T.Y civil.

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – Sept./Oct. 2019

Course: B. Tech in _CIVIL ENGINEERING **Sem: V**

Subject Name: Transportation Engineering **Subject Code:** BTCVC505

Max Marks:20 **Date:-25/09/2019** **Duration:- 1 Hr.**

Instructions to the Students:

1. **All Questions are compulsory.**
2. Draw neat and clean diagram if necessary.
3. Assume suitable data wherever necessary

		Level BT	CO BTCVC 505.	Marks
Q.1	**Answer in one sentence (All Questions carry equal marks)**			6
	1. What is Cross Slope or Camber	1	3	
	2. How much should be the Width of pavement or carriageway?	1	3	
	3. Define reaction time of driver	1	3	
	4. Define super elevation	1	3	
	5. what is Stopping sight distance	1	3	
	6. Enlist various types of tests on Aggregates	1	2	
Q.2	**Solve Any Two of the following.**			3 X 2
(A)	**Discuss classification of roads as per Nagpur road plan.**	2	1	
(B)	**Explain PIEV theory in detail**	2	3	
(C)	**Write short note on Shape test of aggregates (flakiness index and Elongation index)**	2	3	
Q. 3	**Solve Any One of the following.**			8
(A)	**The speed of overtaking and overtaken vehicles are 70 and 40 kmph, respectively on a two-way traffic road. The average acceleration during overtaking may be assumed as 0.99 m/sec^2. Calculate safe overtaking sight distance and minimum length of overtaking zone ?**	3	3	
(B)	**A national highway passing through rolling terrain in heavy rain fall area has a horizontal curve of radius 500 m. Design the length of transition curve assuming suitable data.**	3	3	
	***** End *****			