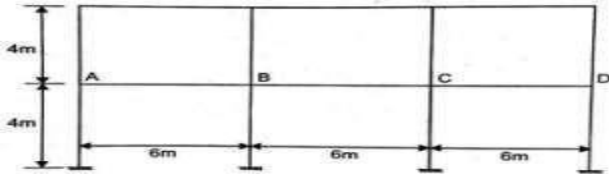
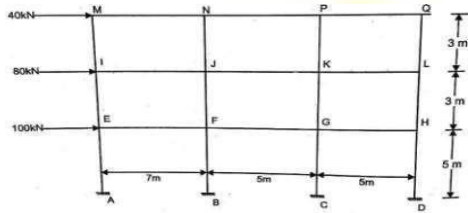
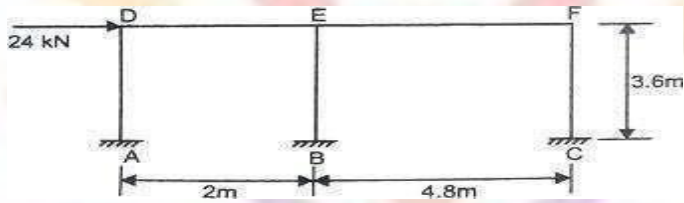
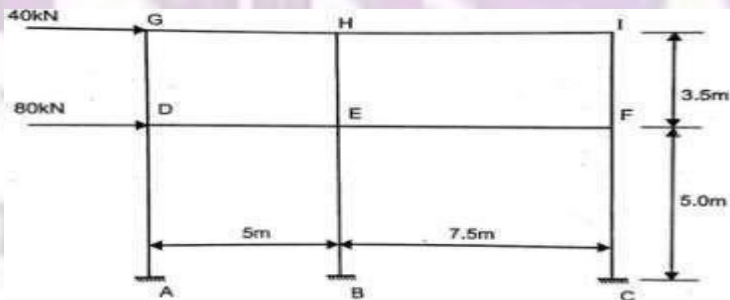


UNIT-III

S. NO	Questions	BTL	CO	PO
PART-A(STORTANSWERQUESTIONS)				
1	In a multistoried building, the frame shown in Figure 2.1 is spaced at 4m intervals. Dead load from the slab is 3 KN/m^2 and the live load is 5 KN/m^2. Analyse the beam BC for mid span positive bending moment. Self weight of the beams may be ignored. Use Substitute Frame method 	L3	CO 3	1
2	In a multistoried building, the frame shown in Figure 2.2 is spaced at 3.5m intervals. Dead load from the slab is 3 KN/m^2 and the live load is 5 KN/m^2. Analyse the beam BC for mid span negative bending moment. Self weight of the beams of 4m span may be taken as 4 KN/m and that of 6m span may be taken as 5 KN/m. Use Substitute Frame method. The Stiffness of the members are indicated against each member	L3	CO 3	1
3	In a multistoried building consists of 4 Storied 3 bay frames spaced at 3m c/c. Live load on floor slab is 3 KN/m^2 and dead load weight of the beams is 3.5 KN/m. Determine the maximum moment in the beam at the junction of first span and second span of an intermediate floor Use Substitute Frame method.	L2	CO 3	2
4	Using the portal method, analyse the building frames subjected to horizontal force (due to wind) as shown	L2	CO 3	1
5	Using the portal method, analyse the building frames subjected to horizontal force (due to wind) as shown in Figure 2.4. Sketch the bending moment diagram.	L3	CO 3	1

S.NO	Questions	BT L	CO	P O
PART-B(LONGANSWERQUESTIONS)				
1	A 3storey building frame has to carry equivalent live loads as shown in Figure 2.5. The inner columns have twice the area of cross section as the outer columns. Find the bending moments on the bottom storey. Use cantilever method 	L2	CO3	2
2	Use portal method, analyze the building frames subjected to horizontal force (due to wind) as shown in Figure 2.6. Draw the bending moment diagram 	L1	CO3	1
3	Explain the substitute Frame method of analysis for a multi-storied frame for obtaining the maximum bending moment in a particular beam or a column.	L2	CO3	2
4	Analyze the frames shown in Figure 2.7 by Cantilever method. Draw the bending moment diagram and Cross-sectional area of all columns is equal.	L1	CO3	1
5	Using the Cantilever method, analyze the building frames subjected to horizontal force (due to wind) as shown in Figure 2.8. Sketch the bending moment diagram 	L3	CO3	2

