

- 3 (a) State what is meant by the *internal energy* of a system.

.....
.....
.....

[2]

- (b) State and explain qualitatively the change, if any, in the internal energy of the following systems:

- (i) a lump of ice at 0°C melts to form liquid water at 0°C ,

.....
.....
.....
.....

[3]

- (ii) a cylinder containing gas at constant volume is in sunlight so that its temperature rises from 25°C to 35°C .

.....
.....
.....
.....

[3]