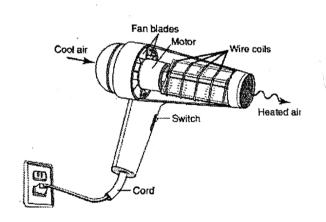
DSP 721: Minor Exam 2

Total marks: 25 || Time: 60 minutes

- 1. Explain briefly the different steps in House of Quality (HoQ) with an example not shown or discussed in the class. (5)
- 2. Using the above example show: (a) whether HoQ is beneficial or not, and (b) in what ways is it beneficial or not. (2+4)
- 3. What can happen if one skips needs and requirements analysis, and jumps directly to solution generation? (4)
- 4. What is function? Explain with an example not shown or discussed in the class. (1+1)
- 5. Develop function structure for the given hair dryer: (8)



When you plug in the hair dryer and turn the switch to "on," current flows through the hair dryer. The circuit first supplies power to the heating element. In most hair dryers, this is a bare, coiled wire. The current then makes the electric motor spin, which turns the fan. The airflow generated by the fan is directed down the barrel of the hairdryer, over and through the heating element. As the air flows over and through the heated element, the generated heat warms the air by forced convection (i.e., heat is transferred from the coils to the air and in turn the coils are cooled). The hot air streams out the end of the barrel.