

Manipal Institute of Technology, Manipal



(A Constituent Institute of Manipal University)

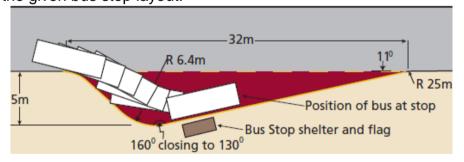
VI SEMESTER B.TECH (AERONAUTICAL AND AUTOMOBILE ENGINEERING) END SEMESTER EXAMINATIONS, JAN/MAY 2016

SUBJECT: VEHICLE TRANSPORT MANAGEMENT [AAE 382]
REVISED CREDIT SYSTEM

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ANY FIVE FULL** the questions.
- Missing data may be suitable assumed.
- **1A.** What are the basic conditions should satisfy by the Public Transport **(02)** company?
- **1B.** List the different types of buses. (03)
- **1C.** Explain about historical background and working of Cable trams (05)
- 2A. Name the given bus stop layout. (02)



- **2B.** Mention the factors to be considered for Bus stop Locations. (03)
- **2C.** Draw the Layout of Drive through type Bus station and write its advantages **(05)** and disadvantages.
- **3A.** Write the possible solutions following in Public transport Department to avoid **(02)** Accidents.
- **3B.** Explain the Bell punch system. (03)
- **3C.** Write the Functions and capabilities of Almex control Systems Transfare or **(05)** Farestram.
- **4A.** How to estimate the Traffic volume while planning the Route. (02)

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- **4B.** Explain how the Public Transport department will respond to Public letters. (03)
- **4C.** A bus has to visit 5 cities Udupi, Mangalore, Mysore, Mandya and Bangalore. **(05)** The distance between the cities is given in the table.

	Udupi	Mangalore	Mysore	Mandya	Bangalore
Udupi	-	30	60	20	30
Mangalore	30	-	50	20	30
Mysore	60	50	-	60	40
Mandya	20	20	60	-	60
Bangalore	30	30	40	60	-

Write the sequence and calculate the shortest route.

- **5A.** What is meant by Duty Roster? (02)
- **5B.** Write the factors affecting punctuality of bus and crew members (03)
- **5C.** List and explain the Strategies of fare structure. (05)
- **6A.** Write the Variables affecting the Cost per vehicle mile. (03)
- **6B.** Find the Initial Basic Feasible Solution for the given Matrix using Vogol's Approximation Method (VAM), North West Corner Method (NWCM) & Matrix Minimum Method. Compare the results and suggest the best method among VAM, NWCM & MMM.

	1	2	3	
Α	25	23	31	3
В	12	32	43	6
С	10	45	42	9
D	30	50	33	12
	7	15	8	1

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