Automotive Technology 6th Edition Chapter 133
Name
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
1) How can torque converters double engine torque?
2) What are the three elements of a planetary gear set?
3) How does a dual clutch automatic transmission shift gears?
4) How does a continuously variable transmission provide variable ratios?
5) How can various gear ratios and reverse be obtained by using a compound planetary gear set?

Answer Key

Testname: SHORT 133

1) A torque converter can double engine torque by using the stator inside the torque converter. The stator redirects hydraulic flow against the turbine section of the torque converter.

Page Ref: 1679

2) The elements of a typical planetary gear set include a ring gear (annulus or internal gear), sun gear, and a planet carrier.

Page Ref: 1682

3) A dual clutch automatic transmission shifts gears by either applying or releasing either of the clutches. The mechanical selection of the gear is performed hydraulically, and then a shift is made when one clutch is applied and the other clutch is released.

Page Ref: 1689

4) A continuously variable transmission provides for variable ratios by using a steel belt between two pulleys whose width, and therefore, the diameter can be hydraulically changed.

Page Ref: 1686

5) Driving one element and holding another element of a planetary gear set results in various gear ratios, as well as reverse.

Page Ref: 1683