

# **PROBLEM SOLVING**

## **Data**

Whatever is “given” in the problem (10% of total marks)

## **Objective**

Whatever is "to find" (to draw, to prove) in the problem (10%)

## **Solvability**

Whether the problem is over determined, critically determined or under determined (10%)

## **Strategy to solve the problem**

The physical law or the mathematical equation applied to solve + the assumptions/limitations of the model used [mention of alternate methods available, the most efficient and the most effective method to reach a solution] (15%)

## **Setting up of the problem**

Coördinate axes, diagrams, conversions in SI [include a table of conversion factors used, symbols/terms used] (15%)

## **Solution of the problem**

Solution using mathematics, physics or logic [solution to be in two columns, the left-hand column containing steps of the solution and the right-hand column their justifications] (30%)

## **Result(s)**

Should be quoted to proper significant figures, solely in the language of data and objective, without referring anything introduced in setting up of problem (10%)

## **Total 100%**