

SECTION-B

2. What are the different types of signal systems? Explain **any two** systems
3. Explain the Relevance of systems of Intelligent Transportation in the present scenario.
4. Name the Laboratory tests conducted to determine the suitability of aggregates for road construction and explain the significance of each test.
5. How are Cement Concrete pavements maintained?
6. Explain briefly the method of Construction of Roads in Water Logged Areas.

SECTION -C

7. What are the causes of development of Potholes and how they are repaired in Bituminous roads?
8. A 7.0m state highway passing through a plain terrain has a horizontal curve of radius equal to ruling minimum radius. Calculate :
 - i. Superelevation
 - ii. Extrawidening
 - iii. Length of transition curve.Assume design speed of 80Kmph and provide the superelevation by the rotation of the pavement about the center line.
9. Explain the method of benefit cost analysis in the case of Highways.