

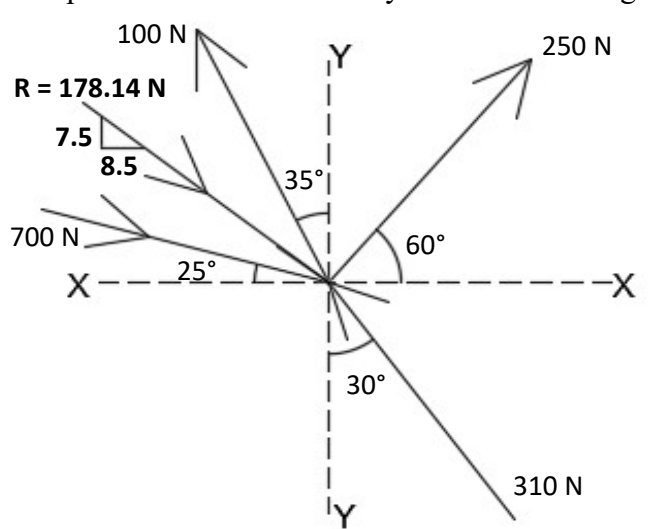
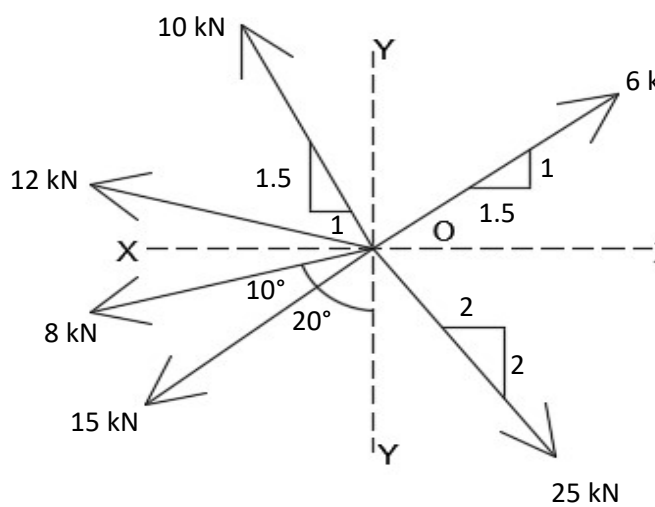


Subject (Name & Code): Mechanics of Solids (CIE 1051)

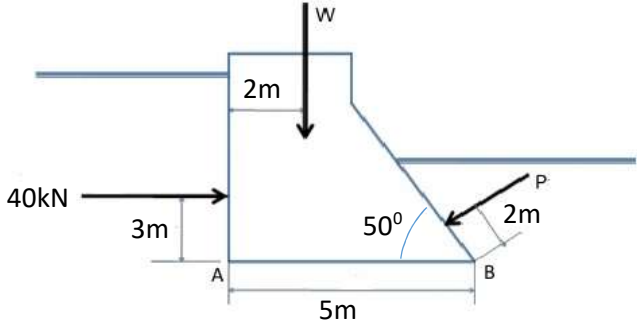
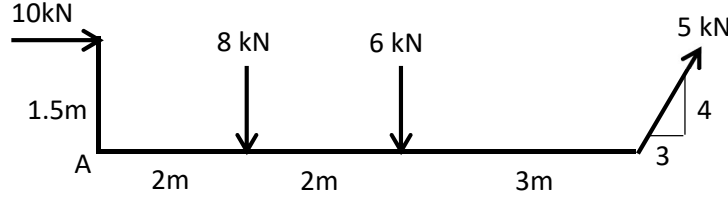
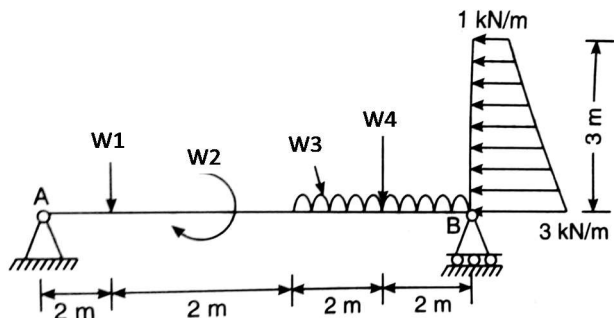
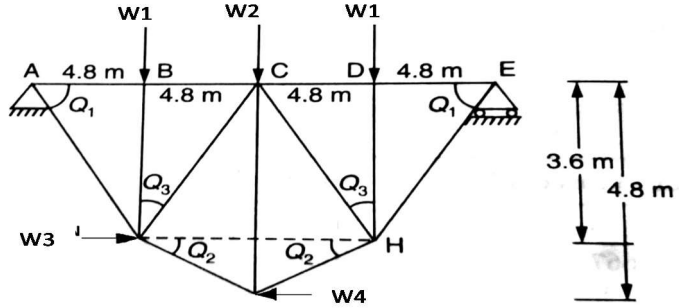
Date of Examination:

Assignment Test - I

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Total Marks: 5

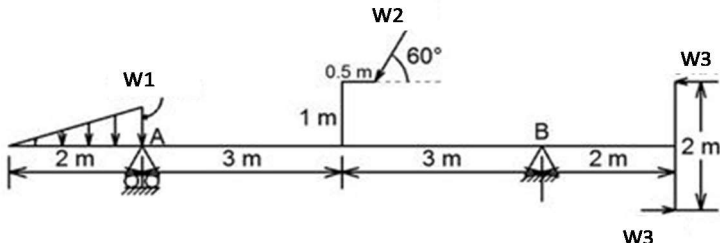
Q. No	Questions	Marks	CO
1	<p>Determine the magnitude and direction of the unknown fifth force for the coplanar concurrent force system shown in Fig.</p> 	5	1
2	<p>Determine the magnitude and direction of the resultant for the coplanar concurrent force system shown in Fig.</p> 	5	1



3	<p>Locate the resultant w.r.t A for the section shown. Given $W=150\text{kN}$ and $P=25\text{kN}$</p> 	5	1
4	<p>Locate the resultant of the force system shown w.r.t point A.</p> 	5	1
5	<p>Determine the support reactions for the beam shown. Take $W1 = 2\text{ kN}$, $W2 = 4\text{ kN-m}$, $W3 = 5\text{ kN/m}$ and $W4 = 10\text{ kN}$.</p> 	5	2
6	<p>Determine the support reactions for the figure shown. Take $W1 = 30\text{ kN}$, $W2 = 60\text{ kN}$, $W3 = 20\text{ kN}$ and $W4 = 20\text{ kN}$.</p> 	5	2

7	<p>Determine the support reactions for the figure shown. Take $W_1 = 5 \text{ kN}$ and $W_2 = 40 \text{ kN}$.</p>	5	2
8	<p>Determine the reactions that develop at the supports A and B for the beam loaded as shown in fig. Take $W_1 = 3 \text{ kN/m}$, $W_2 = 5 \text{ kN/m}$ and $W_3 = 5 \text{ kN}$.</p>	5	2
9	<p>A chord supported at the points A & B carries a load of $W_1 = 30 \text{ kN}$ at the point D, and a load W at the point C as shown in Fig. 5. Find the value of W for the portion CD to remain horizontal.</p>	5	2



10	<p>Determine the reactions that develop at the supports A and B for the beam loaded as shown in figure. Take $W1 = 10 \text{ kN/m}$, $W2 = 10 \text{ kN}$ and $W3 = 5 \text{ kN}$.</p> 	5	2
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