Questions:

1. Use a spreadsheet to calculate the values of (d(p) ) (p= 2,4,12) , δ and i based on an input value of d = 1.4% .
2. Use a spreadsheet to calculate the values of (i(p) ) and (d(p) ) (p= 3,4,12) , δ, d and i based on an input value of i(2) = 2.6% .
3. Use a spreadsheet to calculate the values of (i(p) ) and (d(p) ) (p= 3,4,12) , δ, d and i based on an input value of i(6) = 6% .
4. Use a spreadsheet to calculate the values of (i(p) ) and (d(p) ) (p= 3,4,12) , δ, d and i based on an input value of d(2) = 2.4% .
5. Use a spreadsheet to calculate the values of (i(p) ) and (d(p) ) (p= 3,4,12) , δ, d and i based on an input value of d(6) = 5.3% .
6. Suppose that Rs.1500 is deposited in a savings account. Determine the accumulated amount of the account after 5, 10, 20, and 40 years on the assumption that compound interest is paid at the rate of

(a) 4% per annum

(b) 8% convertible half yearly

(c) 1.5% convertible monthly

(d) 3.3% convertible quarterly

(e) 5.6% compounded continuously

1. Suppose that Rs.12000 is deposited in a savings account. Determine the accumulated amount of the account after t=1,2,3,…20 years on the assumption that compound interest is paid at the rate of

(a) 8% per annum

(b) 2.3% convertible half yearly

(c) 1.25% convertible monthly

(d) 4% convertible quarterly

(e) 6% compounded continuously

1. Draw a graph based on an effective interest rate of 2.3% pa to show that (i(p)) tends towards δ as p → ∞ .
2. Draw a graph based on an effective interest rate of 4% pa to show that (d(p)) tends towards δ as p → ∞ .
3. Draw a graph based on an effective interest rate of 7.5% pa to show that (d(p)) tends towards δ as p → ∞ .
4. Calculate the present value of Rs.10000 over 10 years at the following rates of interest/discount:

(a) A force of interest of 6.3% per annum

(b) A rate of interest of 8% per annum convertible half-yearly

(c) A rate of interest of 5% per annum convertible monthly

1. Calculate the present value of Rs.17000 over 15 years at the following rates of interest/discount:

(a) A force of interest of 1.5% per annum

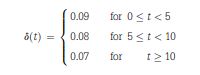
(b) A rate of interest of 3.5% per annum convertible half-yearly

(c) A rate of interest of 6% per annum convertible quarterly

1. A person has borrowed Rs.10000. What will be the repayable amount if:



1. Due at the end of 8 years
2. Due at the end of 26 years
3. Due at the end of 12 years
4. Due at the end of 3 years
5. Due at the end of 17 years
6. Find the accumulated value of Rs. 1500 when:



1. Due at the end of 23 years
2. Due at the end of 5 years
3. Due at the end of 19 years
4. Due at the end of 14 years
5. Due at the end of 2 years