**Gulistan Academy**

Physics (9th) Max.Marks = 40

Chapter No.1 (Physical Quantities and Measurement) Pass Marks = 20

Time = 1 Hour

**Question No.1: Give short answers. (2x12 = 24)**

1. *What is the difference between Base quantities and Derived quantities?*
2. *Estimate your age in seconds.*
3. *What is vernier constant?*
4. *Why the use of Zero Error is necessary in a measuring instrument?*
5. *What is Stop Watch? What is the least count of the mechanical watch used in the laboratory?*
6. *Why we need to measure the small intervals of time?*
7. *What do you mean by significant figures in a measurement?*
8. *What is the relation between prefixes “****micro****” and “****pico****”?*
9. *Shortly describe the method of taking reading from a measuring cylinder.*
10. *Which one of the following is the most accurate Balance to measure the mass of a substance? Explain.*

***1-****Beam Balance* ***2-****Physical Balance* ***3-****Electronic Balance*

1. *Write these numbers using the prefixes:*
2. *20,000* ***g******2-*** *4,800,000* ***W 3-*** *0.00004* ***m 4-*** *0.00580* ***s***
3. *What is the number of significant figures in the following measurements?*
4. *1.009* ***m******2-*** *0.00450* ***kg******3-*** *1.66 x 10-27* ***kg******4-*** *2016* ***s***

**Question No.2: (5+3 = 8)**

1. *Explain how to take reading from Vernier Callipers.*
2. *A screw gauge has 50 marks on its circular scale. The pitch of screw gauge is 0.5 mm. What is its least count?*

**Question No.3: (5+3 = 8)**

1. *What are Physical Quantities? Explain their different types.*
2. *Write the following in standard form:*
3. *6400* ***km******(b)*** *380 000* ***km***

***(c)*** *300 000 000* ***ms-1******(d)*** *Number of seconds in a day*

***(e)*** *3 84 000 000* ***m******(f)*** *0.00045* ***s***