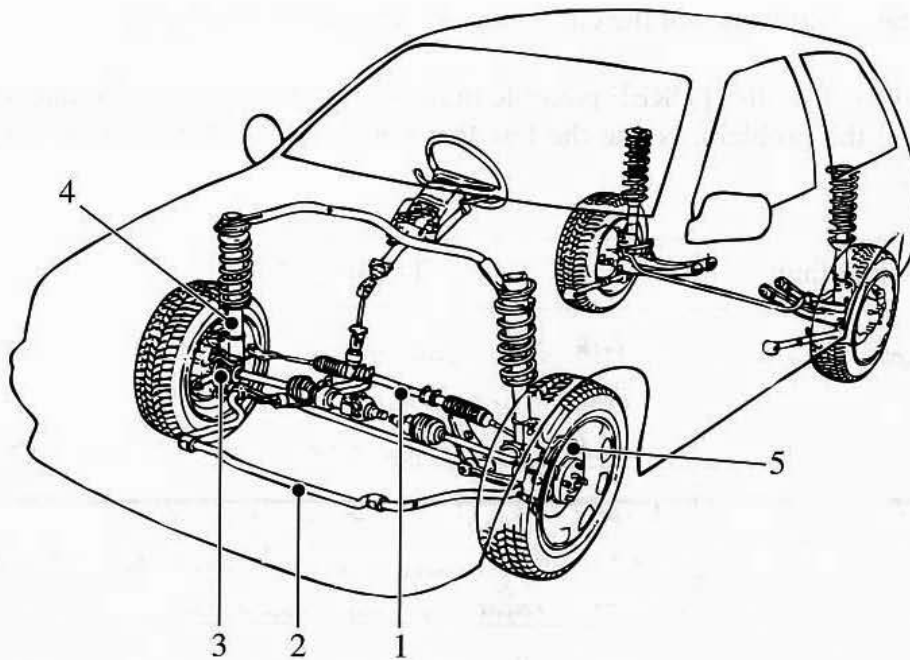


Question 18 (8 marks)



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

5

Name	Function
1. steering rack	when turning the steering wheel, allows driver to steer the car
2. Torsion bar	<ul style="list-style-type: none"> • dampens wheel movement (up & down) • keeps wheel in contact with road at all times.
3. universal joint	<ul style="list-style-type: none"> • allows rotation when steering turning cornering • & wheel moving up & down.
4. strutt	<ul style="list-style-type: none"> • to dampen wheel movement (up & down) • & to keep wheel in contact with car road at all times.
5. disk rotor	when braking,

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
Alternator playing up.	<ul style="list-style-type: none"> • check the amount of current the alternator is putting out. • check windings, commutator & connections in alternator
rectifier	<ul style="list-style-type: none"> • check if it is working properly. • not letting charge back through the alternator when engine is not running.
bad connection	<ul style="list-style-type: none"> • trace the wiring & check each connection is clean & tight.

End of Question 18