



- Notes :
1. All question carry equal marks.
 2. Answer **Any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answer necessary with the help of neat sketches.
 6. Use of pen Blue/Black ink/refill only for writing the answer book.

1. Attempt **any two**.
 - a) Explain the objectives and scope of traffic Engineering. 8
 - b) What is 'PCV'? Explain its concept for mixed traffic flow. 8
 - c) Explain adequacy of sample size for traffic studies sampling. 8
2. a) Explain the terms : 8
 - Spot speed
 - Running speed
 - Time mean speed
 - Space mean speed
- b) Explain, how the speed and delay studies are carried out. What are the various uses of speed and delay study. 8
3. Attempt **any two**.
 - a) What are the various types of traffic markings commonly used? What are the uses of each. 8
 - b) Explain the detrimental effects of Traffic on environment. 8
 - c) Explain briefly the various design factors to be considered in Rotary design. 8
4. a) At a right angled intersection of two roads, Road 'A' has four lanes with a total width of 12m and Road 'B' has two lanes with a total width of 6.6m. The volume of traffic approaching the intersection during design hour are 900 and 744 PCV/hour on the two approaches of Road 'A' and 288 and 180 PCV/hr on the two approaches of Road 'B'. Design the signal timings as per IRC guidelines. 8
- b) Explain the terms 8
 - Traffic signal system
 - Level of service
5. Attempt **any two**.
 - a) Explain the principles of Travel forecasting. 8
 - b) Explain capacity of weaving section of Rotary intersection. 8
 - c) Explain the factors affecting Highway capacity & LOS. 8
6. a) Explain the application of I.T.S. to public Transportation management system. Give example. 8
- b) State the advantages and disadvantages of fixed time signal and actuated signal. 8
