has been recognized but no billing has actually occurred, unbilled (accrued) revenue is recorded. Such accruals would usually occur when an accounting period ends prior to a company billing its customer. This type of accrual can be contrasted with a simple credit sale, which is reflected as an increase in revenue and an increase in accounts receivable. No accrual is necessary.

Q-18. Solution: C.

The adjusting entry to record the expiry of a prepaid expense is the reduction of an asset (the prepaid) and the recognition of the expense.

Q-19. Solution: B.

The statement about accrued expenses is correct. A valuation adjustment for an asset converts its historical cost to current market value; accrued revenue arises when revenue has been earned but not yet received.

Q-20. Solution: C.

C is correct. Relevance and faithful representation are the two fundamental qualitative characteristics that make financial information useful according to the IASB Conceptual Framework.

Q-21. Solution C.

A core objective of IOSCO is to ensure that markets are fair, efficient, and transparent. The other core objectives are to reduce, not eliminate, systematic risk and to protect investors, not all users of financial statements.

Q-22. Solution: B.

Under the IASB's Conceptual Framework, verifiability means that different knowledgeable and independent users would agree that the information presented faithfully represents the economic events that it is intended to represent.

Q-23. Solution: C.

The revenue/expense-based approach is a measurement approach, not a standard setting approach.

Q-24. Solution: C.

Cost of goods sold is a classification by function. The other two expenses represent classifications by nature.

Q-25. Solution: B.

	$000s	
Revenue	14,000	
Less cost of goods sold	(8,400)	
Less other operating expenses	(1,000)	

Less restructuring expenses	(500)	Restructuring charges are operating items.
Operating profit	**$4,100**	

Q-26. Solution: A.

Net revenue means that the revenue number is reported after adjustments for cash or volume discounts or for estimated returns.

Q-27. Solution: B.

The two main types of long- lived assets whose costs are not allocated over time are land and those intangible assets with indefinite useful lives.

A is incorrect because a company records an estimate of uncollectible amounts as an expense on the income statement, not as a direct reduction of revenues.

C is incorrect because, under the matching principle, at the time revenue is recognized on a sale, a company is required to record an estimate of how much of the revenue will ultimately be uncollectible.

Q-28. Solution: C.

The converged standards aim to take a principles- based approach that avoids the provision of specific rules and requirements characteristic of current US GAAP revenue recognition standards.

A is incorrect. Neither current US GAAP nor the new standard suggests aligning revenue recognition with receipt of payments, except where collectability is uncertain.

B is incorrect. Current US GAAP includes extensive guidance on specific industries and transactions. The new standard moves away from this approach.

Q-29. Solution: A.

Change accounting policies need to Retrospect. (To LIFO, no need to adjust retrospectively).

Q-30. Solution: C.

Bad debt expense is an operating expense. Alternatively, it can be classified as non-operating items for a manufacturing firm.

Q-31. Solution: C.

The weighted average number of shares outstanding for 2009 is 1,050,000. Basic earnings per share would be $1,000,000 divided by 1,050,000, or $0.95.

Q-32. Solution: B.

Preferred stock dividends of \$140,000 (0.07× 2,000,000) should be deducted from net income to derive amount available for common shareholders: \$1,360,000 = (1,500,000 - 140,000).

Basic EPS = \$1,360,000/1,000,000 or \$1.36 per share.

Dilutive EPS would consider the convertible bonds if they were dilutive. Interest on the bonds would be \$400,000 and the after-tax add back to net income would be \$400,000 (0.7) or \$280,000. Dilutive EPS would be \$1,640,000/1,300,000 shares assuming conversion = \$1.26 per share.

Q-33. Solution: A.

If the convertible preferred shares were converted to common stocks, there would be no preferred dividends paid. Thus, we should add back the convertible preferred dividends that had previously been subtracted from net income in the numerator.

Basic EPS = (net income – dividend from preferred stocks) / average weighted number of shares issued = (1,000,000 – 1,000,000×0.04) / 500,000= 1.92.

Dilutive EPS = (net income – dividend from preferred stocks + dividend from preferred stocks) / (average weighted number of shares issued + shares from conversion of preferred stocks) = (1,000,000 – 1,000,000×0.04 + 1,000,000×0.04) / (500,000+10,000) = 1.96.

1.96 > 1.92, dilutive EPS is 1.92.

Q-34. Solution: A.

With stock options, the treasury stock method must be used. Under that method, the company would receive \$100,000 (10,000 × \$10) and would repurchase 6,667 shares (\$100,000/\$15). The shares for the denominator would be:

Shares outstanding	1,000,000
Options exercises	10,000
Treasury shares purchased	(6,667)
Denominator	1,003,333

Q-35. Solution: B.

Preferred stock dividends of \$70,000 (0.07× 1,000,000)

$$\text{BEPS} = \frac{\boldsymbol{Net\ income - preferred\ dividends}}{\boldsymbol{Weighted\ average\ number\ of\ common\ shares\ outstanding}}$$

$$= \frac{\mathbf{1,250,000 - 70,000}}{\mathbf{1,000,000}} = \mathbf{1.18}$$

$$\text{DEPS} = \frac{\boldsymbol{Net\ income} - \text{D}_{\boldsymbol{ps}} + \text{converted preferred dividends}}{\text{WACSO + number of shares converted}}$$

$$= \frac{\mathbf{1,250,000 - 70,000 + 49,000}}{\mathbf{1,000,000 + 700 \times 25}} = \mathbf{1.2079}$$

Because DEPS for the company is 1.21, which is larger than its BEPS, which is 1.18, so the preferred stock is an anti-dilutive stock, DEPS for the company is 1.18

Q-36. Solution: C.

$$\text{Diluted EPS}=\frac{\text{adjusted income available for common shares}}{\text{weighted avg. common \& potential common shares out}}$$

$$=\frac{\left[\text{NI- div}_{\text{preferred}}\right]+\left[\text{div}_{\substack{\text{convertible}\\ \text{preferred}}}\right]+\left[\text{interest}_{\substack{\text{convertible}\\ \text{debt}}}\right](1\text{-t})}{\text{WACSO}+\left[\text{shares}_{\substack{\text{conversion of}\\ \text{conv. pfd. shares}}}\right]+\left[\text{shares}_{\substack{\text{conversion of}\\ \text{conv. debt}}}\right]+\left[\text{shares}_{\substack{\text{issuable from}\\ \text{stock opt.}}}\right]}$$

Based on the formula shown above, to calculate DEPS, both convertible debt and convertible preferred stocks will influence both the numerator and denominators

Treasury stock method is used for stock options, and only denominator is influenced to calculate DEPS

Q-37. Solution: A.

Total shareholders' equity = common stock + paid in capital + preferred stock + retained earnings + OCI = 400,000 + 50,000 + 140,000 + 847,000 + 38,000 = 1,475,000.

Q-38. Solution: A.

Under U.S. GAAP and IFRS, the unrealized gains and losses arising from carrying available for sale securities at market value are reported in equity as part of accumulated other comprehensive income.

Q-39. Solution: C.

Total comprehensive income = Net income + other comprehensive income

Net income = Revenues – Expenses

Other comprehensive income includes unrealized gains or losses on available-for-sale securities and translations adjustments on foreign subsidiaries.

(Revenues – Expenses) + Unrealized Gain on AFS – Loss on FX translation

(25,000 – 20,000) + 2,950 – 650 = 7,300.

Q-40. Solution: A.

Gains or losses on the disposal of discontinued operations are reported separately near the bottom of the income statement and are included in net income, not other comprehensive income.

Q-41. Solution: A

Metric	£ thousands
Ending retained earnings	821,000
Less: opening retained earnings	(580,000)
Add back: dividends paid	60,000
Net income	301,000
Comprehensive income	246,000
OCI = Comprehensive income − net income	-55,000

Q-42. Solution: B.

Assets are resources controlled by a company as a result of past events.

Q-43. Solution: B.

Under US GAAP, intangibles must be valued at historical cost; under IFRS they can be valued at cost or revaluation.

A is incorrect. Under IFRS, a classified balance sheet does separate current assets from non-current assets, but non- current assets could be presented first.

C is incorrect. A commercial real estate company would have many non- liquid assets and would not likely use the liquidity- based presentation under IFRS. A commercial bank would use this format.

Q-44. Solution: C.

Treasury stock is non-voting and does not receive dividends.

Q-45. Solution: C.

A liquidity-based presentation can be used when it provides information that is reliable and more relevant. Entities that typically choose this format include banks.

Q-46. Solution: B.

All categories have realized gains or losses treated in the same way; they are reported on the income statement. It is the unrealized gains and losses that are included in other comprehensive income (in equity) for available-for-sale securities carried at market value.

Q-47. Solution: B.

Held-for-trading and available-for-sale securities are carried at market value, whereas held-to--maturity securities are carried at amortized cost. If the investment is reclassified as available-for-sale in 2010, the carrying amount should be adjusted to its market value, which is

$10,000. Compared with the amortized cost of $20,000, it's a decrease of $10,000.

Q-48. Solution: A.

When financial assets are classified as available for sale, the realized gain or loss is reported in income statement, and unrealized gain or loss is reported in equity.

Q-49. Solution: A.

A is correct. Bonds payable issued by a company are financial liabilities that are usually measured at amortized cost.

B is incorrect. Only financial liabilities held for trading are measure at market value, and that does not include bonds issued by the company.

C is incorrect. Historical cost would record the bonds at the value at date of issue and not amortize the bond premium or discount over the life of the bond.

Q-50. Solution: C.

The allowance for doubtful accounts increases by the bad debt expense recognized for the year and decreases by the amounts written off during the year.

Beginning balance allowance	£56 million
Plus bad debt expense	?
Less write-offs	(£84 million)
Ending balance allowance	£92 million
Solve for bad debt expense = 120	

Q-51. Solution: B.

Purchases and sales of long-term assets are considered investing activities. Note: Absent information to the contrary, it is assumed that the sale of a building involves cash. If, for example, the transaction had involved the exchange of a building for common stock or the exchange of a building for a long-term note payable, it would have been considered a significant non-cash activity.

Q-52. Solution: C

Non-cash transactions, if significant, are reported as supplementary information, not in the investing or financing sections of the cash flow statement.

Q-53. Solution: B.

Purchasing other companies' long-term bond generally should be classified as investing activities, which should be classified as operating activities for financial institutions.

Q-54. Solution: A.

The company received the cash in 2011 when it recorded the unearned revenue and it was a part of the cash from operations in that year. In 2012, the revenue is earned but there is no cash exchanged and hence no effect of the cash from operations, ignoring taxes.

Q-55. Solution: C.

Under GAAP, interest payment will be classified as operating cash flows and dividends paid will be classified as financing cash flows. So with lower interest and higher dividends, company B will report lower CFF and higher EPS.

Q-56. Solution: B.

US GAAP requires that interest paid be classified as an operating cash flow; IFRS allows interest paid to be classified as either an operating or financing activity.

A is incorrect. US GAAP requires that interest paid be classified as an operating cash flow; IFRS allows interest paid to be classified as either an operating or financing activity.

C is incorrect. US GAAP requires that interest paid be classified as an operating cash flow; IFRS allows interest paid to be classified as either an operating or financing activity.

Q-57. Solution: A.

Cash collections from sales equals beginning receivables plus sales less ending receivables:

€6,000 + €50,000 – €7,500 = €48,500

B is incorrect. It is sales plus the change in receivables: €50,000 + (€7,500 – €6,000) = €51,500.

C is incorrect. It is sales less the end receivables: €50,000 – €7,500 = €42,000.

Q-58. Solution: C.

Cash received from customers = Sales + Decrease in accounts receivable = 254.6 + 4.9 = 259.5. Cash paid to suppliers = Cost of goods sold + Increase in inventory - Increase in accounts payable = 175.9 +8.8 - 2.6 = 182.1.

Q-59. Solution: C.

CFO = Net income + depreciation + delta current liabilities - delta current asset + loss – gains = 240 + 40 + 50 – 20 – 10 + 30 – 4. Note that the increase in PP&E cannot be classified as cash flows from operating activities.

Q-60. Solution: B.

All dollar amounts are in millions. Net income (NI) for 2010 is $35. This amount is the increase in retained earnings, \$25, plus the dividends paid, \$10. Depreciation of \$25 is added back to net income, and the increases in accounts receivable, \$5, and in inventory, \$3, are subtracted from net income because they are uses of cash.

The decrease in accounts payable is also a use of cash and, therefore, a subtraction from net income. Thus, cash flow from operations is \$45.

Q-61. Solution: B.

To derive CFO, the company would make the following adjustments to net income: Add depreciation of \$2 million; add the decrease in A/R of \$3 million; add the increase in A/P of \$5 million; and subtract the increase in inventory of \$4 million. Total additions would be \$10 million, and total subtractions would be \$4 million, which gives net additions of \$6 million.

Q-62. Solution: C.

The direct method of cash flow statement presentation shows the specific cash inflows and outflows that result in reported cash flow from operating activities (e.g., cash from customers and ash to suppliers). Companies using IFRS can decide to report interest and dividend receipts as ther an investing or operating activity, whereas under US GAAP, they must report such income as an operating activity. The listed operating and investment activities indicate that the company reports under IFRS using the direct method.

Q-63. Solution: C.

The primary benefit of the direct method is that it provides information on the specific sources of operating cash receipts and payments.

Q-64. Solution: B.

Interest expense is equal to ending interest payable plus cash paid for interest less beginning interest payable. The calculation is as follows:

	£ millions
Interest expense = Ending interest payable + Cash paid for interest – Beginning interest payable	84.5 + 103.3 – 90.4 = 97.4

Q-65. Solution: A.

Ending year net book value is \$59 million (=105 –46), and the beginning year net book value is \$60 million (=100 –40).

$NBV_{ending} = NBV_{beginning}$ + purchase – depreciation.

Cash received from equipment sale= $NBV_{beginning}$ + purchase – depreciation - NBV_{ending} – loss = 60 +10 -8 – 59 - 2 =1 million

Q-66. Solution: A.

The increase of $42 million in common stock and additional paid-in capital indicates that the company issued stocks during the year. The increase in retained earnings of $15 million indicates that the company paid $10 million in cash dividends during the year, determined as beginning retained earnings of $100 million plus net income of $25 million, minus ending retained earnings of $115, which equals $10 million in cash dividends.

Q-67. Solution: B.

CFI consist of the inflows and outflows of cash resulting from the acquisition or disposal of long-term assets and certain investments.

Q-68. Solution: A.

Sell and purchase of trading securities are cash flow from operatings, and proceeds from issuance of bonds is a cash flow from financing. Only purchase of 20% of shares of an affiliated company is a cash flow from investing activities, and it is a cash outflow. So from this aspect, the cash flow from investing activity for Genite Company is -355,000.

Q-69. Solution: C.

CFI = -purchased of new machine = -150,000

CFF = -dividends paid – principal paid = -42,000 – 34,000 = -76,000

Convertible preferred stock – non-cash

Dividends received – operating cash flows

Q-70. Solution: B.

Only the cash flows for the purchase of the shares in an affiliated company is cash from investing activities, thus the net amount is –$275,000. Cash flows from trading securities is an operating activity, and cash flow from issuing bonds is a financing activity.

Q-71. Solution: C.

CFO = net income + depreciation + loss on sale of equipment + decrease in accounts receivable - increase in inventories + increase in accounts payable.

It would have been deducted in the calculation of net income but the loss is not the cash impact of the transaction (the proceeds received, if any, would be the cash effect) and cash flows related to equipment transactions are investing activities, not operating activities.

CFO = 91.6 + 36.4 + 3.2 + 8.4 –10.8 +9 = $137.8 million; so FCFE = 137.8-14.6=$123.2 million.

Q-72. Solution: C.

Free cash flow = CFO + interest paid (1 - tax rate) – investment in fixed asset

= 1000 + 60×(1-25%)– 120 = 925.

Q-73. Solution: A.

The FCFF [Cash flow from operations (CFO) + Interest × (1– t) – Capital expenditures] would be the same. CFO and capital expenditures would both increase by the same amount (ignoring taxes). Therefore, net effect on FCFF would be zero

Q-74. Solution: B.

Calculation of the free cash flow to the firm (FCFF):

	$ millions
Net income	90
+ Non-cash charges	15.2
+ Interest expense × (1-tax rate)	28 × (1-0.4) = 16.8
- Capital expenditures	(34.3)
- Working capital expenditures	(13)
FCFF	74.7

Q-75. Solution: C.

FCFE = FCFF – Int × (1- t) + net borrowing

Interest paid should be subtracted from FCFF, and net borrowing should be added.

Q-76. Solution: A.

The company is becoming increasingly less solvent, as evidenced by its debt-to-equity ratio increasing from 0.35 to 0.50 from 2013 to 2015. B is incorrect because it incorrectly interprets the debt-to-equity ratio as a measure of liquidity. C is incorrect because it incorrectly interprets the direction of the trend and misinterprets the ratio as an indicator of liquidity.

Debt to equity:

2015	4,000/8,000=0.5000
2014	3,800/9,000=0.4222
2013	3,500/10,000=0.3500

Q-77. Solution: B.

Cash conversion cycle = collection period + inventory period - payables period.

An increase in receivables turnover will decrease the collection period and shorten the cash conversion cycle. An increase in the payables period will also shorten the cash conversion cycle.

Q-78. Solution: C.

	Calculation	Company	Industry
Tax burden ratio	NI/EBT	45,700/65,800 = 0.69	14.1/21.6 = 0.65
Financial leverage	Total assets/Equity	558,750/332,355 = 1.68	158/89.2 = 1.77
Interest burden ratio	EBT/EBIT	65,800/88,000= 0.75	21.6/30.0 = 0.72

The Golden's financial leverage ratio is lower than the industry, and it is one of the causes for its lower relative ROE performance. The tax burden ratio and the interest burden ratio are all higher than the industry average, which would increase ROE.

Q-79. Solution: B.

	2017	2016	Result
Cash ratio = (Cash + Marketable securities) ÷ Current liabilities	(196 +778.4) ÷ 354.6 = 2.75	2.26	Increase
Quick ratio = (Cash + Marketable securities + Receivables) ÷ Current liabilities	(196 + 778.4 + 24) ÷354.6 = 2.82	2.96	Decrease
Current ratio = Current assets ÷ Current liabilities	1238.6 ÷ 354.6 = 3.49	3.26	Increase

Q-80. Solution: C.

Common-sized analysis of the income statements shows that Company A has a lower percentage cost of goods sold and hence a higher gross margin than the industry.

	Co A	**Co B**	**Industry**	**Co A**	**Co B**
Sales	\$21,000	\$ 16,500	100.0%	100%	100%
Cost of goods sold	12,706	10,478	63.8%	60.5%	63.5%
Gross margin			36.2%	39.5%	36.5%
Company A earns a higher gross margin than both Company B and the industry					
Pretax earnings	1,364	908	4.4%	6.5%	5.5%
Taxes	410	290	1.6%	2.0%	1.8%
Tax rate = Taxes ÷ Pretax earnings			36%	30%	32%

The tax rates for the companies are not higher than the industry.

The interest rate is not a function of sales and cannot be analyzed on a common-sized income statement. Tax rates are determined based on taxes ÷ pretax earnings, not as a percentage of sales (as shown in common-sized analysis).

Q-81. Solution: B.

Current ratio = Current assets ÷ Current liabilities

Current assets:	£ 000
Cash	400
Accounts receivable	700
Inventory	2,500
Total	3,600

Current liabilities:	£ 000
Accounts payable	600
Taxes payable	400
Loan payable, first installment	400
Total	1,400

The higher the current ratio the more liquid the company. Thus, with a current ratio of 2.6 (3,600 ÷ 1,400), the company is less liquid than the industry, with a current ratio of 3.3.

Q-82. Solution: B.

Sustainable growth rate = retention ratio (b) × ROE.

b = 1- Dividend payout ratio	1 - 0.471 = 0.529
ROE = ROA x Financial leverage	0.038 x 1.65 = 0.0627
Sustainable growth rate = b x ROE	0.529 x 0.0627 = 3.32%

Q-83. Solution: B.

Cash conversion cycle = Days sales outstanding + Days of inventory on hand – Days of payables

	Accounts receivable Days in Sales	Inventory Days on hand	Accounts payables Days in payables
Turnover	Sales ÷ A/R	Cost of Goods Sold ÷ Inventory	Purchases ÷Payables
	9,600 ÷ 1,250	5,760 ÷ 1,420	5,880 ÷ 290
	= 7.68 times	= 4.06 times	= 20.3 times
In days	365 ÷ 7.68	365 ÷ 4.06	365 ÷ 20.3
	= 48 days	= 90 days	= 18 days

Cash conversion cycle = Days in sales + Days of inventory on hand – Days in Payables = 48 +90 – 18 = 120 days

Q-84. Solution: C.

The debt- to- capital ratio is

$$\frac{Total\ debt}{Total\ debt + Total\ shareholders'equity} = \frac{5{,}590}{5{,}590 + 1{,}200 + 1{,}810} = 0.65$$

Where total debt includes only interest- bearing debt.

A is incorrect. It includes current liabilities and other long- term liabilities as a part of total debt: [(3,800 + 5,590 + 800)/(3,800 + 5,590 + 800 + 1,200 + 1,810)] = 0.7719.

B is incorrect. It calculates long- term debt to equity: [5,590/(1,200 + 1,810)] = 1.86.

Q-85. Solution: B.

Debt payment ratio (Cash flow from operations/Cash paid for long- term debt repayment) shows the firm's ability to pay debts with operating cash flows.

C is incorrect. Interest coverage ratio is calculated as (CFO + Interest paid + Taxes paid)/Interest paid. It measures the firm's ability to meet interest obligations.

A is incorrect. Reinvestment ratio (CFO/Cash paid for long- term assets) shows the firm's ability to acquire assets with operating cash flows.

Q-86. Solution: B.

$$\text{Quick ratio}=\frac{\text{Cash+Marketable securities+Receivables}}{\text{Current Liabilities}}$$
$$=\frac{5900+1460+11480-1300}{18960}=0.93$$

Q-87. Solution: B.

A common-size balance sheet expresses all balance sheet accounts as a percentage of total assets and would provide insight into what portion of a company's assets is liquid. On the other hand, cash and current ratios measure liquidity relative to current liabilities, not relative to total assets

Q-88. Solution: C.

The gross profit margin increased the most in the current year.

	Current Year (%)	Prior Year (%)	Increase
Revenues	100		
Cost of goods sold	37.6		
Gross profit margin	**62.4**	**61.5**	**+0.9**
Research expenses	4.3		
Selling and general expenses	31.9		
Operating margin	**26.2**	**25.8**	**+0.4**
Interest expense	3.0		
Earnings before tax	23.2		
Minus income tax expense	20% × 23.2 = 4.64		
Net profit margin	**18.56**	**17.8**	**+0.76**

Q-89. Solution: B.

The appropriate base for a common-size income statement is revenue. As such, the value used for research & development expenses is $24million÷$564 million x 100 = 4.3%.

Q-90. Solution: A.

Because inventories are excluded from the quick ratio, holding all other variables constant, an increase in cash, marketable securities, or receivables will increase a company's quick ratio. In addition, holding all other variables constant, an increase in current liabilities will decrease a company's quick ratio.

Q-91. Solution: B.

The total capitalized costs include fixed production costs, the direct conversion costs of material and labor, storage costs required as part of production, normal waste cost but not abnormal waste costs. $450,000 +$225,000 +$135,000+$25,000+$7,500 = $842,500.

Q-92. Solution: A

Zimt uses the FIFO method, so its cost of sales represents units purchased at a (no longer available) lower price. Nutmeg uses the LIFO method, so its cost of sales is approximately equal to the current replacement cost of inventory.

Q-93. Solution: C.

C is correct. LIFO is widely used in the United States because it results in a higher cost of goods sold, and thus lower taxable profits, under the assumption of historically rising prices. Income taxes are correspondingly lower, and thus operating cash flows are higher.

A is incorrect. Under normal conditions (rising prices), the LIFO method results in a higher reported cost of goods sold and a lower reported gross profit.

B is incorrect. IFRS does not allow LIFO as an inventory valuation method.

Q-94. Solution: C.

Under FIFO, the oldest units are sold first, thus for the six units sold FIFO, cost of sales is $3,850, as follows: 1 unit at $600 + 5 units at 650 = $3,850.

A is incorrect. It is the cost of goods available for sale not the cost of goods sold: 1 unit at $600 + 5 units at 650 + 3 units at 680 = $5,890.

B is incorrect. It used the $680 most recent cost for all 6,000 units sold: 6 × $680 = $4,080.

Q-95. Solution: A

In the ending inventory, there are 300 unit inventories purchased in 2 Jan, and 500 unit inventories purchased in 13 Mar are left. So the ending inventory based on LIFO= 300*20+ 500*

17= $14,500.

Q-96. Solution: C.

When using the FIFO inventory method the ending inventory, the cost of goods sold and the gross margin, are the same under either the perpetual or periodic methods. The use of a perpetual or periodic system makes a difference under weighted average, and LIFO.

Q-97. Solution: A.

If all else is held constant, in a period of rising costs the ending inventory will be lower under the weighted average cost method and the cost of goods sold will be higher (compared to FIFO), resulting in lower net income and retained earnings. There will be no impact on the debt level, current or long-term. Therefore, the debt-to-equity ratio (Total debt/Total shareholder's equity) will increase because of the decrease in retained earnings (and lower shareholders' equity).

Q-98. Solution: A.

In a period of rising prices, the most recently purchased units of inventory carry the highest cost. Under the LIFO approach, it is these high- cost units (those that are "last in") that are transferred to the income statement ("first out") as cost of goods sold. The lowest- cost units remain on the balance sheet as inventory. With a high cost of goods sold value (numerator) and a low inventory value (denominator), the inventory turnover ratio is highest under LIFO.

B is incorrect. Under the weighted average approach, inventory is transferred to the income statement at a cost that falls somewhere between the lowest cost earlier purchases and the higher cost later purchases. The cost of goods sold value is thus higher than the FIFO value, but lower than the LIFO value. Similarly, the inventory value falls between that of LIFO and FIFO. The inventory turnover ratio also falls in between that of LIFO and FIFO.

C is incorrect. Under the FIFO approach, the lower cost inventory purchased earlier is transferred to the income statement as cost of goods sold. The resulting cost of goods sold value is lower while inventory remains high. As a result, the inventory turnover ratio is low with a lower numerator and higher denominator.

Q-99. Solution: C.

C is correct. Specific identification best matches the physical flow of the inventory items because it tracks the actual units that are sold.

A is incorrect. LIFO is based on cost flow assumptions but does not necessarily match the actual physical movement of the goods.

B is incorrect. FIFO is based on cost flow assumptions but does not necessarily match the actual physical movement of the goods.

Q-100. Solution: A.

FIFO has the same results under periodic and permanent system.

Q-101. Solution: C.

Inventories are carried at historical cost, unless the current replacement cost of the inventory is less.

Q-102. Solution: C.

IFRS measures inventory at the lower of cost and net realizable value.

Under IFRS, net realizable value (NRV) is defined as the estimated selling price less the estimated costs necessary to get the inventory ready for sale and make the sale:

Selling price	$360	
Costs to get ready to sell	$20	*(Free shipping is required to sell the chairs at $360.)*
NRV per chair	$340	
For 100 chairs	$34,000	

Q-103. Solution: B.

Under IFRS, the inventory would be written down to its net realizable value ($4.1 million); under US GAAP, market value is defined as current replacement cost and thus would be written down to its current replacement cost ($3.8 million). The smaller write- down under IFRS will reduce the amount charged to the cost of goods sold compared with US GAAP and result in a lower cost of goods sold of $0.3 million.

A is incorrect. The write- down is larger under US GAAP, so IFRS gross profit would be higher, not lower.

C is incorrect. IFRS and US GAAP define market differently. As current replacement cost (US GAAP definition is lower than NRV) the effect is not the same.

Q-104. Solution: A.

U.S. GAAP does not permit inventory write-downs to be reversed.

Q-105. Solution: A

IFRS require the reversal of inventory write-downs if net realisable values increase; US GAAP do not permit the reversal of write-downs.

Q-106. Solution: B.

Under IFRS, the recovery of a previous write-down is limited to the amount of the original write-down (€40,000) and is reported as a decrease in the cost of sales.

Q-107. Solution: A.

The reversal of the write-down shifted cost of sales from 2008 to 2007. The 2007 cost of sales was higher because of the write-down, and the 2008 cost of sales was lower because of the reversal of the write-down. As a result, the reported 2008 profits were overstated. Inventory balance in 2008 is the same because the write-down and reversal cancel each other out. Cash flow from operations is not affected by the non-cash write-down, but the higher profit in 2008 likely resulted in higher taxes and thus lower cash flow from operations.

Q-108. Solution: C.

The write-down reduced the value of inventory and increased cost of sales in 2007. The higher numerator and lower denominator mean that the inventory turnover ratio as reported was too high. Gross margin and the current ratio were both too low.

Q-109. Solution: B.

$\triangle$NI = $\triangle$LIFO reserve (1-t) = 15 × (1 – 30%) = 10.5.

NI_{LIFO} = (120 – 70 -25) × (1- 30%) = 17.5.

NI_{FIFO} = 10.5 + 17.5 = 28.

Net profit margin = 28 / 120 = 23.33%.

Q-110. Solution: A.

$COGS_{(FIFO)}$ = $COGS_{(LIFO)}$ - (ending LIFO reserve - beginning LIFO reserve) = 2,400 – (1,600 -1,640) = 2,440.

Q-111. Solution: A.

Adding the ending balance in the LIFO reserve to the LIFO inventory would equal the ending balance for inventory on FIFO basis.

Q-112. Solution: A.

Inventory turnover is cost of goods sold divided by average inventory. As reported, this was $3,654 / $1,115 = 3.28. Under FIFO, cost of goods sold would have been $3,641 and inventory would have been $1,232.6 and $1,237.6 (average $1,235.1). Adjusted inventory turnover would thus be 2.95.

Q-113. Solution: B.

The most appropriate way to identify a LIFO liquidation is by reviewing the inventory footnotes for a decrease in the LIFO reserve. Although a LIFO liquidation may result in an increase in gross margin or changes in inventory out of line with changes in sales there are other factors that could explain those changes.

Q-114. Solution: B.

The company will capitalise as part of the cost of the machine all costs that are necessary to get the new machine ready for its intended use: €21,800 purchase price, €400 for delivery, €600 for installation and testing, and €700 to reinforce the factory floor and ceiling joists to accommodate the machine's weight, The company will capitalise the expenditure of €3,000 to repair the factory roof because the repair is expected to extend the useful life of the factory.

The €200 to train staff is not necessary to get the asset ready for its intended use and will be expensed. The company will expense the €2,000 to have the exterior of the factory and adjoin¬ing offices repainted because the painting does not extend the life or alter the productive capacity of the buildings.

Q-115. Solution: A.

Costs associated with internally developing intangible assets are usually expensed; thus, a company that has internally developed intangible assets through expenditures on R&D will recognize a lower amount of assets than a company that has obtained intangible assets through external purchase.

B is incorrect. Costs of acquiring intangible assets are classified as investing cash outflows. Thus if the company is developing assets internally, it will report lower investing cash outflows than a company that obtains intangibles through external purchase.

C is incorrect. Costs associated with internally developing intangible assets are classified as operating cash outflows. Thus, if the company is developing the intangible assets internally, it will report higher operating cash outflows than a company that obtains the intangibles through external purchase.

Q-116. Solution: B

Companies that capitalize R&D costs report those expenditures in CFI; companies that expense R&D costs report those expenditures in CFO. Companies that expensed will report a higher expense, lower NI,and then a lower equity,therefore, it would incur a worse financial leverage.

Q-117. Solution: A.

The interest costs can be capitalized. Under IFRS, any amounts earned by temporarily investing the funds are deducted from the capitalized amount. The costs related to the preferred shares cannot be capitalized.

Capitalized costs	
Interest costs	0.07 × 10,000,000 = 700,000
Less interest income	0.06 × 4,000,000 / 2 = (120,000)
Total capitalized costs	580,000

Q-118. Solution: C.

IFRS allows development costs to be capitalized if certain criteria are met; unlike US GAAP, capitalization is not restricted to software development.

Q-119. Solution: B.

The capitalized cost of the building would include the other costs that are directly attributable to the building and are involved in extending its life or getting it ready to use: building and are involved in extending its life or getting it ready to use:

	€ Millions
Initial cost	70.0
Repairs to roof and windows	4.0
Modifications to interiors	1.0
Total cost	75.0

Q-120. Solution: B.

Only costs necessary for the machine to be ready to use can be capitalized. Therefore, Total capitalized costs = 12,980 + 1,200 + 700 + 100 = $14,980.

Q-121. Solution: B.

Gain or loss on the sale = Sale proceeds – Carrying amount

= 85,000 - [100,000 - 1((100,000 - 10,000)/9 years) × 3 years]= 15,000.

Q-122. Solution: C.

An accelerated method of deprecation produces greater expenses in the early years and lowers net income, which in turn lowers the retained earnings resulting in a decrease in shareholders' equity.

Q-123. Solution: C.

The units- of- production method is independent of the useful life estimate.

A is incorrect. The double declining balance method is linked to useful life estimate because the “double” refers to doubling the rate determined under the straight- line method which depends on the useful life.

B is incorrect. The straight- line method is linked to useful life estimate.

Q-124. Solution: B.

With accelerated amortization, first year amortization expense is the highest.

A is incorrect. With accelerated amortization, year 5 amortization expense should be the lowest.

C is incorrect. With accelerated amortization, amortization expense declines over the years.

Q-125. Solution: B.

The expected remaining useful life of a company's overall asset base	= Net PPE ÷ Depreciation expense.
Depreciation expense equals the change in accumulated depreciation *	750 – 500 = 250
The expected remaining useful life	4,250 ÷ 250 = 17 years
*This is true when there are no asset dispositions or acquisitions, as appears to be the case here because the gross PPE does not change.	

Q-126. Solution: B.

Under the double declining balance method, the depreciation rate is 2 × Straight line rate. The straight line rate is 33.3% (i.e., 1/3 years), so the double declining rate is 66.6%, or two-thirds depreciation rate per year. But the asset should not be depreciated below its assumed residual value in any year.

	Double Declining Balance Method of Depreciation		
Year	Net Book Value at Start of Year	Depreciation	Net Book Value at End of Year
1	€100,000	€66,667	€33,333
2	33,333	22,222	11,111
3	11,111*	1,111**	10,000
*	Alternative calculation for start of Year 3 net book value: €10,000 × (1 – 0.667) × (1 – 0.667) = €1,111.		
**	Depreciation cannot be 2/3 × €11,111 = €7,407 because that would reduce book value to less than the estimated €10,000.		

Q-127. Solution: A.

The patent is the only identifiable intangible asset, and it should be amortized on a straight-line basis over its expected future life: $540,000 ÷ 3 = $180,000/year. Goodwill is an unidentifiable intangible and should be tested for impairment but not amortized. If the reputation of the company is an internally generated intangible that is not recorded or amortized.

Q-128. Solution: A.

The difference between the double-declining balance method and the units-of-production method (in MXN) is 400,000 – 288,000 = 112,000.

	Straight Line	Units of Production	Declining Balance
Rate	1/10	5,000,000 units	1/10 × 2 = 20%
Annual expense	(2,000,000–200,000)/10	(2,000,000 – 200,000) × (800,000/5,000,000)	0.20 × 2,000,000
	= 180,000	= 288,000	= 400,000

Q-129. Solution: A.

The carrying value of the stamping machine is its cost less accumulated depreciation. Depreciation taken through 2004 was (($22,000,000 - $4,000,000) / 12×7 =) $10,500,000 so carrying value is ($22,000,000 - $10,500,000 =) $11,500,000. Because the $11,500,000 carrying value is more than expected future cash flows of ((5×$1,500,000) + $1,000,000 =) $8,500,000, the stamping machine is impaired.

Q-130. Solution: A.

Under IFRS,the recoverable amount for customer list is the higher of:

- Value in use, which is the present value of the future cash flows: $886,000.
- Fair value less costs to sell: $890,000 -7,000 = $883,000.

The recoverable amount ($886,000) is lower than the carrying value ($930,000).

Therefore, the asset is impaired and should be written down to that amount.

Under U.S. GAAP, the carrying value of the customer list is lower than undiscounted future cash flow, so the customer list is not impaired under US GAAP.

Q-131. Solution: B.

The upward revaluation increases the carrying amount of the assets but bypasses net income. The revaluation is reported as other comprehensive income and will be accumulated in equity under the heading of revaluation surplus, increasing equity. This increase will cause the return on equity to decline.

Q-132. Solution: B.

Fair value less costs to sell: 44,000,000 –4,000,000 = 40,000,000

Value in use = present value of expected future cash flow = 42,000,000

Recoverable amount (higher value of the above two amounts) = 42,000,000

Impairment loss under IFRS = Carrying value (net book value) – recoverable amount

Impairment loss = 50,000,000 –42,000,000 = C$8,000,000

Q-133. Solution: C.

Intangible assets with infinite useful life does not need to amortize, and acquisition date does not need to disclose.

Q-134. Solution: B.

When a long lived asset is sold only the net gain or loss is reported on the income statement. The gain or loss on a sale = sales proceeds – carrying amount = $160,000 – $140,000 = $20,000 gain.

Q-135. Solution: B.

The increase in the value of the land bypasses the income statement and goes directly to a revaluation surplus account in equity, assuming no previous decreases in value in the asset class for revaluation purposes. Equity increases, thereby decreasing the debt-to-equity ratio.

Q-136. Solution: A.

Under IFRS, an asset can be written up under FV and revaluation model. With the 1 million loss recorded in income statement, the asset was recorded under fair value model.

Under IFRS, other comprehensive income includes certain changes in the value of long-lived assets that are measured using the revaluation model rather than the cost model.

Q-137. Solution: B.

Under IFRS, a building owned for the purpose of earning rentals or capital appreciation—in this case, the one owned by the company and leased out to tenants—is an investment property and can be reported under either the cost model or fair value model.

Q-138. Solution: C.

The different treatment for tax purposes and financial reporting purposes is a temporary difference and would create a deferred tax liability. Deferred tax liabilities should be classified as debt if they are expected to reverse with subsequent tax payments. The long history of profitability implies the company will likely be paying taxes in the following years, and hence an analyst could reasonably expect the temporary difference to reverse. Under IFRS, all deferred tax liabilities are non-current.

Q-139. Solution: B.

Income tax expense = taxes payable (current income tax expense) + △ DTL - △DTA = 2000 + (900-720) – (400-320)=2100.

Q-140. Solution: C.

Accounting items that are not deductible for tax purposes will not be reversed and thus result in permanent differences.

Q-141. Solution: C.

Straight line depreciation expense = (100,000 – 20,000) / 10 = 8,000

DDB depreciation expense = (2/8) × 100,000 = 25,000

DTL = 30% × (25,000 – 8,000) = 5,100

Q-142. Solution: B.

The temporary difference is the difference between the net book value (NBV) of the asset for accounting purposes and the NBV for taxes

NBV accounting	[1,000,000 – (1,000,000/10)]	$900,000
NBV taxes	[1,000,000 – 0.14 × (1,000,000)]	$860,000
Temporary difference		$40,000

Q-143. Solution: B.

Deferred tax balances result from temporary differences between a company's income as reported for tax purposes and income reported for financial statement purposes. The temporary difference in this case arises from the difference between the depreciation for accounting purposes and the depreciation for tax purposes. Because of this difference, the company would report more income tax expense than would actually be paid in taxes. The difference is a deferred tax liability.

Temporary difference balance = Depreciation expense for tax purposes – Depreciation for accounting purposes	£12,680 – £9,000	£3,680
Deferred tax balance = Temporary difference balance × Corporate tax rate	£3,680 × 30%	£1,104

Q-144. Solution: C.

Tax credits that directly reduce taxes are a permanent difference, and permanent differences do not give rise to deferred tax.

Q-145. Solution: B.

A valuation allowance is required under U.S. GAAP if there is doubt about whether a deferred tax asset will be recovered. Under IFRS the deferred tax asset is written down directly.

Q-146.   Solution: C.

The temporary difference is the difference between the net book value (NBV) of the asset for accounting purposes and the NBV for taxes.

NBV accounting	500,000-500,000/10=450,000
NBV taxes	500,000-500,000×0.15=425,000
Temporary differences	25,000

A is incorrect. The tax base of the asset is the amount that will be deductible for tax purposes in future periods. At the end of the year that amount is \$425,000= 500,000 – 0.15×500,000.

B is incorrect. The difference will create a deferred tax liability of \$10,000 (25,000 × 40%), not a deferred tax asset.

Q-147.   Solution: C.

Income tax expense equals income tax payable (the tax rate multiplied by the taxable income) plus the increase in the deferred tax liabilities.

(0.30 × \$430,000) + (\$181,300 –\$164,800) = \$129,000 + \$16,500 = \$145,500.

Q-148.   Solution: A.

If the liability will not reverse, there will be no required tax payment in the Future and the "liability" should be treated as equity.

Q-149.   Solution: B.

Under U.S. GAAP, deferred tax assets must be assessed at each balance sheet date. If there is any doubt whether the deferral will be recovered, the carrying amount should be reduced to the expected recoverable amount. The asset is reduced by increasing the valuation allowance. Should circumstances change so that it is more probable that the deferred tax benefits will be recovered, the deferred asset account will be increased (and the valuation allowance decreased). An increase in the carry-forward period for tax losses extends the possibility that benefits will be realized from the deferred tax asset and would likely result in a decrease in the valuation allowance and an increase in the deferred tax asset.

Q-150.   Solution: B.

The valuation allowance is taken against deferred tax assets to represent uncertainty that future taxable income will be sufficient to fully utilize the assets. By decreasing the allowance, Zimt is signaling greater likelihood that future earnings will be offset by the deferred tax asset.

Q-151. Solution: B.

The change in Fred’s rates causes its deferred tax liability account to increase ((40 – 30) / 30) ×$1,200,000 =) $400,000. The corresponding increase is to current income tax expense.

Q-152. Solution: C.

A decrease in the tax rate will result in a decrease in the previously reported amounts of deferred tax assets.

Q-153. Solution: B.

Deferred tax liability=taxable temporary difference × tax rate		
In 2017 if the rates had not changed, and deferred tax liability would be	0.30×8,000=	£2,400
But with the lower tax rate, the deferred tax liability will be:	0.25×8,000=	£2,000
Effect of the change in rate therefore is a decrease in the liability		£(400)
Alternative calculation=change in rate × taxation difference	-5%×8,000	£(400)

Q-154. Solution: B.

Current tax expense = Taxable income × Current tax rate= 150,000 × 30% = 45,000

2012.1.1

DTL (old) =30,000

Temporary difference (old) = 30,000/30% = 100,000

2012.12.31

Additional temporary difference = 300,000-150,000=150,000

Temporary difference (new) = 100,000 + 150,000 = 250,000

DTL (new) = Temporary difference (new) × tax rate (new)= 250,000 × 25% = 62,500

Delta DTL = 62,500 – 30,000 = 32,500

Income tax expense = tax payable + delta DTL = 45,000 + 32,500 = 77,500

Q-155. Solution: A.

When interest rates rise, bonds decline in value. Thus, the carrying amount of the bonds being carried on the balance sheet is higher than the market value. The company could repurchase the bonds for less than the carrying amount, so the economic liabilities are overestimated. Because the bonds are issued at a fixed rate, there is no effect on interest coverage.

Q-156. Solution: A

The coupon rate on the bonds is higher than the market rate, which indicates that the bonds will be issued at a premium. Taking the present value of each payment indicates an issue date value of €10,210,618. The interest expense is determined by multiplying the carrying amount at the beginning of the period (€10,210,618) by the market interest rate at the time of issue (6.0 percent) for an interest expense of €612,637. The value after one year will equal the beginning value less the amount of the premium amortised to date, which is the difference between the amount paid (€650,000) and the expense accrued (€612,637) or €37,363. €10,210,618 – €37,363 = €10,173,255 or €10.17 million.

Q-157. Solution: B.

IFRS recommends the effective interest method for the amortization of bond discounts/premiums. The bond is issued for 0.9228 × 50 = 46.140 million

Interest expense = 46.140 × 5% = 2.307million

Q-158. Solution: A.

Interest paid = Coupon rate at issue × Issued amount of bonds = 9% × $50,000 = 4,500

Interest expense = Market rate at issue × Carrying (book value) of bonds

Amortization of discount = Interest expense – Interest paid

B	A	S	E
47,565	4757	4500	47822

Amortization of discount= 4757-4500=257

Q-159. Solution: A.

Under U.S. GAAP, expenses incurred when issuing bonds are generally recorded as an asset and amortized to the related expense (legal, etc.) over the life of the bonds. Under IFRS, they are included in the measurement of the liability. The related cash flows are financing activities.

Q-160. Solution: C.

Gain = Book value of debt – Market value = £20,754,438 – £20,371,882 = £382,556

Both at time of retirement, calculations below.

The market value of debt at retirement can be determined by discounting the future cash flows at the current market rate (5%) by using a financial calculator:

Face value (FV) = £20,000,000; i = 5%; PMT = £1,200,000; N = 2; Compute present value (PV) = £20,371,882.

The book value after the third interest payment (two payments remaining) can be found by using either a financial calculator and the market rate at the time of issue (4%) or an amortization table (shown next).

FV = £20,000,000; i = 4%; PMT = £1,200,000; N = 2; Compute PV =£20,754,438.

Q-161. Solution: C.

The reduction in the cost of borrowing is a benefit of covenants to the borrower.

A is incorrect. Limiting a company's ability to pay dividends is a benefit to the lender, not the borrower.

B is incorrect. Restrictions on how the borrowed money may be invested is a benefit to the lender, not the borrower.

Q-162. Solution: C.

Information about the coupon rates on the various long-term fixed-rate debt issues can usually be found in the notes to the financial statements. The MD&A is more likely to discuss interest rate trends and/or current financing costs but not specific information on individual debt issues.

Q-163. Solution: B.

The present value of the lease is $360,477.62. (n = 5, I/Y= 12%, PMT = $100,000) 12% of the original PV is $43,257.31 and represents the interest component of the payment in the first year. The difference between the annual payment and the interest is the amortization of the lease obligation included in cash flow from financing. $100,000 – 43,257.31 = $56,742.69. Depreciation is $360,477.62/5 or $72,095.52 so the total reduction in pretax income would be interest plus depreciation or $115,352.83. CFO would be reduced by the amount of the interest only because the depreciation would be added back to determine cash flow from operations.

Q-164. Solution: B.

For operating lease, lease payments are entirely categorised as rent (interest expense is lower.) Because the rent expense is an operating outflow but principal repayments are financing cash flows, the operating lease will result in lower cash flow from operating activity.

Q-165. Solution: C.

If the present value of the lease payments is greater than 90% of the fair value of the asset, the lease is considered a capital lease. A lease with a term that is 75% or more of the useful life of the asset is deemed to be a capital lease. The option to purchase the asset must be deemed to be cheap (bargain purchase option), not just include the option to purchase the asset.

Q-166. Solution: A.

A finance lease is similar to borrowing money and buying an asset; a company that enters into a finance lease as the lessee reports an asset (leased asset) and related debt (lease payable) on its balance sheet. A company that enters into a finance lease as the lessee will report interest expense and depreciation expense on its income statement. A company that enters into an operating lease will report the lease payment on its income statement. For a finance lease, only the portion of the lease payment relating to interest expense reduces operating cash flow; the portion of the lease payment that reduces the lease liability appears as a cash outflow in the financing section. A company that enters into an operating lease as the lessee will report the full lease payment as an operating cash outflow.

Q-167. Solution: A.

Sales-type lease treats the lease as a sale of the asset, and revenue is recorded at the time of sale equal to the present value of future lease payments. Under a direct financing lease, only interest income is reported as earned. Under an operating lease, revenue from rent is reported when collected.

Q-168. Solution: C.

The used aircraft that the manufacturer buys and leases back are classified as operating leases. For the lessor, these assets under operating leases would be classified in property, plant, and equipment in capital assets and thus would lead to an increase in capital assets. With payments in advance, there would be no lease receivable arising from the operating lease; long-term lease receivables arise from financing leases, not operating leases. Although revenues will increase by the lease payments, the leased assets are depreciated, and therefore EBIT will increase by the lease payment received minus depreciation expense.

Q-169. Solution: B.

The company will report a net pension obligation of €1 million equal to the pension obligation (€10 million) less the plan assets (€9 million).

Q-170. Solution: A.

		$’000
DC plan	Contributions	2,000
DB plan	Employee service costs	2,800
	Interest expense accrued on beginning pension obligation	400
	Less expected return on plan assets	(800)
Total Expense		4,400

Q-171. Solution: A.

An asset such as deferred customer acquisition costs indicates a delay in the recognition of expense for current period, which can be serve as an indication of low quality earnings.

Q-172. Solution: B.

Conservative accounting choices decrease the company's reported performance and financial position in the current period and may increase its reported performance and financial position in later periods.

A is incorrect because aggressive accounting choices have the opposite effect of increasing the company's reported performance and financial position in the current period and may decrease its reported performance and financial position in later periods

C is incorrect because conservative accounting such as decreasing current reported performance and increasing later reported performance does not typically create a sustainability issue.

Q-173. Solution: C.

NI=$200 million and CFO=$120, so NI>CFO, and CFO=NI + dep. /amor. - gain + loss - changes in current assets + changes in current liabilities.

Tightened credit policies and increased collection efforts will increase CFO; and to sell a long-term investment for an amount equal to book value at the end of the year is an investment activity, so increased raw materials inventory in anticipation of increased sales at the end of the year will lead to CFO decreased, and less than NI.

Q-174. Solution: B.

B is correct. Poor internal controls provide opportunities for errors or fraud to be incorporated in financial reporting without being detected.

A is incorrect. Rationalization takes place after the low- quality reporting act has taken place and is a psychological process used by individuals to justify their actions. Poor internal controls are not a psychological process.

C is incorrect. Motivation results from personal pressures or corporate pressures to report on a low- quality basis. Poor internal controls provide the vehicle through which low- quality reporting can be concealed, not the motivation for it.

4.1. 进阶题

Q-1. Solution: C.

Proceeds received from selling A/R increase CFO.

Since the proceeds are less than the book value of A/Rs, a loss should be reported on the income statement.

Q-2. Solution: A.

Under U.S. GAAP, bank overdrafts are not considered part of cash and cash equivalents and are classified as financing cash flows.

Q-3. Solution: A.

Financing payables actually reduces operating cash flow as payables are reclassified as short-term debt. Companies may decrease operating cash flows reported under the indirect method by using this strategy. Securitization of receivables increases operating cash flows as the funds received are treated as an operating cash inflow. Exercise of employee stock options increases operating cash flows due to tax benefits associated with exercise.

Q-4. Solution: B.

If the expense is capitalized, Wally will recognize the patent as an asset, the company will recognize depreciation cost each year, and the cash flow related to the purchasing will classified as an outflow of CFI. So during that period, the CFI for Wally is lower and CFO is higher.

Also, the net income for Wally will higher in that period if the expense is capitalised, so that the EPS for Wally will be higher in that period.

Q-5. Solution: A.

The difference between the double-declining balance method and the units-of-production method (in MXN) is 800,000 – 576,000 = 224,000.

	Straight Line	Units of Production	Declining Balance
Rate	1/10	5,000,000 units	1/10 × 2 = 20%
Annual expense	(4,000,000– 400,000)/10	(4,000,000 – 400,000) × (800,000/5,000,000)	0.20 × 4,000,000
	= 360,000	= 576,000	= 800,000

Q-6. Solution: C.

At the end of 2014, a test of impairment is required because "events or changes in circumstances indicate that its carrying amount may not be recoverable." (All amounts

$ thousands)	
US GAAP Impairment Test:	
Step 1: Assess recoverability: Compare carrying amount with undiscounted future net cash flows.	
Carrying amount = 3,208 > 2,700 (expected future net cash flows):	The recoverability test is not satisfied, so an impairment loss is required.
Step 2: Determine impairment loss:	Carrying amount - Fair value = 3,208 – 2,450 = 758 New carrying value:2,450
Estimated depreciation in 2015	$\frac{New\ carrying\ value - revised\ residual\ value}{revised\ useful\ life}$ $= \frac{\$2{,}450 - \$400}{4\ years} = \$512.5$

Q-7. Solution: C.

The lease would qualify as a finance (capital) lease under U.S. GAAP because the present value of the lease payments is more than 90% of the fair value.

PV of lease payments: PMT = 25,000, i = 8%, N = 5, BGN Compute PV.

PV = $107,803, 90% of the fair value: 0.90 x 115,000 = $103,500.

Therefore, the lease is greater than 90% and would be capitalized at $107,803. With the first payment made immediately, the outstanding balance in 2012 = 107,803 -25,000 = 82,803.

Interest expense in 2012	0.08 x 82,803	6,624.24
Amortization expense for the year using the lease term as the useful life (no indication that the lease will be renewed beyond the initial term)	107,803 / 5	21,560.60
Total expense in 2012		28,184.84

Q-8. Solution: A.

The portion of the proceeds attributable to the warrants would be classified as equity, thus the portion classified as a liability would be smaller (lower). The lower balance sheet value would lead to a lower interest expense when it is calculated. The interest expense is based on the liability at the beginning of the period. Not the coupon payment.

Q-9. Solution: B.

McKinnon should add $60 million to accounts receivable, reduce cash from operating activities by $50 million, and increase cash from financing activities by $50 million.

Q-10. Solution: C.

If all development costs had been expensed, net income would be reduced by the amount spent, and increased by the amortization of the previously capitalized amounts: 225 - 25 + 10 = 210 million. ROA= 210 / 1,875 = 11.2%. **(注意：理论上来说，average asset 需要减去资产的增加部分).** CFO would be lower by the amount spent on development 290 - 25 = 265 million.

Note: The amortization of previous development costs is a non-cash expense so does not affect cash flow.

Q-11. Solution: A.

A company growing primarily through acquisition will usually record large amount of goodwill, which is intangible asset.

Q-12. Solution: B.

The bonds will be issued at a discount because the market interest rate is higher than the stated rate. Discounting the future payments to their present value indicates that at the time of issue, the company will record £978,938 as both a liability and a cash inflow from financing activities. Interest expense in 2010 is £58,736 (£978,938 times 6.0 percent). During the year, the company will pay cash of £55,000 related to the interest payment, but interest expense on the income statement will also reflect £3,736 related to amortisation of the initial discount (£58,736 interest expense less the £55,000 interest payment). Thus, the value of the liability at 31 December 2010 will reflect the initial value (£978,938) plus the amortised discount (£3,736), for a total of £982,674. The cash outflow of £55,000 may be presented as either an operating or financing activity under IFRS.

Q-13. Solution: B.

Goodwill makes up 40.8% of total assets; therefore, the company has made significant acquisitions at some point because goodwill is only recognized during acquisitions. Leverage is below the industry average for both the debt-to-equity ratio of 41% [(20.0 + 1.5) ÷ 53] versus the industry average of 55% and long-term debt-to-equity ratio of 38% [20.0 ÷ 53] versus the industry average of 42%. The low PP&E and inventory levels also indicate the company is not likely a manufacturer.

Q-14. Solution: C.

The company can choose when to enter into the short-term borrowing with the bank and reclassify its accounts payable into short-term financing. It will likely do so when cash flows are seasonally strong, thereby reducing operating cash flows but increasing financing cash flows. On repayment, the cash outflow is treated as a financing activity (loan repayment) instead of an operating cash flow. The result is that the company can manipulate the timing of reported cash flows since the timing and extent of vendor financing is at management's discretion.

Q-15. Solution: B.

The difference is a temporary difference and would create a deferred tax liability.

Deferred tax liabilities should be classified as debt if they are expected to reverse with subsequent tax payments.

Under IFRS all deferred tax liabilities are non-current.

Q-16. Solution: A.

Number of days of inventory = $2,000/ ($30,000/365) = 24.333 days

Number of days of receivables = $3,000/(S40,000/365) = 27.375 days

Operating cycle = 24.333 + 27.375 days = 51.708 days

Purchases = $30,000 + $2,000–$1,500 = $30,500

Number of days of payables = $4,000/ ($30,500/365) = 47.869 days

The net operating cycle is 51.708–47.869 = 3.839 days

Q-17. Solution: C.

In a rising costs environment, FIFO would result in higher earnings, higher ending inventory, as well as higher book value of equity. Thus, both P/E and P/BV tend to be understated relative to a comparable firm that uses LIFO method.

Q-18. Solution: C.

Under IFRS: the company must use the component method of depreciation expense :	
(1,000,000 ÷ 10) + (1,000,000 ÷ 5)	= $300,000 per year for the first five years.
Under U.S. GAAP, the company would not use component deprecation because it would prefer to minimize depreciation expense in order maximize income.	
2,000,000 ÷ 10	= $200,000 per year.
Under IFRS, depreciation in first year is:	$100,000 higher

Q-19. Solution: A.

Only the portion of the difference between the tax base and the carrying amount that is not the result of the revaluation is recognized as giving rise to a deferred tax liability. The portion arising from the revaluation surplus is used to reduce the revaluation surplus in equity.

(millions)	Accounting Purposes	Tax Purposes
Revaluation surplus	(£5,000 – £2,800) = £2,200	No revaluation allowed

Depreciation, straight line	10 years	2 years remaining
Start of year balance after revaluation, 2016	£5,000	£1,600
Depreciation, 2016	(£5,000/10 years) = £500	£800
Net balance, end of 2016	£4,500	£800
Minus revaluation surplus	– £2,200	_____
Carrying value for purposes of deferred taxes	£2,300	£800
Deferred tax liability = 0.40 × (£2,300 – £800) = £600		

Q-20. Solution: B.

Company 2 because it has been offering the same products and its demand and cost structures have been stable too. Therefore, the relationship between sales and gross profit (i.e., gross margin) should be stable and most reliable.

Q-21. Solution: C.

The convertible preferred shares are anti-dilutive, as shown in the following table. Therefore, the diluted EPS is the same as the basic EPS $1.82.

	Basic EPS	Diluted EPS (using if-converted method)	
Net income	$2,000,000	$2,000,000	
Preferred stock, Series A	(192,000)	(192,000)	24,000 shares × $8/share
Preferred stock, Series B	(900,000)	0	60,000 shares × $15/share
Earnings available to common shareholders	$908,000	$1808,000	
Weighted Average Number of Common Shares Outstanding (WACSO)			
Shares outstanding	500,000	500,000	
If converted	______	300,000	5 × 60,000 shares
WACSO	500,000	800,000	
EPS = Earnings available to common shareholders/WACSO	**$1.816**	**$2.26***	
* Exceeds Basic EPS; Series B is anti-dilutive and is thus not included.			