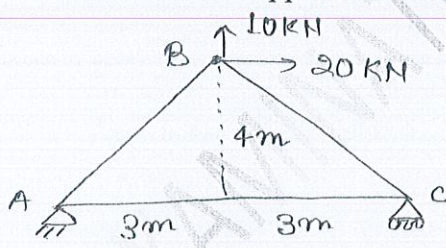
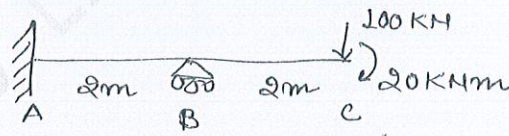
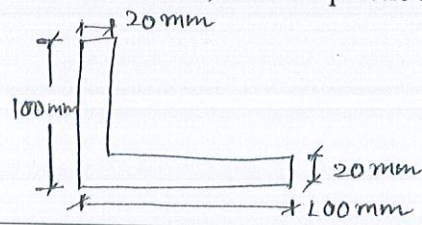
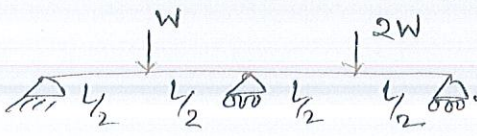


Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	(i) Write down the steps followed in Finite Element Method analysis. (ii) Explain how Stadd Pro and Ansys software are different in term analysis of a structural problem. (iii) Explain the advantage of plastic analysis. Draw the stress diagram and write moment carrying capacity of different stages of plastic analysis.	CO4	2+2+2 =6
Q2	Solve the given truss and find the support reaction by using stiffness matrix method. 	CO5	8
Q3	Solve the given beam by using stiffness matrix method. 	CO5	7
Q4	For the given cross section of beam, find the plastic section modulus. 	CO4	7
Q5	For the given beam find the collapse load when plastic moment is M_p . 	CO4	7