## **Practicing Problem Solving**

Growing with concepts has two parts, First is assimilation of concepts and Second is practicing concepts in problem solving. Second part is essential in carving proficiency in use of concepts, the essence of learning. Therefore, First Part of concepts through a series of articles in this column has been completed in April'18 and is being integrated in Mentor's Manual, as a free web-resource.

The Second Part endeavour is being started in May'18 issue of the e-Bulletin. In this issue assorted questions on Units, Dimensions and Measurement, the First steppingstone in Physics is taken with a spectrum of typical question involving single choice, multiple choice, fill up the blank and matching the choices. These questions are drawn from various sources viz. text books, study materials, examinations, and moderation has been made to the possible extent.

These questions shall also be put in sequential levels such that: **Level –I** questions shall use bare concept on the topic titled. Students are advised to solve these questions after learning of each chapter. **Level-II** questions shall be involving integration of concepts learned earlier, and, therefore, students are advised that before attempting these questions they revise previous learning. **Level-III** questions are for testing proficiency in learning of physics upto 12<sup>th</sup> standard and, therefore, involve integration of complete learning of the subject. **Students are advised to take these practice tests under examination conditions.** 

Answers to each question shall be separately listed in the respective e-Bulletin, for verification. Students are advised to retry each question/problem, where answer is not matching, at least twice before referring to illustrations that shall also be incorporated in respective bulletin separately. This is being done with a consideration that monthly frequency of e-Bulletin may not be affordable to students, to maintain required pace, in case they encounter difficulty in solving. Students, are welcome to seek clarification to the solutions or referring fresh problems (image thereof with figures if any) by writing through **CONTACT US**.

Going forward these questions shall be organized by clustering each type of questions for intralevel practice by students. It is our endeavour to automate the practice tests. This will require students to register, free-of-cost, to avail facility of practice tests, self-evaluation and refer to detailed solutions in case of any doubt or difficulty.

Students, teachers and parents are welcome to enrich and diversify this question bank by flowing-in questions with its source. We respectfully take these inputs in enriching the free-web-resource for benefit of all students in general, in particular those unprivileged children who are economically, sociologically, geographically of for that matter any other reason disconnected from the main stream. Your pro-action with a sense of Personal Social Responsibility (PSR) in facilitating use of the web-enabled platform that is available to us. We shall acknowledge it with a sense of gratitude most appropriately expressed by Albert Einstein "A hundred times a day I remind myself that my inner and outer life depend on the labors of other men, living and dead, and that I must exert myself in order to give in the measure as I have received and am still receiving"