

Student Name : \_\_\_\_\_

Reg # \_\_\_\_\_

First Exam  
16 Nov 2000

Ahmad Jaradat  
Time : 40 min

---

**Q1**

For nominal interest rate of 10 % per year, what is the effective interest rate if compounding is :

( a ) semiannually .

( b ) every 2 months .

( c ) continuously .

---

**Q2**

I want to buy a car for 13000 JD. I plan to make a down payment of 4000 JD and get the loan from the bank to pay the remaining cost. If the bank charges 12 % per year compounded monthly from loans:

( a ) What will be my monthly payment if the loan is to be paid back in 5 years ?

( b ) If I want to pay the loan off at the end of the third year, how much must I pay the bank?

( c ) What percentage of the second payment is interest ?

---

**Q3**

A young woman placed 200 JD in a saving account paying monthly interest. After one year her balance had grown to 212.16 JD . What was the effective annual interest rate?

**Give answer to 1/100 of a percent.**

---

**Q4**

If the interest rate is 6 % compounded quarterly, how long ( number of quarters ) does it take to earn 100 JD interest on an initial deposit of 300 JD ?

---

**Q5**

A 25,000 JD is deposited in a bank trust account that pays 10 % interest compounded semiannually. Equal annual withdrawals are to be made from the account beginning one from now and continuing forever .

Calculate the maximum amount of the equal annual withdrawals ?

---