Questions:

1. In 2012, the average vehicle in the US sold for $42,830. In 2002 (10 years earlier) the average selling price was $25,313. What was the annual increase in the selling price over this time period?

a) 3.89 percent

b) 4.20 percent

c) 4.56 percent

d) 5.01 percent – **not correct answer**

e) 5.40 percent

2. You have taken a new job at a start-up company. You agreed to a modest salary for the first two years, but if the company is successful you will be paid $32,000 bonus at the end of the 2nd year of employment. When you receive it you plan to invest it for 5 more years and conservatively believe you can earn no less than 4.5 percent per year. Based on this assumption, how much money will you have 7 years from now?

a) $39,877.82

b) $41,687.14

c) $44,079.84 – **not correct answer**

d) $47,908.12

e) $52,002.67

3. You are trying to save to buy a new $45,000 Lexus. You have $28,000 today that can be invested and you believe you can reasonably earn a 5 percent return on funds. How many years will it be before you can drive off in your new Lexus? (assume the price of the vehicle remains constant)

a) 3.55 years

b) 5.68 years

c) 7.98 years – **not correct answer**

d) 9.72 years

d) 11.29 years

4. You have just received notification that you have won the $600,000 first prize in the Centennial Lottery to be awarded on your 100th birthday which is 70 years from now. However, you have an option to take a lump sum now, which is the discounted present value of the prize. The lottery commission uses a 5% discount rate to determine the present value of your winnings. What is the lump sum you can collect now if not waiting until your 100th birthday?

a) $6,404.20

b) $12,876.50

c) $19,719.70

d) $26,333.33

e) $37,418.69 – **not correct answer**

5. This morning, Louise opened a savings account that will earn 2.2 percent interest, compounded annually. After five years, her savings account will be worth $5,600. Assume Louise will not make any withdrawals or additional deposits. Given this, which one of the following statements is false?

a) Louise deposited less than $5,600 this morning

b) The present value of Louise’s account is less than $5,600 – **not correct answer**

c) Louise could have deposited less money and still had $5,600 in five years if she could have earned more than 2.2 percent interest

d) Louise would have had to deposit more money to have $5,600 in five years if she were to earn less than 2.2 percent interest

e) Louise will earn an equal dollar amount of interest every year for the next five years

6. Your grandfather just gave you a $10,000 cash gift. You would like to start a new family tradition and have decided to invest this money so that you can gift it to your grandchildren 50 years from now. How much additional money will you have to gift to your grandchildren if you can earn an average of 6.0 percent instead of just 5.5 percent on our savings?

a) $26,486.12

b) $31,592.10

c) $38,781.93

d) $47,239.01 – **not correct answer**

e) $55,872.98

7. Barnacle Manufacturing, Inc. has an unfunded pension liability of $850 million that must be paid in 25 years. To assess the value of Barnacle’s stock, financial analysis want to discount this liability back to its present value. The relevant discount is 6.3 percent. What is the percent value of this liability?

a) $159,803.469

b) $171,834,907

c) $176,067,311 – **not correct answer**

d) $184,538,639

e) $191,620,445

8. Charles has been purchasing $25,000 worth of liquid ink stock annually for the past 11 years. His holdings are now worth $587,959. What is his annual rate of return on this investment?

a) 14.06 percent

b) 14.18 percent

c) 14.29 percent

d) 14.37 percent

e) 14.68 percent – **not correct answer**

9. A(n) \_\_\_\_\_\_\_\_\_ is an example of a monthly interest rate expressed as an annual rate.

a) stated rate

b) discounted annual rate

c) effective annual rate

d) periodic monthly rate – **not correct answer**

e) consolidated monthly rate

10. Your broker has offered you two investment options. Each pays 5 percent interest, compounded annually. Option A pays three annual payments of $4,000 each. Option B pays three annual payments starting with $2,000 the first year followed by two annual payments of $5,000 each. Which one of the following statements is correct given these two investment options?

a) Both options are of equal value given that they both provide $12,000 of income

b) Option A has the higher present value at time of investment

c) Option B has the higher present value future value at the end of year three – **not correct answer**

d) Option A is perpetuity

e) Option B is an annuity

11. Beginning three months from now, you want to be able to withdraw $1,500 each quarter from your bank account to cover college expenses over the next 4 years. The account pays 0.8 percent interest per quarter. How much do you need to have your account today to meet expense needs over the next 4 years?

a) $21,630.44

b) $21,994.06

c) $22,045.26 – **not correct answer**

d) $22,256.09

e) $22,443.45