

BCA: 1st Semester Physics Code: BCA 109

OBJECTIVE: The objective of this paper is to identify the foundation terms and concepts that are commonly used in Physics. This course will give complete descriptions about the terms used in the Physics.

QUESTIONS:

- 1. What is Force, Explain Newton's first, second, third law of motion. Show that how Newton's first law can be derived from Newton's Second law.
- 2. Explain Friction and Causes of friction, Types of friction, Laws of friction, Angle of friction and repose, Centripetal and centrifugal force.
- 3. Explain Coulomb's Law. State & Proof of Gauss's theorem, Kirchhoff's rules.
- 4. Explain Thomson's atomic model, Intrinsic semiconductor, Doping, Extrinsic semiconductors.
- 5. Explain Actions of n-p-n & p-n-p transistors, 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 important terminologies to relate to the Physics.

REFERENCE BOOKS:

[T1]: S.K. Gupta, "Modern ABC of Physics", Vol1, Modern Publishers.

[T2]: Pradeep, "Fundamental Physics", Class XI, Pradeep Publications.

[T3]: S.K. Gupta, "Modern ABC of Physics", Vol2, Modern Publishers.

[T4]: Pradeep, "Fundamental Physics", Class XII, Pradeep Publications.