Physics - FSC Part 1 Physics Chapter 1 Short Questions Preparation

Q1. which base quantities has units mole and kelvin

Ans 1: Mole: Mole is unit of base quantity "Amount of a substance"

Ans 2: Kelin: Kelvin is unit of base quantity "Temperature"

Q2. Describe the structure of ripple tank

Ans 1: ripple tank consist of a rectangular tray having glass bottom and is placed nearly half meter above the surface of table

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Q3. What do you mean by scientific notation? Give an example.

Ans 1: The standard form to represent numbers using power of ten is called scientific notation. The accepted practice is that there should be only one non-zero digit left o decimal. For Example
The scientific notation of measurement 134.7 is 1.347×10^2.

Q4. An old saying is that " A chain is only as strong as its weakest link , " What analogous statement can you make regarding measurement ?

Ans 1: The analogous statement is that the result of an experimental data which is as accurate as measurements can be used in the computation.

Q5. what is time period?

Ans 1: The time taken by vibrating body to complete its one vibration is called time period.

Q6. How many nanoseconds are there in 1 year?

Ans 1: As 1 year = 3.136×10^7 s
1 year = 3.1536×10^7 X1s
1 year =$3.1536 \times 10^7 \times 10^9 \times 10^{-9}$s
1 year =$3.1536 \times 10^7 \times 10^{-9}$ns
1 year =3.1536×10^{16}ns

Q7. Discuss the assessment of uncertainty in the final result?

Ans 1:

Q8. How the distance between interference fringes will be affected if the distance between the slits in Young 's experiment is doubled.?

Ans 1:

Q9. The period of simple pendulum is measured by a stop watch. What type of errors are possible in the time period?

Ans 1: The two types of errors are possible .
Random error which is due to the negligence or inexperience of a person at the time of starting and stopping the stopwatch.And systematic error which occurs due to the poor calibration of the instrument.

Q10. Name two major types of errors in measurement and also define them.

Ans 1: The major types of errors in measurement are Systematic Error and Random Error.

Systematic Errors:Systematic errors occurs when repeated measurements of a quantity give the same values under the same conditions.This error is due to poor calibration or zero error in the stop watch. This error can be removed by applying correction factor

Ans 2: Random Error: Random error occurs when repeated measurements of a quantity give different values under the same conditions. This error is due to faulty procedure or negligence and inexperience of person at the time to start or stop the stop watch. This can be reduced by taking average value of observed readings .