| | | | | |
|---|---|---|---|---|
| Title of Subject | : | Structural Analysis-II | Date | : 22/09/2020 |
| Subject Code | : | 2150608 | | |
| Assignment No | : | BHS-01 | | |
| Assignment Title | : | Influence Line Diagram | | |

Q-1: For a two span simple support continuous beam ABC having AB=4m and BC=5m, calculate the ILD ordinates for $R_A$ at every 1m interval.

Q-2: Compute the ordinates of ILD for reaction at A for the figure (2).

Q-3: Five wheel loads as shown in figure (3) crosses a simply supported beam of span 24 m from left to right. Calculate the maximum positive and negative SF at the center of the span and absolute maximum BM anywhere in the span.

Q-4: Differentiate the influence line diagram for BM at any section and normal BM diagram. Explain this with taking simple example.

Q-5: For a propped cantilever beam AB, fixed at A and having roller support at B, of span 5m, draw ILD for $R_B$. Calculate ordinates of ILD at every 1m interval.

Q-6: Draw ILD for $R_A$ and $M_A$ for a beam shown in fig.-6

Q-7: Construct Influence Line Diagrams for Reaction ($R_A$) and Moment ($M_A$) for a cantilever beam AB fixed at A and having span L.

Q-8: For a simply supported beam AB of span 8m, draw Influence Line Diagrams for Support reactions ($R_A$ and $R_B$), Shear Force and Bending Moment at a section 2m from left support.

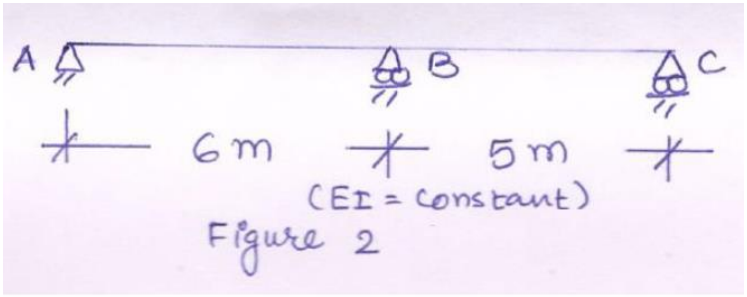

Figure 2

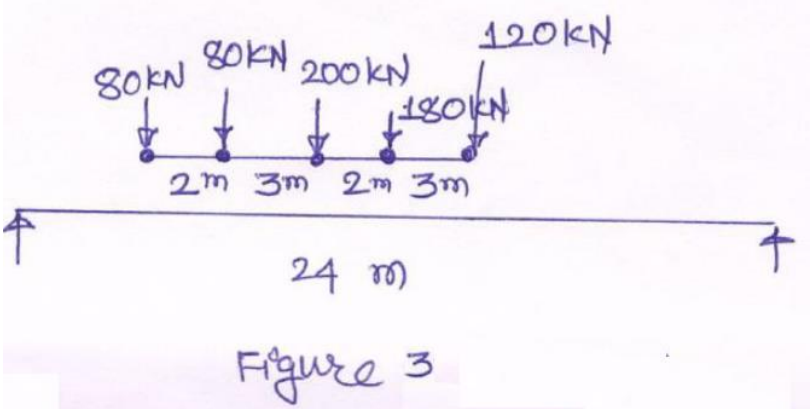

Figure 3

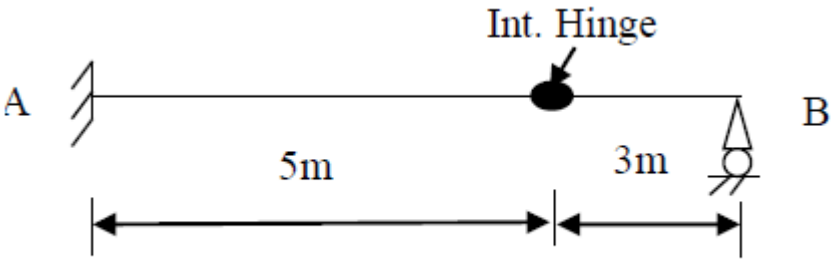


Fig.-6