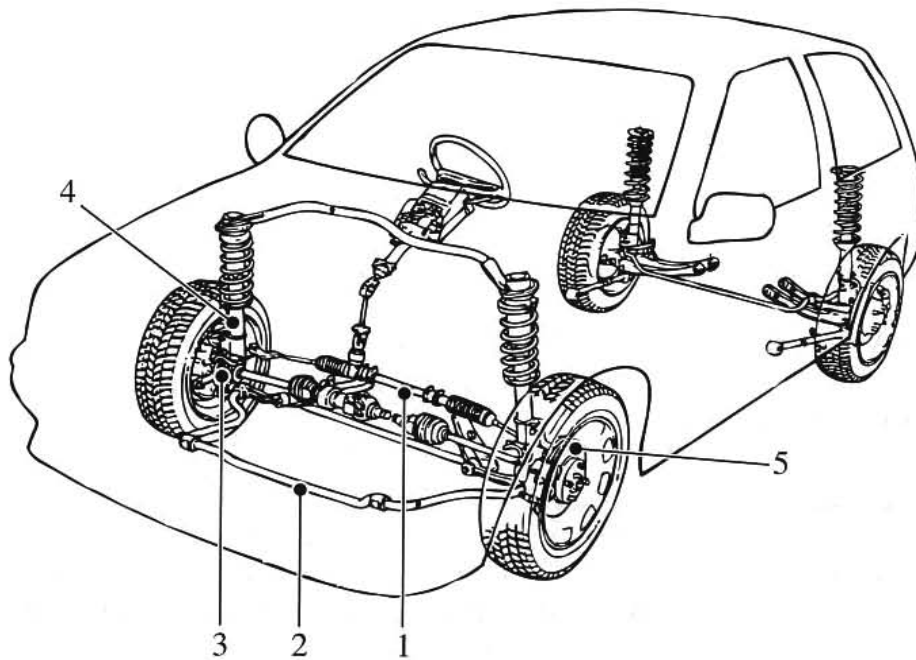


Question 18 (8 marks)



(a) Complete the table below, naming each numbered component and describing its function.

5

Name	Function
1. steering rack	allow the driver to steer the front wheels. Convert drivers rotational movement into lateral movement.
2. sway bar	stabilise the front of the car during use. Limit body roll & excessive wheel movement.
3. CV CV joint (constant velocity)	to allow drive through a live steering axel at multiple angles.
4. coil over strut (McFurson)	to cushion the cars ride and sprung weight as well as limit spring oscillations.
5. disc brake	to stop or slow down the car in a controlled way while allowing steering.

Question 18 continues on page 12

Question 18 (continued)

- (b) A customer complains that the car battery is constantly running flat.

3

In the table below, list THREE possible faults in the charging system that could be causing the problem. Name the test that you would perform for each fault identified.

Possible fault	Test to perform
failed Alternator	run the engine and use a multimeter to test the voltage flow from the alternator
Collapsed battery cell	disconnect battery and use a multimeter to test the individual cells and record their volts. Visually check for damaged cells.
lack of conductant (water)	remove battery caps and check if the cells are covered with sulfuric acid to the fill line, if not fill with distilled water.

End of Question 18