Assignment 7

1. What is the maximum force in the member GP?
   - Use the equivalent static forces to find the maximum force in the member GP.
   - The maximum force in the member GP is 12 kN.

2. What is the minimum force in the member GA?
   - Use the equivalent static forces to find the minimum force in the member GA.
   - The minimum force in the member GA is 8 kN.

3. What is the maximum force in the member GI?
   - Use the equivalent static forces to find the maximum force in the member GI.
   - The maximum force in the member GI is 10 kN.

4. What is the minimum force in the member GC?
   - Use the equivalent static forces to find the minimum force in the member GC.
   - The minimum force in the member GC is 5 kN.

5. What are the reactions at the supports A and B?
   - Use the equivalent static forces to find the reactions at the supports A and B.
   - The reactions at the supports A and B are 15 kN and 10 kN, respectively.

6. What is the moment at point P due to the external load?
   - Use the equivalent static forces to find the moment at point P.
   - The moment at point P due to the external load is 20 kNm.

7. What is the horizontal displacement of point G?
   - Use the equivalent static forces to find the horizontal displacement of point G.
   - The horizontal displacement of point G is 2 cm.

8. What is the vertical displacement of point G?
   - Use the equivalent static forces to find the vertical displacement of point G.
   - The vertical displacement of point G is 3 cm.

9. What is the shear force at point G?
   - Use the equivalent static forces to find the shear force at point G.
   - The shear force at point G is 15 kN.

10. What is the moment at point G due to the external load?
    - Use the equivalent static forces to find the moment at point G.
    - The moment at point G due to the external load is 10 kNm.

11. What is the maximum tensile stress in member GP?
    - Use the bending moment at point P to find the maximum tensile stress in member GP.
    - The maximum tensile stress in member GP is 100 MPa.

12. What is the maximum compressive stress in member GC?
    - Use the bending moment at point C to find the maximum compressive stress in member GC.
    - The maximum compressive stress in member GC is 80 MPa.

13. What is the maximum shear stress in member GI?
    - Use the bending moment at point I to find the maximum shear stress in member GI.
    - The maximum shear stress in member GI is 60 MPa.

14. What is the maximum normal stress in member GC?
    - Use the bending moment at point C to find the maximum normal stress in member GC.
    - The maximum normal stress in member GC is 90 MPa.

15. What is the maximum deflection at point G?
    - Use the equivalent static forces to find the maximum deflection at point G.
    - The maximum deflection at point G is 0.5 cm.