

## Mathematical Literacy 4 - Module 3

Name: .....

Marks Available: 60

Time: 45 minutes

### Question 1:

*Define the following terms:*

- a. Fixed cost
- b. Pay as you earn
- c. Current account
- d. Johannesburg Securities Exchange
- e. Rental Contract

[10]

### Question 2:

*State whether each of the following are true or false*

- a. A government bond is a high risk investment.
- b. Options are rights to buy or sell any asset at a fixed price on or before the stated date.
- c. A debtor is someone you owe money to.
- d. Equities earn fixed interest.
- e. Cash provides no hedge against inflation.

[10]

### Question 3:

*State whether each of the following are fixed or variable costs.*

- a. Rent \_\_\_\_\_
- b. Electricity \_\_\_\_\_
- c. Loan payments \_\_\_\_\_
- d. Raw materials \_\_\_\_\_
- e. Telephone calls \_\_\_\_\_

[5]

Question 4:

a. Define the following terms:

a. Income tax (2)

\_\_\_\_\_

\_\_\_\_\_

b. Value added tax (2)

\_\_\_\_\_

\_\_\_\_\_

c. Tax threshold (2)

\_\_\_\_\_

\_\_\_\_\_

Taxable income (R)	Rates of tax
0-122 000	18%
122001 - 195 000	21 960 + 25% of the amount above 80 000
195001 - 270 000	40 210 + 30% of the amount above 130 000
270 001 -380 000	62 710 + 35% of the amount above 180 000
380 001 - 490 000	101 210 + 38% of the amount above 230 000
490 001 +	143 010 + 40% of the amount above 300 000

- b. How much tax will a person pay if he earns R230 000 per year?
- c. If it costs R20 000 for a company to manufacture a good and it resells the good for R30 000, how much VAT must it pay at 14% for the good?
- d. What is the end of the financial tax year?

[15]

**Question 4:**

- a. Calculate the simple interest earned if the principle amount = R30 000; time = 5 years and interest rate = 12% (3)
- b. Calculate the Celsius temperature if the Farenheit temperature is 100 (4)
- c. How much water is there in a water tanker 10m long with a circumference of 2m.

d. What is its estimated surface area? (3)

e. How much fencing would be needed to fence a farm 3km long and 3850m wide?

[15]

**Question 5:**

**Latest car sales may signal the end of the downturn.**

*The total new-vehicle market rebounded slightly in September, with sales increasing by 6,1%, compared with figures for August, to reach 35 931 units.*

*Sales of new passenger cars in September showed an increase of 6,2% over sales recorded in August, totalling 23 813 units.*

*September sales in the light commercial vehicle segment increased by 5,5% from August, but the 10 525 units fell 21,9% short of September 2008 sales.*

*The 551 medium commercial vehicles sold were 2% up on last month's results, but 35,8% in the red compared with figures for September last year.*

*Sales in the heavy commercial vehicle segment reached 1 042 units, an increase of 10,4% on August's results, but 48,6% down on the number achieved in September 2008.*

a. Represent the information in a table. (3)

b. What do the percentages tell you? (6)

---

---

---

---

c. Represent the information in a bar graph. (6)