ASSIGNMENT 3 (COMPULSORY)

Due Date	Unique Number
16 April 2018	862691

Submit your answers online through myUnisa. No extensions will be granted for submission of this assignment. ***NO*** *manual or posted submissions will be allowed.*

Question 1

Suppose R3 500 is invested into a savings account which pays interest at 7.5% per annum, compounded annually. How long will it take the investment to reach R4 044.69?

1) 1.16 years
2) 2.00 years
3) 1.21 years
4) 2.08 years

Questions 2

Rebecca borrow R5 000 from Jacob at a simple interest of 12.5% per annum. She will pay the loan as a lump sum amount at the end of 2 years. How much is the lump sum amount?

1) R6 250.00
2) R5 125.78
3) R6 328.13
4) R5 125.00

Questions 3

Joseph has R2 500 to invest, however, he wishes to have R4 000 in 5 years' time. What should the simple interest rate be for his investment?

1) 12 %
2) 16%
3) 10%
4) 15%

Question 4

Themba's son was 6 years old when Themba invested R6 610 into a savings account. When his son was 18 years old, the investment was worth R11 131.24. Assuming simple interest, what was the interest rate earned on this investment?

1) 6.00%
2) 8.30%
3) 6.80%
4) 5.70%

Question 5

Madimpho invests R3 500 into a savings account that earns interest at 7.5%per annum, compounded annually. How much would she have accumulated after 5 years?

1) R86 663.47
2) R57 445.80
3) R5 024.70
4) R5385.18

Question 6

Lerato invests R60 000 into an account that earns 10% interest per annum, compounded quarterly. How much would she have accumulated after 4 years?

1) R84 000.00
2) R87 846.00
3) R89 070.34
4) R88 647.33

Questions 7

A couple wants to achieve an investment sum of R100 000 in 5 years' time. They found an investment product that earns interest at 15% per annum, compounded monthly. How much should the couple invest now in order to reach their goal?

1) R49 717.67
2) R47 456.76
3) R48 101.71
4) R47 889.71

Question 8

Suppose R2 000 is invested now, R4 000 is invested at the end of three years from now and R5 000 is invested at the end of five years from now. If the interest rate is 5% per annum, compounded monthly, what is the accumulated sum of these investments?

1) R11 121.57
2) R14 839.20
3) R13 062.68
4) R12 599.74

Question 9

Jaco deposited R9000 into an investment account. After three months his car broke-down and he withdrew R2 320 from the same account for repairs. The account pays 10% interest per annum, compounded quarterly. How much does he have after 9 months?

1) R7 254.57
2) R8 549.28
3) R7 018.18
4) R7 259.50

Question 10

What is the present value of an ordinary annuity that consists of 24 monthly payments of R1 000 each; if the interest rate is 9% per annum, compounded monthly?

1) R23 996.61
2) R21 889.15
3) R21 498.42
4) R20 030.41

Question 11

What is the value of an ordinary annuity that consists of quarterly payments of R1 000 each, for six years; if the interest rate is 12% per annum, compounded quarterly?

1) R12 550.36
2) R16 935.54
3) R20 030.99
4) R17 884.99

Question 12

Michael made a R40 000 down payment on a car. He paid R4 000 per month for three years, with interest rate charged at 12% per annum, compounded monthly. How much did he pay on interest charges?

1) R63 569.98
2) R72 769.66
3) R23 569.98
4) R32 769.66

Question 13

Hendrick won the lottery jackpot. The lottery commission agrees to pay Hendrick twenty instalments of R500 000 per year. The first R500 000 is payed immediately, thereafter Hendrick is paid yearly. If a bank investment pays an interest of 9% per annum compounded yearly, how much money should the commission have in the bank in order to guarantee all payments?

1) R4 975 057.39
2) R4 475 057.39
3) R4 564 272.83
4) R5 064 272.83

Question 14

Madimpho has R1 500 000 in her company's retirement account. However, she is now changing jobs and wants to transfer her retirement funds into a new account. She also wants to invest R30 000 per quarter into the new account until her retirement, 20 years from now. If the new account earns an interest of 8% per annum compounded quarterly. How much will she have when she retires?

1) R5 813 158.73
2) R7 313 158.73
3) R8 813 158.73
4) R13 126 317.46

Question 15

Marietta plans to deposit R50 000 into an investment account at the end of the month. At from the following month and in the same account, she will deposit R2 000 per month for the next five years. If the account pays an interest of 6% per annum compounded monthly, how much will Marietta have at the end of the five years?

1) R67 779.72
2) R117 779.72
3) R139 540.06
4) R207 319.78

Question 16

Oupa plans to supplement his pension using his savings of R1 200 000 as an ordinary annuity that will make a monthly payment to him for twenty years. If the interest rate is 9% per annum, compounded monthly, how much will he get paid per month?

1) R10 954.65
2) R12 223.34
3) R10 796.71
4) R13 145.58

Question 17

Find the monthly payment to amortize a R2 250 000 loan at 6% per annum, compounded monthly, for thirty years.

1) R13 621.67
2) R15 272.73
3) R13 489.89
4) R17 715.36

Question 18

Ditebogo and her husband were approved for a R1 400 000 home loan from the bank. If the bank charges 10.5% interest rate for a 15-year payment period, find out how much will be their monthly repayment amount.

1) R14 703.79
2) R15 778.93
3) R17 346.52
4) R15 475.58

Question 19

A coffee machine dealer has a deal to buy a certain coffee machine. The amount of R6 000 is required as a down payment as well as a monthly payment of R300 for the next three years. If the interest is 1.25% per month on the unpaid balance, find the cost of the coffee machine.

1) R8 219.61
2) R14 654.18
3) R16 800.00
4) R14 219.61

Question 20

Thandi wants to buy a car worth R300 000. She is offered a five-year vehicle loan that charges interest of 12% per annum, compounded monthly. What is the total interest that Thandi will pay for the vehicle loan?

1) R100 399.80
2) R122 570.62
3) R116 114.60
4) R180 000.00

Question 21

Harriet and her husband are planning to purchase a family home. They have R600 000 for a down-payment, and they can afford a monthly payment of R20 000 for twenty years. If interest is charged at 9% per annum, compounded monthly, what is the maximum price of a house that they can afford?

1) R5 400 000.00
2) R2 822 899.08
3) R2 190 850.92
4) R2 790 850.92

Question 22

Malebo needs to pay back a R500 000 loan through equal instalments at the end of each year for five years. If interest is charged at 8% per annum, compounded annually. What is the size of the instalment that Malebo has to pay?

1) R125 228.23
2) R108 000.00
3) R121 658.37
4) R140 000.00

Question 23

Rajesh and Mila bought a house ten years ago for R2 000 000. In that purchase they made a down-payment of 20%, the balance was financed using a thirty-year home loan at 9% per annum, compounded monthly. The house is now worth R3 800 000. If they were to sell the house at this price, how much would they have remaining after selling the house?

1) R1 430 875.69
2) R1 600 000.00
3) R2 369 124.31
4) R2 200 000.00

Question 24

Jacob's parents are planning to contribute R2 500 every month for his first year's rent at university. They plan to deposit a lump-sum amount so that Jacob can withdraw R2 500 at the end of each month from January to December. Assuming that interest earned is 12% per annum, compounded monthly, how much should Jacob's parents deposit in his account?

1) R30 000.00
2) R26 785.71
3) R36 000.00
4) R28 137.69

Question 25

Dintle made a down-payment of R4 000 on furniture that she purchased. For the balance of the purchase price, she paid R753.20 per month over two years. If the interest was charged at 12% per annum, compounded monthly, what was the purchase price of the furniture?

1) R18 076.80
2) R22 415.23
3) R20 000.52
4) R26 415.23