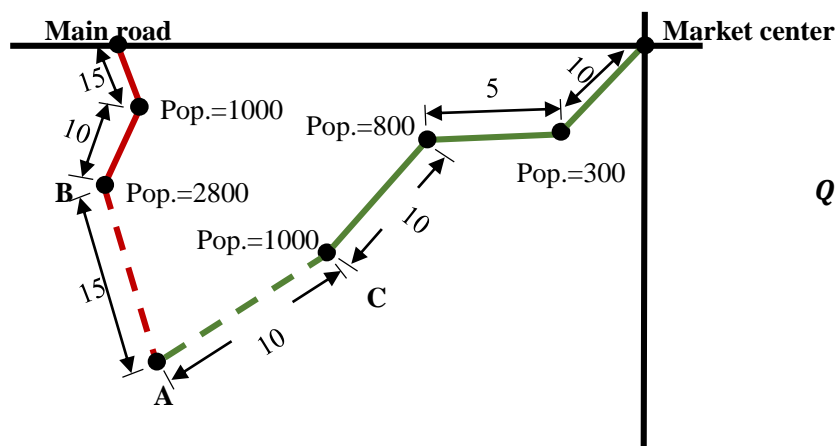


**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, PILANI****First Semester 2023 – 2024****BITS F474 (Rural Infrastructure Planning) Mid-Semester (Closed Book)****Instructor In-Charge : Dr. Nishant Bhargava****Max. Marks : 50****Duration : 90 minutes**

1. What is the role of MBR and ESR in rural water supply scheme? [6]
2. What are the three dimensions for determining India's national Multidimensional Poverty Index. Explain the Alkire-Foster Methodology for the calculation of MPI. [6]
3. Explain any three investment opportunities for rural infrastructure development. [6]
4. How does rural water supply and sanitation contribute to the rural welfare and development? [6]
5. Explain the influence of socio-economic factors on domestic water needs. [6]
6. List the factors influencing selection of rural water supply scheme. Explain any 3 factors in detail. [6]
7. How does MGNREGA contributes to rural infrastructure development? List any 5 entitlements associated with MGNREGA. [6]
8. For the figure provided below, determine whether Village A should be connected with Village B or Village C. [8]



$$Q = p + m/\sqrt{d} + \sum_{i=1}^n q_i/r_i$$