Ans to the question 5(c):

In[•]:=
```
NDSolve[{x''[t] + x[t] == 0, x[0] == 1, x'[0] == 0}, {x[t], x'[t]}, {t, 0, 10 π}]
```

Out[•]=
```
{{x[t] → InterpolatingFunction[ ⊞ 〰 Domain: {{0., 31.4}}
                                Output: scalar ][t],
  x′[t] → InterpolatingFunction[ ⊞ 〰 Domain: {{0., 31.4}}
                                 Output: scalar ][t]}}
```

In[•]:=
```
Plot[{x[t], x'[t]} /. %11, {t, 0, 10 π}]
```

Out[•]=