



IQRA NATIONAL UNIVERSITY, PESHAWAR

DEPARTMENT OF CIVIL ENGINEERING

Semester (4th) Major Assignment (Spring Semester 2020)

Subject: Steel Structures

Submission Deadline: 19<sup>th</sup> April

Instructor: Amjad Islam

Total Marks: 30

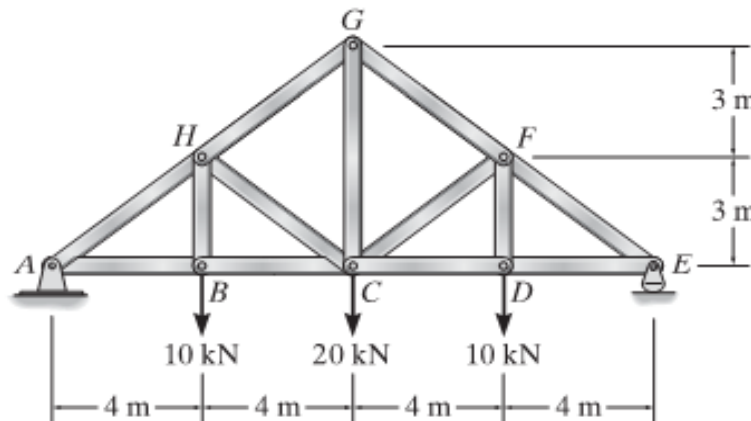
Note: Attempt all questions. You can take help from your textbook(s). Assume any necessary data, if required.

Q1: (10)

Write a detail note in your own words on different types of loads that different types of structures are designed to support throughout its life. Elaborate with examples. (CLO1)

Q2: (10)

Determine the force in each member of the truss. State if the members are in tension or compression. Assume all members are pin connected. (CLO 2)



Q3: (10)

Determine the slope at A and displacement at C of the beam in the figure by a)- **Moment-Area Theorem and**. Take  $E = 200 \text{ GPa}$ ,  $I = 6(10^6) \text{ mm}^4$ . (CLO2)

