

**OBJECTIVE:** To enable professional undergraduate students to understand the importance of basic physics.

### QUESTIONS

- 1) What is Newton's first law of motion, Newton's Second law of motion, Newton's third law of motion and its applications?
- 2) What is Collisions? Discuss Types of collision, elastic collision in 1D & 2D, Inelastic collision in 1D, Perfectly inelastic collision in 1D
- 3) Discuss Capacitance? Principal of Capacitor, Parallel and spherical capacitors, Grouping of capacitors and their capacitance.
- 4) What is the difference between n-p-n & p-n-p transistors, write Advantages of transistors & Integrated Circuit?

### PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

1. Cover page
2. Objectives
3. Index
4. Content
5. Conclusion
6. References
7. Softcopy AND Hardcopy
8. Give proper headings and subheadings
9. Explain every topic in points and using diagrams.
10. Put Examples

### OUTCOME:

After doing this assignment, students will come to understand the importance of physics.

### TEXT BOOKS:

[T1]Rosen, K.H., Discrete Mathematics and its Applications, McGraw Hill, (2006) 6<sup>th</sup> ed.

[T2]Kolman, Busby and Ross, "Discrete Mathematical Structure", PHI, 1996.