10.	D. all of the above	**D**
	Estimate the CRSS value required to initiate slip in a perfect Cu crystal. (2 Marks)	
	The shear modulus of Cu is 48 GPa.	
	A. 8 GPa B. 24 GPa C. 15.2 GPa D. 7.6 GPa	
11.	Yield strength of a metal can be increased by (1 Marks)	**ABC**
	(a) alloying (b) reducing the grain size	
	(c) plastic deformation (d) reducing the crack size	
12.	For a Diamond cubic structure obtain the effective number of atoms/cell.	**D**
	(2 Marks)	
	A. 1 B. 2 C. 4 D. 8	
13.	Steady state creep rate in sample A (1 Marks)	**C**
	compared to that in sample B is	
	A. higher B. equal C. lower	
14.	In the following FCC crystal, the stress in the loading direction is 50 MPa, calculate the resolved shear stress in the indicated slip system (2 Marks)	**A**
	A. 0 MPa	
	B. 14.3 MPa	
	C. 23.6 MPa	
	D. 36.8 MPa	
15.	What kind or nature of stress field is present around an edge dislocation	**A**
	(1 Marks)	
	A. Principal stress C. Mixed principal and shear stress	
	B. Shear stress D. None	

Rough Work