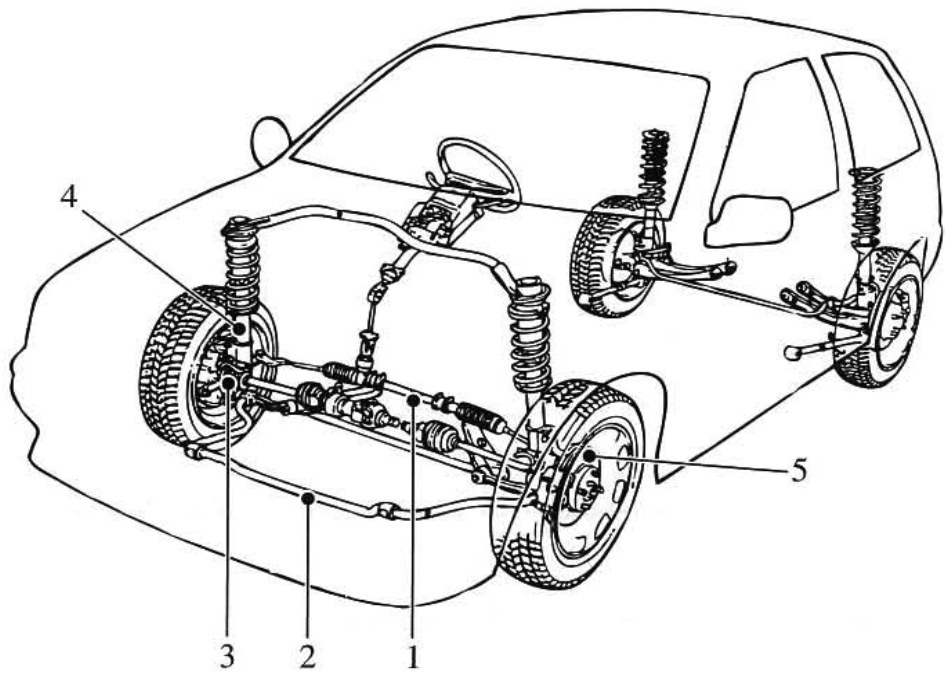


Question 18 (8 marks)



(a) Complete the table below, naming each numbered component and describing its function. 5

| Name | Function |
|-------------------|---|
| 1. Steering rack | Convert Converts turning force into lateral force which controls the direction of the wheels |
| 2. Swaybar | Prevents excess body roll |
| 3. CV Joint | allows flexibility in the driveshaft to allow steering and suspension travel |
| 4. Shock absorber | Prevents oscillation in the spring after absorbing road shocks. |
| 5. Wheel | Bolts to the hub and gives a suitable surface for mounting the tyre. |

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 |
|---|---|
| Low alternator charge | Test charge voltage. ~ Start car and measure voltage over battery whilst loading up electrics |
| Voltage drop between alternator and battery | Measure charge voltage at alternator and battery then compare. |
| Worn / Expired battery | Battery load test. |

End of Question 18