

22507

## 12223

# 3 Hours / 70 Marks

Instructions:

- (1) All Questions are *compulsory*.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Use of Non-programmable Electronic Pocket Calculator is permissible.

Marks

#### 1. Attempt any FIVE of the following:

10

- (a) State the various scopes of traffic engineering.
- (b) List out the factors affecting the gradient.
- (c) Give the purpose of traffic studies.
- (d) Classify the road signs.
- (e) State the purpose of segregation of traffic.
- (f) Define 'Summit Curves'.
- (g) Give the requirements of traffic control devices.

### 2. Attempt any THREE of the following:

**12** 

- (a) Describe the factors affecting the PCU.
- (b) Explain the uses of various control devices for smooth traffic flow.
- (c) Justify the need of various carriage way markings.
- (d) Draw neat sketches of typical prohibitory sign post and right turn prohibitory sign.



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### 3. Attempt any THREE of the following: 12 Enumerate the advantages of traffic signal. (a) (b) Compare the fixed time signal with manually operated signals. (c) Discuss the factors affecting lighting scheme for roads. (d) Describe the points to be considered for the roadside development. 4. Attempt any THREE of the following: 12 (a) Discuss the purpose of planning trees and shrubs. (b) Suggest various measures to prevent road accidents. Explain the considerations to be taken for road safety. (c) (d) Describe the various objectives of road accident studies. Explain the legislation and law enforcement, education in road accident (e) studies. 5. **12 Attempt any TWO of the following:** (a) Explain the methods of parking studies, stating the necessity of it. (b) Draw any four sketches of regulatory signs and warning signs. Explain the various forms of representation of traffic volume count data. (c) 6. Attempt any TWO of the following: **12** Explain the various types of traffic Islands along with a neat sketch. (a) Explain with a neat sketch the condition diagram and symbols commonly used (b) along with typical condition diagram. (c) Draw the sketches of rotary interchange and diamond type of grade interchange.

