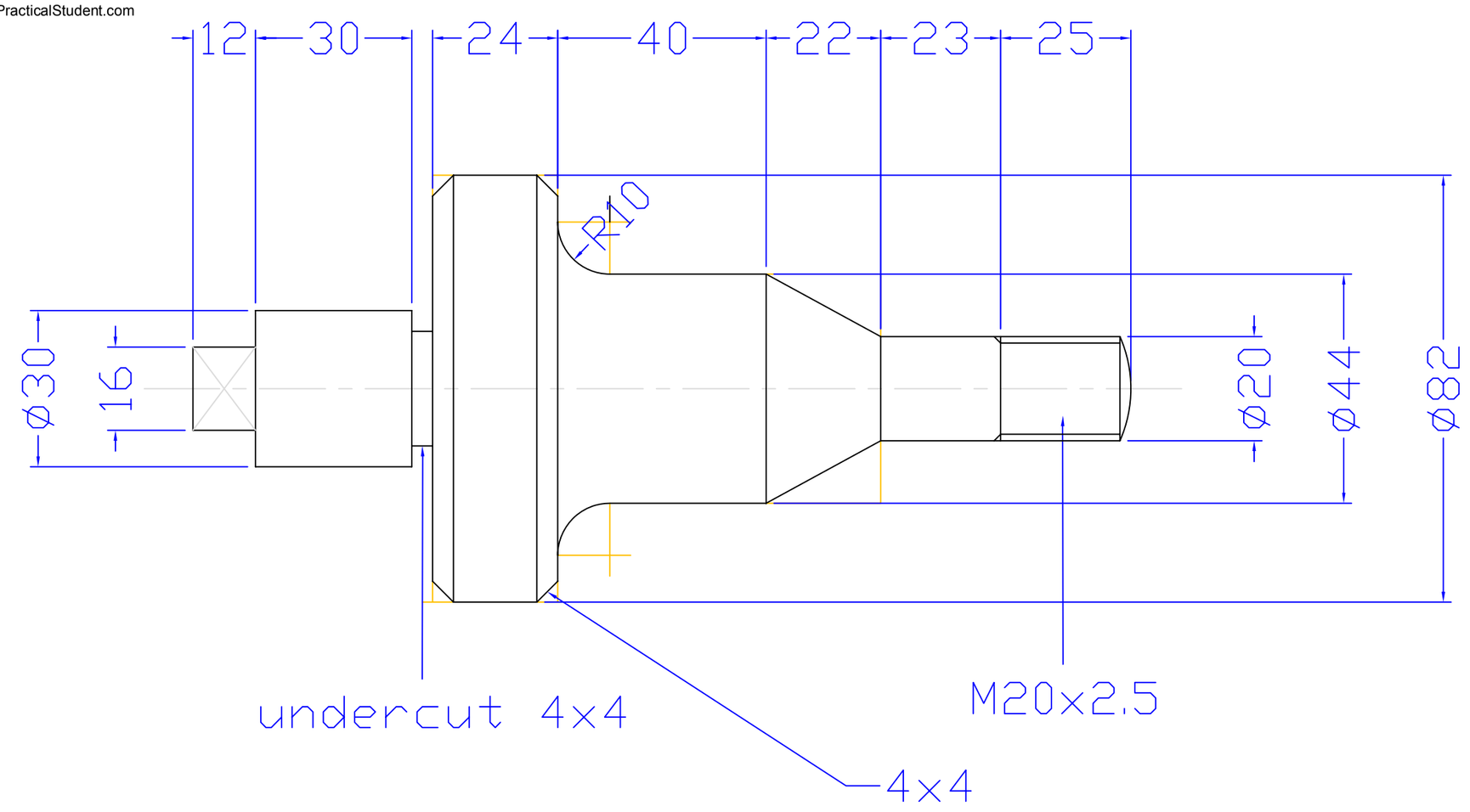
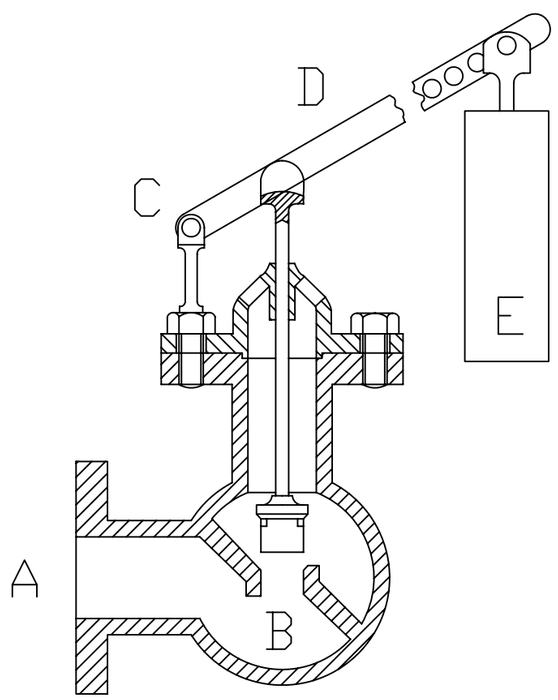
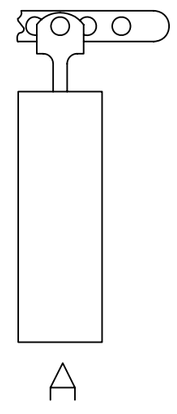


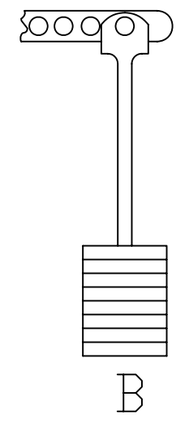
Item	Name
1	Body
2	Washer
3	Stem
4	Lever
5	Counterweight



When the air pressure at A is at an acceptable level the weight at E holds the lever, D down, in turn keeping the valve, B closed.
When the pressure at A increases to unacceprable levels the valve at B is forced open. The lever D is free to rotate about point C, the fulcrum of the lever. The air can escape through the 4 holes at the top of the valve.
When the pressure decreases again the weight at E closes the valve.



A : Moving the weight so that it is closer to, or further from the fulcrum, C, will affect how much pressure is needed to lift it. The further it is from the fulcrum, the more pressure is required to move the weight. Conversely, the closer the weight is to the fulcrum the less pressure is needed.



B : The valve could also be regulated by applying different weights to the end of the lever, D. The more weight, the more pressure is required to raise the lever.

Leaving Certificate	
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Engineering	Question 4