***Financial Markets and Institutions, 7e* (Saunders)**

**Chapter 18 Pension Funds**

1) Of the different types of defined benefit plans, plans using the final pay method will usually produce the biggest retirement benefit to employees.

2) A Keogh plan is designed for self-employed individuals.

3) Pension plans administered by the federal government are called insured pension plans.

4) There are now Roth versions of 401(k) plans and 403(b) plans as well as Roth IRAs.

5) Most state and local pension funds are underfunded.

6) Noninsured pension plans generally invest in riskier assets than insured pension plans.

7) If you believe that taxes are going to go up and you will likely have to pay a high tax rate when you retire, you will probably be better off with a Roth IRA than with a traditional IRA.

8) If you are terminated before you are fully vested in an employer-sponsored plan, you may not get to keep previous contributions to your pension made by your employer.

9) In a defined benefit plan, the retirement benefit will vary according to rates of return on pension fund reserves.

10) In terms of assets managed and numbers of plans, defined contribution plans are becoming more predominant and defined benefit plans are declining.

11) In 2016, pension fund reserves held by life insurance companies represent about 45 percent of the typical life insurer's assets.

12) Pension contributions paid to insured pension funds and the assets purchased with these funds become the legal property of the insurance company and are not the legal property of the individual pension fund contributors.

13) A defined benefit pension plan expects to pay out $25 million per year over the next 10 years to pensioners. The fund currently has $155 million in pension assets that are earning 10 percent per year. This plan is underfunded.

14) If you are married and you and your spouse make $160,000 total per year, you are not allowed to contribute to an IRA.

15) Assets in 401(k) plans are now greater than assets in private defined benefit plans.

16) A pension plan has promised to pay out $25 million per year over the next 15 years to its employees. Actuaries estimate the rate of return on the fund's assets will be 5.50 percent. What amount of pension fund reserves (to the nearest dollar) are needed for the plan to be fully funded?

A) $375,000,000

B) $310,945,678

C) $250,939,524

D) $202,345,555

E) $198,466,231

17) Private pension funds are funds administered by

I. the federal government.

II. state and local governments.

III. insurance companies.

IV. banks and mutual funds .

A) I and II only

B) II and III only

C) III and IV only

D) II, III, and IV only

E) I and III only

18) In general terms, which one of the following plan types is the riskiest for an employee on a year-to-year basis?

A) Defined contribution plan invested in fixed-income securities

B) Defined contribution plan invested in equities

C) Final pay defined benefit plan

D) Career average defined benefit plan

E) Overfunded defined benefit plan

19) In recent years defined contribution plans have grown faster than defined benefit plans in which of the following areas?

I. Fund assets

II. Number of funds

III. Number of plan participants

A) I only

B) I and II only

C) II and III only

D) I, II, and III

E) II only

20) Congratulations, you have just been employed! You now have a choice between a flat benefit at retirement equal to $4,000 times your years of service, or a career average formula of 3.50 percent of your average salary times your years of service. You expect to work 40 years. At what average salary would you be indifferent between the two alternatives?

A) $160,000

B) $145,444

C) $114,286

D) $101,104

E) $98,976

21) At your new job you estimate that your average salary over your working years will be $95,000 per year. How many more years would you have to work to receive as much benefit from a flat benefit of $3,000 times years of service as you would receive from 3.75 percent of your average salary times years of service?

A) 1.33 times as many years

B) 0.75 times as many years

C) 1.19 times as many years

D) 2.40 times as many years

E) 1.50 times as many years

22) An employee who has worked for his firm for 30 years can retire right now and receive a constant annual benefit of $45,000. He has a final pay plan that pays his average salary over his final five years x 2 percent x years of service. He has decided he will keep working five more years but only if by doing so his retirement benefits will grow at 6 percent per year. How much would his expected average salary (to the nearest dollar) have to be over the next five years to keep him working?

A) $54,198

B) $86,029

C) $51,617

D) $66,911

E) $53,147

23) The main advantage of a profit sharing Keogh plan over a money sharing Keogh plan is that profit sharing plans

A) are eligible for PBGC insurance and money sharing plans are not.

B) have higher maximum contributions than money sharing plans.

C) can have contributions that vary from year to year with profits, while money sharing plan contributions are a fixed percentage of the employee's income.

D) profit sharing Keogh plans are eligible for PBGC insurance and money sharing plans are not, and they have higher maximum contributions than money sharing plans.

E) None of these options are correct.

24) The Pension Protection Act of 2006 requires companies to correct funding shortfalls in their defined benefit plans within

A) one year.

B) three years.

C) five years.

D) 10 years.

E) 20 years.

25) Under ERISA, pension fund managers are required to invest fund assets as wisely as if they were investing their own money. This requirement is called the

A) owl rule.

B) vesting requirement.

C) 403(b) requirement.

D) prudent person rule.

E) funding rule.

26) A(n) \_\_\_\_\_\_\_\_ plan does not require the employer to guarantee retirement benefits nor to maintain a minimum level of pension reserves.

A) defined benefit

B) insured pension

C) corporate pension

D) uninsured pension

E) defined contribution

27) Which of the following statements about 401(k) plans are true?

I. They are defined benefit plans.

II. They allow employer and employee contributions.

III. Earnings accrue tax-free during the employee's working years.

IV. They allow employee discretion in asset allocation.

V. They always have minimum guaranteed rates of return.

A) I, IV, and V only

B) I, II, and V only

C) II and III only

D) II, III, and IV only

E) All of these choices are correct.

28) An employee contributes 9 percent of his salary to his 401(k) plan and the employer matches with 40 percent of the first 6 percent of the employee's salary. The employee earns $90,000 and is in a 28 percent tax bracket. If the employee earns 10 percent on the plan investments, what is his one-year rate of return relative to the net amount of money he invested?

A) 16.28 percent

B) 51.25 percent

C) 90.07 percent

D) 93.52 percent

E) 29.72 percent

29) Employee plus employer contributions to a 401(k) are $15,000 per year. Equity funds are earning 15 percent, bond funds 8 percent, and money market funds 6 percent. The employee wants to retire as soon as possible with $1 million in retirement assets. If he puts 50 percent of his money in stocks, 30 percent in bonds, and 20 percent in money funds, how long until he can expect to retire?

A) 3.3 years

B) 9.7 years

C) 20.2 years

D) 2.4 years

E) 12.2 years

30) Which of the following statements are true about a traditional IRA?

I. Subject to an income limit, in 2016 a single person could contribute up to $5,500 per year ($6,500 if over 50 years old) of pretax income to an IRA.

II. All withdrawals are tax-free.

III. Earnings on the IRA account are not taxed until withdrawn.

IV. You must begin withdrawals at age 59½.

V. Withdrawal(s) can be a lump sum or installments.

A) I, II, IV

B) I, II, IV, and V

C) I, III, and V

D) II, IV, and V

E) III, IV, and V

31) Which of the following is/are true about a Roth IRA?

I. Contributions are tax deductible.

II. Withdrawals after retirement are not taxed.

III. You must begin withdrawals at age 70½.

IV. Employers match contributions.

V. They are only available to individuals earning less than $50,000, or households earning less than $90,000.

A) I, II, and IV

B) II, IV, and V

C) I, III, and IV

D) II only

E) V only

32) A retirement account specifically designed for self-employed persons is a

A) Roth IRA.

B) traditional IRA.

C) Keogh.

D) Penny Benny.

E) public pension plan.

33) Under ERISA the maximum time period allowed for vesting is \_\_\_\_\_\_\_\_ years.

A) three

B) five

C) eight

D) 10

E) 15

34) ERISA established all but which one of the following?

A) Prudent man rule

B) Maximum vesting times

C) Minimum funding requirements

D) Insurance for pension plan participants

E) Minimum payouts for defined contribution plans

35) The PBGC

I. insures participants of defined benefit plans if plan funds are insufficient to meet contractual pension obligations.

II. insures participants of defined contribution plans if investment returns are insufficient to meet expected pension obligations.

III. regulates day-to-day pension fund operations.

A) I only

B) II only

C) I and III only

D) II and III only

E) I, II, and III

36) A defined benefit pension plan has expected payouts of $15 million per year for eight years and then $20 million per year over the following 15 years. Actuaries have estimated that the fund can be expected to earn an average of 5.25 percent on its assets. The fund currently has reserves of $185,475,000. The plan is \_\_\_\_\_\_\_\_ by about \_\_\_\_\_\_\_\_ million.

A) underfunded; $100

B) underfunded; $59

C) overfunded; $30

D) overfunded; $24

E) underfunded; $46

37) An employee contributes 6 percent of her salary to her 401(k) plan and her employer contributes another $1,900. The employee earns $75,000 and is in a 28 percent tax bracket. If the employee earns 8.50 percent on all funds invested each year and her salary does not change, how much will she have in her account in 20 years?

A) $195,369

B) $213,133

C) $244,667

D) $289,055

E) $309,613

38) Employee plus employer contributions to a 401(k) are $11,000 per year. Equity funds are earning 10 percent; bond funds, 5 percent; and money market funds, 3 percent. The employee will retire in 30 years. How much money will he have if he earns the average return from putting 65 percent of his money in equities, 30 percent in bond funds, and the rest in money market funds?

A) $1,838,526

B) $1,280,925

C) $1,654,320

D) $1,978,565

E) $1,248,550

39) You want to have $1,200,000 when you retire and you are in a defined contribution plan. You can earn 9 percent per year on the money invested and you will retire in 25 years. Your employer also contributes to your plan. The employer will contribute 4 percent of what you put into the plan each year. How much do you have to contribute per year to meet your goal?

A) $18,435.43

B) $17,654.87

C) $16,879.32

D) $13,622.60

E) $15,999.44

40) Vesting refers to

A) how long until an employee owns any employer contributions to the employee's pension plan.

B) how long until an employee can transfer any of his own contributions to a new plan if he switches jobs.

C) eligibility requirements to retire early.

D) restrictions on asset allocations within a defined contribution plan.

E) the extent to which an employee materially participated in a given business in a given year.

41) IRAs are

A) self-directed investment vehicles designed to provide supplemental retirement income.

B) corporate retirement plans for self-employed individuals and small businesses.

C) specific classes of investments such as equities or bonds issued by certain corporations.

D) investment vehicles created by ERISA.

E) special types of life insurance policies.

42) A country where the link between public pension benefits and amount of taxes paid in is weak is

A) Sweden.

B) Italy.

C) Great Britain.

D) Chile.

E) France.

43) Social Security began running a deficit for the first time in what year?

A) 1990

B) 1995

C) 2000

D) 2005

E) 2010

44) Social Security is a:

A) fully funded pension plan.

B) federally insured private pension plan.

C) pay-as-you-go system.

D) government backed private pension plan.

E) overfunded pension plan.

45) What is the main asset held by private pension funds?

A) Corporate bonds

B) U.S. Government bonds

C) Municipal bonds

D) Corporate equities

E) Money market securities

46) In general, in a defined benefit pension plan, the risk of shortfall is borne by the \_\_\_\_\_\_\_\_; while in a defined contribution pension plan, the risk of the shortfall is borne by the \_\_\_\_\_\_\_\_.

A) plan administrator; employee

B) employee; employer

C) employer; employee

D) government; employer

E) employer; government

47) Which of the following formulas is not used to determine pension benefits for defined benefit pension funds?

A) Flat-benefit formula

B) Career-average formula

C) Final-pay formula

D) Career-contribution formula

E) All of these choices are correct.

48) Which of the following is not one of the principal features of ERISA?

A) Vesting of benefits

B) Employee termination

C) Fiduciary responsibility

D) Transferability

E) Funding

49) Your company sponsors a 401(k) plan into which you deposit 8 percent of your $95,000 annual income. Your company matches 65 percent of the first 10 percent of your earnings. You expect the fund to yield 9 percent next year. If you are currently in the 30 percent tax bracket, what is your one-year return?

A) 64.136%

B) 135.518%

C) 182.232%

D) 95.358%

E) 112.135%

50) Why do insured pension plans invest in less risky assets than uninsured pension plans?

51) A 55-year-old has just changed jobs and has a choice between a defined benefit plan [final pay] and a defined contribution plan. He will work for 10 more years. What should he consider in making his decision?

52) Suppose that a corporate defined benefit plan had decided it will keep pension fund reserves equal to the present value of expected future pension benefits to be fully funded. The plan has expected payouts of $12 million per year for 15 years and then $22 million per year for the subsequent 10 years. All payments are at year-end. At the current 5.75 percent rate of return on the plan's assets, the plan is currently fully funded. If the plan can increase the proportion of stock investments the fund holds and raise the expected rate of return to 8.00 percent, how many dollars of pension assets can be freed up by the corporation?

53) Why do employees increasingly prefer defined contribution plans to defined benefit plans?

54) You are 30-years old and you make $110,000 per year. You calculate that you cannot  retire until you have accumulated a lump sum amount of $2,000,000 to live on after retirement. You contribute 6 percent of your salary to your 401(k) and your employer contributes 3 percent of your salary. You plan on investing 65 percent of your funds in equities on which you expect to earn an average rate of return of 10 percent, and the rest in bonds projected to earn 5 percent. If your salary does not grow, how old will you be when you can retire?

55) An individual is considering contributing $4,000 per year to either a traditional or a Roth IRA. Payments would begin in one year. If she uses the traditional IRA, her contributions would be fully deductible. She is 40-years old and is in a 28 percent tax bracket. On either IRA she can earn 7 percent. When she retires at age 65, she believes she will be in a 15 percent tax bracket. Which type of IRA should she choose if she invests not only the $4,000 per year, but any tax savings due to the deductibility of her contributions in a taxable investment earning a pretax rate of 7 percent? She will withdraw all her money upon retirement and may owe taxes then, depending on the type of IRA chosen.

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57) How is Social Security different from a private defined benefit plan? When and why is Social Security projected to become insolvent?

58) How sound is the PBGC? How much do firms pay for pension fund insurance? Describe President Bush's proposal to increase funding for PBGC.

59) What are the main provisions of ERISA?

60) How do public pension plans differ in other countries? Has privatization worked overseas?