

Girls' High School & College, Prayagraj

Worksheet No.- 2

Session 2020-2021

Class - IX A B C D E F

Subject- Physics

Chapter- Measurements and Experimentation

Instructions:- Parents are expected to ensure that the student spends two days to read and understand the chapter according to the books and website referred and thereafter answer the given questions.

Note:-

Topic :- MEASUREMENT OF LENGTH, TIME AND SIMPLE PENDULUM

Student should refer to books of class 6, 7, 8 and also the following books/website-

Concise Physics By R. P. Goyal and S. P. Tripathi (Selina Publisher) OR

A New Approach to I.C.S.E. Physics by V. K. Sally and D. Chauhan (Goyal Brothers Prakashan)

OR

website-http://quiznext.in/study-material/learning_material/ICSE-9-Physics/Measurement-and-Experimentation/measurement-of-length/

Answer the following questions briefly:-

1. What do you understand by the term 'least count' of an instrument?
2. Define the term 'Vernier constant'.
3. Name the important parts of a vernier callipers.
4. What are the uses of a vernier callipers?
5. Explain the principle of a vernier callipers and write the formula for least count of a vernier callipers.
6. What is the function of external jaws of a vernier callipers?
7. How can the least count of a screw gauge be decreased?
8. Draw a neat and labelled diagram of a vernier callipers.
9. What is backlash error? How is it avoided?
10. State the purpose of ratchet in a screw gauge.
11. A simple pendulum completes 50 oscillations in one minute. Find its

- (a) frequency,
- (b) time period.

- 12.** Name two factors on which the time period of a simple pendulum depends.
- 13.** Compare the time periods of two pendulums of length 4 m and 9 m.
- 14.** What is a second's pendulum?
- 15.** An ammeter has 10 divisions between 0 A and 1 A. What is its least count?

END