## **Answer Tutorial 9 - Chapter 3: Mechanics of material**

Problem No.	Answers	Problem No.	Answer
01	a) $c_{CE}14.68 \text{ mm}$ (Radius of shaft CDE) b) $c_{FH}=10.63 \text{ mm}$	04	22.mm (based on maximum permissible shear stress) 31.4 mm (based on maximum possible twist of CD) (Ans)
02	a) $\tau_{AB} = 55 \text{ MPa}$ b) $\tau_{CD} = 45.3 \text{ Mpa}$ c) $\tau_{EF} = 47.7 \text{ MPa}$	05	a) $\tau_{AB} = 11.8 \text{ MPa}$ b) $\tau_{CD} = 11.2 \text{ MPa}$
03	$TL\left[\frac{1}{J_{BE}C_{BE}} + \frac{4}{J_{AD}C_{AD}}\right]$		