Deel 1 Normering: 1 + aantal goed.

1. 6
2. 6
3. 6
4. 7
5. 12
6. 3.14159265359 (obviously: pi or π is also graded as the correct answer, just as any number of decimals which indicate that they know it is pi)
7. 13 (program finds greatest common divisor)
8. 3 2
9. 5 -1

Deel 2: Normering: 1 + aantal goed.

1 D) 'None' (Nothing)

2 C) Type error during runtime

3 B) Runtime error, variable not defined

4 D) Indentation error

5 E) np.cos and np.arange ipv gewone cos en arrange

6 D) 800000

7 C) '5'

8 C) runtime error, variable not defined

9 A) correct, prints '22'

Part 3:

Problem1. Following parts

a. `arange(0.,10.+dt,dt)`
b. `array([])`
c. `v+a*dt`
d. `ttab[1:],vtab` or: `ttab[:-1],vtab ttab, append([0], vtab)` or something similar

Problem 2. Numpy array

```
from numpy import *  #(may be forgotton)

a = zeros((100,4))
t = linspace(0,0.98,99) # or t = arange(0,0.98,0.01)

a[1:,0] = t
a[1:,1] = 5.0
a[1:,2:] = 2.0
```

or other methods (vstack, hstack, for-loops/list append methods also ok)

3. Least squares method

Something like the lines below (actual numbers irrelevant) (6 points):

```
A = mat("3 0 1;2 0 2;3 1 3; 3 2 9;2 1 2")
b = mat("3;2;4;5;1")

xls = inv(A.T*A)*A.T*b
print(xls)
```

Deel 4:

Problem 1: -4.38451, 0.0, 3.65338, 5.96588
Problem 2: 0.065797
Problem 3: 819
Problem 4: 41 or 44 bounces (numerically sensitive)

Cijfer: neem gemiddelde 1+2+3
En cijfer deel 4:
Samen middelen = totale cijfer