

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI EXAMINATION – SUMMER 2025

Subject Code: 3160210

Date: 22-05-2025

Subject Name: Vehicle Maintenance and Garage Practice

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

| | | | |
|-----|-----|--|----|
| Q.1 | (a) | Discuss very briefly about daily and weekly periodic checks required for a car | 03 |
| | (b) | What is maintenance? List down different type of maintenance. | 04 |
| | (c) | What is vehicle breakdown? Discuss causes and disadvantages of vehicle breakdown | 07 |
| Q.2 | (a) | List out different type of measuring instruments used in automobile workshop. | 03 |
| | (b) | What would be the possible differences between EV and Conventional vehicle service station? | 04 |
| | (c) | Discuss advantages and disadvantages of an authorized service station and a private service station. | 07 |
| OR | | | |
| | (c) | What is Job Card? What is the importance of it? Prepared job card for servicing of Hybrid car. | 07 |
| Q.3 | (a) | Explain Camber angle, Caster angle and Toe in | 03 |
| | (b) | What do you mean by steering geometry? Discuss any two terms in detail. | 04 |
| | (c) | Discuss the overhauling of gear box in detail | 07 |
| OR | | | |
| Q.3 | (a) | What is valve tapping? | 03 |
| | (b) | Discuss the brake bleeding procedure in detail | 04 |
| | (c) | Explain the procedure of overhauling & diagnosis of clutch assembly | 07 |
| Q.4 | (a) | What do you mean by carburetor tuning process? | 03 |
| | (b) | What do you mean by balancing? Give their types. | 04 |
| | (c) | Which are the different tests carried out for testing brakes? | 07 |
| OR | | | |
| Q.4 | (a) | Discuss the overhauling of differential in detail | 03 |
| | (b) | Discuss the role of service advisor for automobile workshop | 04 |
| | (c) | Discuss various stages of painting process for passenger car. | 07 |
| Q.5 | (a) | Explain Tyre rotation | 03 |
| | (b) | Enlist the possible causes and remedies for hard shifting of gear and Transmission stick in gear | 04 |
| | (c) | Give detail maintenance & repair of electrical and ignition system. | 07 |
| OR | | | |
| Q.5 | (a) | Explain cylinder Honing process. | 03 |
| | (b) | What do you mean by clutch juddering? Discuss its possible causes and remedies. | 04 |
| | (c) | Which are the different causes for engine does not start? | 07 |