

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VI (NEW) EXAMINATION – WINTER 2021****Subject Code:3160210****Date:26/11/2021****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) Write down difference between preventive and breakdown maintenance.	04
(c) Write a short note on four post hoist, Electronic air Inflator & Exhaust gas analyzer.	07
Q.2 (a) Draw the Job card for Four Wheeler used in Modern Workshop.	03
(b) Explain use of feeler gauge and bore gauge in Automobile.	04
(c) Draw schematic layout of a modern automobile service station. Explain activities and responsibilities of workshop manager.	07
OR	
(c) Explain Wheel balancing and different tyre rotation patterns for a car with suitable sketches.	07
Q.3 (a) Explain Following term :	03
i) Camber Angle ii) Caster Angle iii) Toe In	
(b) Discuss the brake bleeding procedure in detail.	04
(c) Write down Causes and remedies of below generated problems in Engine.	07
1. Engine fails to start	
2. Engine knocks	
3. Engine lacks power	
4. Engine overheats	
OR	
Q.3 (a) Discuss basic steps of servicing for auto vehicle.	03
(b) Explain maintenance of engine valve system.	04
(c) Explain the procedure of overhauling & diagnosis of clutch assembly.	07
Q.4 (a) Explain any Two types of Accelerometer.	03
(b) Discuss various stages of painting process for passenger car.	04
(c) Explain the methods for measurement of fuel consumption. Enlist the possible causes for excessive fuel consumption	07
OR	
Q.4 (a) List out different service equipments used in service station.	03
(b) What do you mean by carburetor tuning process?	04
(c) Explain Lubrication and maintenance of suspension system.	07
Q.5 (a) Explain cylinder Honing process.	03
(b) Explain maintenance process of propeller shaft.	04
(c) Give detail maintenance & repair of electrical and ignition system.	07

OR

- Q.5**
- (a) Explain benefits of auto extended warranty for a vehicle **03**
 - (b) Explain Servicing and maintenance of Radiator. **04**
 - (c) Write down any Two Causes and remedies of below generated problems **07**
in Gearbox.
 - 1. Gear case becomes unusually hot
 - 2. Unusual or excessive noise
 - 3. Vibration is excessive
 - 4. Input shafts rotates in idle condition and output shaft is not driven
 - 5. Main body has cracks or shaft is broken
 - 6. Gears are worn
 - 7. Oil Leakage
