Seat No.: _____

Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV EXAMINATION – WINTER 2015

| Subject Code: 140202Date:06/01/2016Subject Name: Fundamental of Automobile SystemTime: 02:30pm to 05:00pmInstructions:Total Marks: 70 | | | |
|---|-------------|--|----------|
| | | | |
| | 2 | Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. | |
| Q.1 | (a) (b) | Explain air Suspension system with neat sketch Explain vacuum braking system | 07 07 |
| Q.2 | (a) (b) | Classify Manual gear box used in automobile. Explain any one with sketch Explain front engine and front wheel drive vehicle layout with advantages and disadvantages | 07 07 |
| | | OR | |
| | (b) | Explain rear engine and rear wheel drive vehicle layout with advantages and disadvantages | 07 |
| Q.3 | (a) | Write down a short note on single plate clutch | 07 |
| | (b) | Explain internal expanding shoes brake with sketch | 07 |
| | | OR | |
| Q.3 | (a) | Explain process of bleeding of brakes with sketch | 07 |
| | (b) | Write down a short note on multi plate clutch | 07 |
| Q.4 | (a) | Write down a short note on torque converter | 07 |
| | (b) | List out different components mounted on chassis. Explain the function of chassis and frame. | 07 |
| | | OR | |
| Q.4 | (a) | Write down a short note on hydraulic power steering | 07 |
| | (b) | Write down a short note on independent suspension system | 07 |
| Q.5 | (a) | Compare tubeless tyres with conventional tube tyres. | 07 |
| | (b) | Write down a short note on 1) Propeller shaft | 07 |
| | | 2) Dead axle | |
| | | OR | |
| Q.5 | (a) | Write down merits and demerits of LPG as an automobile fuel | 07 |
| | (b) | Define 1) Gradeability 2) Tractive Force 3) Air resistance 4)Camber 5) Caster 6) Toe in 7) To out | 07 |
