Assignment 10

1) Recrystallization temperature of pure materials _____ (in terms of homologous temperature) ***1 point***

- 0.1
- 0.2
- 0.3
- 0.4

Accepted Answers:
0.3

2) Decrease in free energy during recovery is attributed to ***1 point***

- excess point defects
- excess dislocations
- grain boundaries
- all

Accepted Answers:
excess point defects

3) Decrease in free energy during recrystallization is attributed to ***1 point***

- excess point defects
- excess dislocations
- grain boundaries
- all

Accepted Answers:
excess dislocations

4) Driving force for grain growth process ***1 point***

- stored energy of cold work
- grain boundary energy
- both
- stacking fault energy

Accepted Answers:
grain boundary energy

5) Driving force for recrystallization process **1 point**

- stored energy of cold work
- grain boundary energy
- both
- stacking fault energy

Accepted Answers:
stored energy of cold work

6) Methods to retard grain growth **1 point**

- solute drag
- pinning action of particles
- both
- none

Accepted Answers:
both

7) Higher the degree of deformation, recrystallization temperature is **1 point**

- higher
- lower
- no effect
- either higher or lower

Accepted Answers:
lower

8) Recrystallization rate varies in the following manner with temperature **1 point**

- linearly increasing
- linearing decreasing
- exponential
- logarithmic

Accepted Answers:
exponential

9) For a particular temperature, the minimum temperature at which complete recrystallization will occur within approximately one hour **1 point**

- homologous temperature
- equicohesive temperature
- curie temperature
- recrystallization temperature

Accepted Answers:
recrystallization temperature

10) During recrystallization, ***1 point***

- tensile strength decreases
- ductility increases
- both
- none

Accepted Answers:
both