

13. a. Draw a neat sketch of a single plate dry friction type clutch with coil springs used in an automobile and explain how the clutch is working.
(or)

b. Bring out the need of differential and explain the construction and working of a typical differential mechanism used in a vehicle.

14. a. Explain the working of any one type of power assisted steering used in a heavy vehicle.

(or)

b. With the aid of block diagram and sketches explain the working of an Air brake system used in a Bus

15. a. (i) Bring out the sources and storage techniques for hydrogen to be used as an alternative fuel for automobiles. (8 marks)

(ii) Explain the working of a fuel cell. (8 marks)
(or)

b. Write notes on the following:-

(i) Electric vehicles

(ii) Usage of LPG in petrol vehicles.