**LO.a: Describe the types of post-employment benefit plans and implications for financial reports.**

1. Which of the following statements about defined benefit and defined contribution pension plans is *least accurate*?
   A. A company with a defined benefit plan will report on its balance sheet the net difference between the value of the pension fund assets and the value of the pension liability.
   B. Accounting for a defined contribution plan is complicated because many investment options are available to the employees.
   C. Accounting for defined benefit plan is complicated because of the required actuarial assumptions.

**LO.b: Explain and calculate measures of a defined benefit pension obligation (i.e., present value of the defined benefit obligation and projected benefit obligation) and net pension liability (or asset).**

2. The projected benefit obligation (PBO) is defined as:
   A. actuarial present value of all future pension benefits earned to date based on current salary levels.
   B. actuarial present value of all future pension benefits earned to date based on expected future salary increases.
   C. actuarial future value of all post-retirement healthcare benefits earned to date.

**LO.c: Describe the components of a company's defined benefit pension costs.**

3. Which of the following changes in pension assumptions will decrease the projected benefit obligation (PBO) of a pension plan?
   A. A decrease in the rate of compensation growth.
   B. Increase in the expected rate of return.
   C. Decrease in the discount rate.

**LO.d: Explain and calculate the effect of a defined benefit plan's assumptions on the defined benefit obligation and periodic pension cost.**

4. Which of the following changes in actuarial assumption will lead to a lower service cost for a company?
   A. Increasing the expected rate of return.
   B. A higher rate of compensation growth.
   C. Increase in the discount rate.

**LO.e: Explain and calculate how adjusting for items of pension and other post-employment benefits that are reported in the notes to the financial statements affects financial statements and ratios.**

5. Analyst 1: Changes in actuarial assumptions and past service costs fully and immediately affect the income statement.
   Analyst 2: Changes in projected benefit obligation (PBO) and plan assets fully and immediately affect the balance sheet.
   A. Analyst 1 is correct.
   B. Analyst 2 is correct.
   C. Both analysts are correct.

**LO.f: Interpret pension plan note disclosures including cash flow related information.**

6. The following information is available for a company's defined benefit pension plan.

   | | |
   |---|---|
   | Contributions | $1.0 million |
   | Reported pension expense | $0.9 million |
   | Economic pension expense | $1.2 million |

   Based on the above information, which of the following statements is *most accurate*?
   A. There is a reduction in the overall pension obligation of $200,000.
   B. There is a reduction in the overall pension obligation of $100,000.
   C. The company has effectively borrowed $200,000.

**LO.g: Explain issues associated with accounting for share-based compensation.**

7. Which of the following describe a date that employees can first exercise the stock options?
   A. Grant date.
   B. Vesting date.
   C. Exercise date.

**LO.h: Explain how accounting for stock grants and stock options affects financial statements, and the importance of companies' assumptions in valuing these grants and options.**

8. Two analysts are discussing share-based compensation and make the following comments regarding stock appreciation rights and phantom stock:
   Analyst 1: With a phantom share plan, compensation is based on the performance of the firm's actual shares.
   Analyst 2: Stock appreciation rights do not have a dilution effect on existing shareholders.
   A. Only Analyst 1 is correct.
   B. Only Analyst 2 is correct.
   C. Both analysts are correct.

**Solutions**

1. B is correct. Accounting for defined benefit plan is more complicated than accounting for defined contribution plans. The remaining two statements are correct.

2. B is correct. The projected benefit obligation (PBO) is defined as the actuarial present value of all future pension benefits earned to date based on expected future salary increases.

3. A is correct. A decrease in the rate of compensation growth will lower the future pension payments. This will lower the PBO.

4. C is correct. An increase in the discount rate will result in lower service cost. A higher rate of compensation growth will yield higher future pension benefits owed, and thus a higher service cost. The expected return has no impact on service cost.

5. B is correct. Changes in the projected benefit obligation (PBO) and plan assets immediately affect the funded status (difference in PBO and plan assets) and the full amount of the changes is reflected on the balance sheet when the change occurs. However, changes in actuarial assumptions and past service costs are recognized in the income statement over time thereby smoothing pension expense.

6. C is correct. The economic pension expense represents the true cost of the pension. The reported pension expense is irrelevant in this case. Since the economic pension expense ($1.2 million) exceeds the contributions ($1.0 million), the $200,000 difference can be viewed as a source of borrowing.

7. B is correct. In accounting for stock options, there are several important dates, including the grant date, the vesting date, the exercise date, and the expiration date. The grant date is the day that options are granted to employees. The vesting date is the date that employees can first exercise the stock options. The exercise date is the date when employees actually exercise the options and convert them to stock.

8. B is correct. Stock appreciation rights do not cause dilution to the existing shareholders since no shares are actually issued. The payoff of phantom stocks is based on the performance of hypothetical stock instead of the firm's actual shares.