# KLS Gogte Institute of Technology

# Department of Civil Engineering

**Scheme of Internal Assessment Test I**

**Subject: Road Safety (OPEN ELECTIVE) Sub Code: 18CV562**

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| **Sl. No.** | **Answer** | **Marks** |
| 1a. | Explanation of the recommendations and implementations of Jayakar committee  RECOMMENDATIONS: For the improvement of roads in India government of India appointed Mr. Jayakar Committee to study the situations and to recommend suitable measures for road improvement in 1927 and a report was submitted in 1928 with following recommendations:   1. Road development in the country should be considered as a national interest. As the provincial and local government do not have the financial and technical capacity for road development. 2. Extra tax to be levied from the road users as fund to develop road. 3. A Semi-official technical body has to be formed to collect and pool technical knowhow from various parts of the country and to act as an advisory body on various aspects of the roads. 4. A research organization should be instituted at National level to carry out research and development work and should be available for consultation.   IMPLEMENTATIONS:  Majority of the recommendations were accepted by the government implemented by Jayakar Committee.  Some of the technical bodies were formed such as,  • Central Road Fund (CRF) in 1929  • Indian Road Congress (IRC) in 1934  • Central Road Research Institute (CRRI) in 1950. | 3+3=6 |
| 1b. | Draw a typical cross section and label the cross sections with dimensions.   1. National Highway or State Highway (NH or SH) in rural area      1. Two lane city road in Built up area | 3.25\*2=6.5 |
| 2a. | Explanation of road safety and its importance in India.  With reference to road statistics in India explain the importance of road safety. | 6 |
| 2b. | Listing and explaining the factors affecting design of geometric elements.  Factors affecting geometric design  Factors affecting the geometric designs are as follows  Design speed, Topography, Traffic, Environmental, Economy, Others. | 6.5 |
| 3a. | Explanation of PIEV Theory with neat diagram.  According to this theory the total reaction time of the driver is split into four parts:   1. Perception 2. Intellection 3. Emotion 4. Volition | 6 |
| 3b. | Explanation of the pedestrian requirements required for elderly people, disabled and children.  Tactile pavers: Guiding Blocks and Warning Blocks, Hand Rails for Stair Cases, Placement of Street Furniture, wash basin Heights, Signage for accessible toilets, drop off and boarding Points and Designated car parking spaces for disabled. | 6.5 |