

LAMPIRAN A.1

```

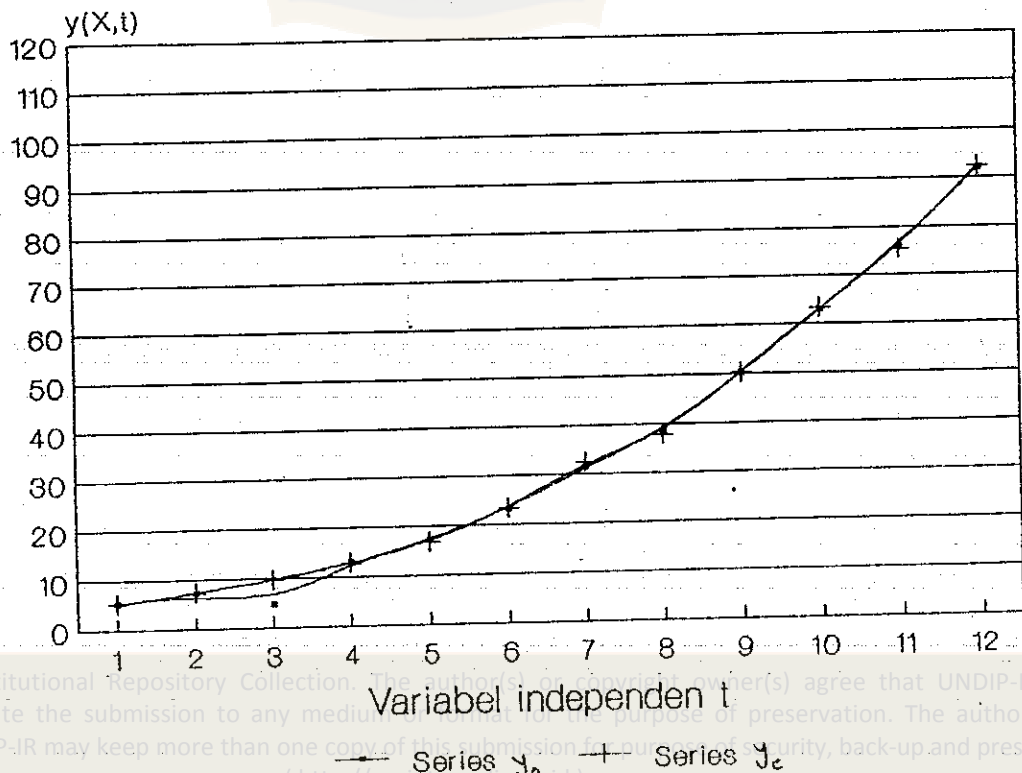
580 DATA "LOGISTIK" : REM NAMA HIMPUNAN DATA
590 DATA 12
600 DATA 1,2,3,4,5,6,7,8,9,10,11,12 : REM HARGA DATA INDEPENDEN
605 REM HARGA DATA DEPENDEN
610 DATA 5.308,7.24,9.638,12.866,17.069,23.192,31.443
615 DATA 38.558,50.156,62.948,75.995,91.972
  
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5000 REM *****
5010 REM *           RESIDU UNTUK APROKSIMASI FUNGSI LOGISTIK           *
5020 REM *           M = JUMLAH SAMPEL                               *
5030 REM *****
5040 M = 12
5050 L1 = 0
5060 FOR I = 1 TO M
5070 Y=S(I,1)
5080 R(I)=X(1)/((1+X(2)*EXP(Y*X(3))))-S(I,2)
5090 NEXT I
5100 RETURN
7000 REM *****
7010 REM *           JAKOBIAN UNTUK FUNGSI LOGISTIK           *
7020 REM *****
7030 FOR I = 1 TO M
7040 Y = S(I,1)
7050 BAGI(I)=1+X(2)*EXP(Y*X(3))
7060 A(I,1)=1/BAGI(I)
7070 A(I,2)=(-X(1)*EXP(Y*X(3)))/BAGI(I)^2
7080 A(I,3)=(-X(1)*X(2)*Y*EXP(Y*X(3)))/BAGI(I)^2
7090 NEXT I
7100 RETURN
7110 END
  
```

LAMPIRAN A.2

MODEL PERTUMBUHAN LOGISTIK



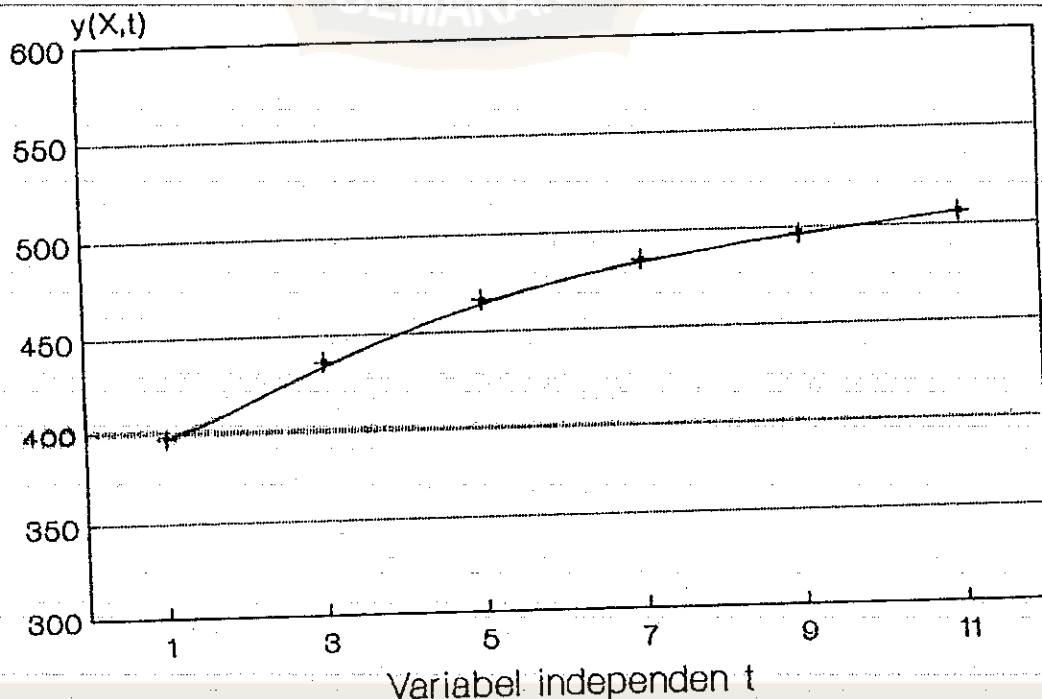
LAMPIRAN B.1

```
580 DATA "Mekanistik" : REM NAMA HIMPUNAN DATA
590 DATA 6
600 DATA -5,-3,-1,1,3,5 : REM HARGA DATA INDEPENDEN
610 DATA 99,238.5,332.5,395.5,437,465.5 : REM HARGA DATA DEPENDEN
```

```
5000 REM *****
5010 REM * RESIDU UNTUK APROKSIMASI FUNGSI PERUBAHAN MEKANISTIK *
5020 REM * M = JUMLAH SAMPEL *
5030 REM *****
5040 M = 6
5050 L1 = 0
5060 FOR I = 1 TO M
5070 Y=S(I,1)
5080 R(I)= X(1)+X(2)*EXP(X(3)*Y)-S(I,2)
5090 NEXT I
5100 RETURN
7000 REM *****
7010 REM * JAKOBIAN UNTUK FUNGSI PERTUMBUHAN MEKANISTIK *
7020 REM *****
7030 FOR I = 1 TO M
7040 Y=S(I,1)
7050 A(I,1)= 1
7060 A(I,2) = EXP(X(3)*Y)
7070 A(I,3) = Y*X(2)*EXP(X(3)*Y)
7080 NEXT I
7090 RETURN
7100 END
```

LAMPIRAN B.2

MODEL PERTUMBUHAN MEKANISTIK



LAMPIRAN E.1

580 DATA "F. NONLINEAR SIMULTAN" : REM NAMA HIMPUNAN DATA  
590 DATA 5  
600 DATA 1,2,3,4,5 : REM HARGA DATA INDEPENDEN  
610 DATA 1.1,2.2,3.3,4.4,5.5 : REM HARGA DATA DEPENDEN

```
5000 REM *****
5010 REM *      RESIDU UNTUK APROKSIMASI FUNGSI NONLINEAR SIMULTAN *
5020 REM *      M = JUMLAH SAMPEL *
5030 REM *****
5040 M = 3
5050 L1 = 0
5060 R(1) = 3*X(1)-COS(X(2)*X(3))- .5
5070 R(2) = X(1)^2-81*(X(2)+.1)^2 - SIN(X(3))+1.06
5080 R(3) = EXP(-X(1)*X(2))+20*X(3) +(10*22/7 -3)/3
5090 RETURN
7000 REM *****
7010 REM *      JAKOBIAN UNTUK FUNGSI NONLINEAR SIMULTAN *
7020 REM *****
7030 A(1,1) = 3
7040 A(1,2)=X(3)*SIN(X(2)*X(3))
7050 A(1,3)=X(2)*SIN(X(2)*X(3))
7060 A(2,1)=2*X(1)
7070 A(2,2)=-162*(X(2)+.1)
7080 A(2,3)= -COS(X(3))
7090 A(3,1)= -X(2)*EXP(-X(1)*X(2))
7100 A(3,2)= -X(1)*EXP(-X(1)*X(2))
7110 A(3,3)= 20
7120 RETURN
7130 END
```

