COURSE CODE (CREDITS): 18B1WCE737 (3)

COURSE NAME: Finite Element Method

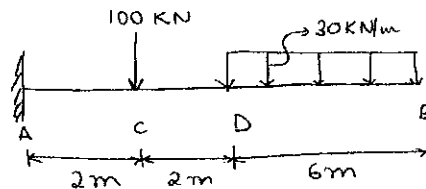COURSE INSTRUCTORS: Sugandha Singh

MAX. MARKS: 15

MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

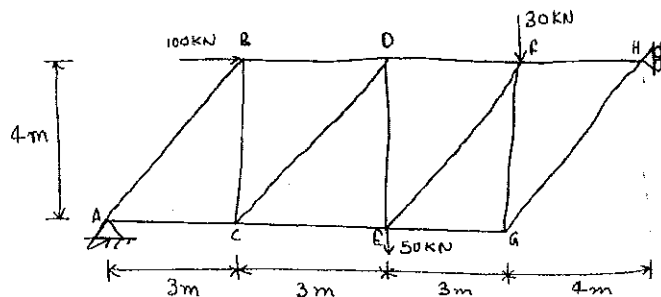1. Describe the types of *Instabilities in a Structures*. [CO–1, 3 marks]
2. Find the support reactions for the following beam. [CO–1, 2 marks]

3. For the given truss, find the forces in the members CD, DE, and EF. [CO–1, 5 marks]

4. Draw the Free–Body Diagram of the following rigid–framed structure. [CO–1, 5 marks]