PAMUKKALE ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ CENG 241 BİLİMSEL HESAPLAMA DERSİ FİNAL SINAVI CEVAP KAĞIDI

AD-SOYAD : Cansu DAL NUMARA :18253039 CEVAP 1) • >> clear all >>y=x(3:end);>>y(end+1:end+2)=x(1:2); • >> clear all >>X'(size(X',1):-1:1; CEVAP 2) >> clear all >> a=[1 0 -2; 1 -1 1; 0 3 -2]; >> b=[-4;3;-1]; >> c=inv(a)*b $\mathbf{c} =$ 1.7143 1.5714 2.8571

CEVAP 3)

```
i=0;
for x=0:0.04:4
  i=i+1;
  y(i)=exp(-x)sin(3x);
end
x=0:0.04:4;
A(i)=0;
for i = 2:101,
  A(i)=A(i-1)+(x(i)-x(i-1))*(y(i)+y(i-1))/2;
end
plot(x,y,'k');
hold on
plot(x,A,'k:');
xlabel('zaman[s]');
ylabel('y(x) ve int(y(x))');
title('integral işlemi');
```

```
CEVAP 4)
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```
>>> x = linspace(0,10,50)

>>t = linspace(0,20,100)

>>grid off;

>>xlabel('x ekseni');

>>tlabel('t değeri');

>>zlabel('u çıkışı');

>>syms x t u

>>u=cos(t)*sin(x)
```

SORU 5)

clear all syms x int(sqrt(2*x-1),1,10) -(1/3)+ $(19 \cdot \sqrt{19})/3$

CEVAP 6)

C1=[1/4,2];

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C2=[-1,3];
R1=2.015;
R2=3;
F=@(x)([(x(1)-C1(1))^2+(x(2)-C1(2))^2-R1^2;...
    (x(1)-C2(1))^2+(x(2)-C2(2))^2-R2^2];
a=fsolve(F,[C1(1),C1(1)+R1]);
b=fsolve(F,[C1(1),C1(1)-R1]);
Xcozum = [a(1), b(1)];
Ycozum = [a(2), b(2)];
fprintf('X cozum: (%f,%f)\n',Xcozum(1),Xcozum(2));
fprintf('Ycozum: (%f,%f)\n',Ycozum(1),Ycozum(2));
CEVAP 7)
                                                      C=
A=
                           B=
                                                                          D=
```