Software Design

Software systems often incorporate structural representations of the application domain in which they operate. For example, a vehicle control system should be aware of the fact that the car has precisely four wheels. This kind of information must be captured, encoded and tested at each stage of the software design process.

Using the number of wheels in a car as a simple example, describe relevant design activities and products at each of the following phases of a software project:

(a) inception; [4 marks]
(b) elaboration; [4 marks]
(c) construction; [4 marks]
(d) transition; [4 marks]
(e) system operation. [4 marks]