# USWA COLLEGE ISLAMABAD

Entry Test Class XI

## Paper Physics

**Time Allowed : 30 Minutes** **Total Marks:30**

**Name : ----------** **Father's name:----------**

**Roll No .----------** **Group:----------**

**Q.1 Choose the correct answer i.e. A / B / C / D. Each part carries equal marks.**

I. Least count of digital Vernier caliper is ------mm
(a)0.01 (b)0.1 (c)0.001 (d)1.00

II. If distance between the masses is halved the gravitational force is ------
(a)doubled (b)halved (c)quarter (d)four times

III. Humen body temperature in kelvin is
(a)37 (b)98.6 (c)310 (d)300

IV. If walls of rooms are 20cm thick and they are reduced to 10cm then thermal conductivity is
(a)doubled (b)halved (c)quarter (d)four times

V. 1MWh=----------
(a)3.6KJ (b)3.6MJ (c)3.6GJ (d)3.6TJ

VI. If length of pendulum is doubled its frequency is
(a)doubled (b)halved (c)quarter (d)four times

VII. Half life of carbon is 5730 years how much time (years) it takes to become 1/16 of sample
(a)5730 (b)11460 (c)17190 (d)22920

VIII. Minimum voltage required by electron gun to emit electron is
(a)2V (b)4V (c)6V (d)8V

IX. Which of following quantity is not changed during refraction?
(a)its direction (b) its speed (c) its frequency (d) its wavelength

X. Which one is non ohmic
(a)Iron (b)copper (c)silver (d) silicon

XI. If separation of plates of capacitor is doubled its capacitance is
(a)doubled (b)halved (c)quarter (d)four times

XII. The value of gravitational constant "G"at One Earth radius is
(a)doubled (b)halved (c)quarter (d)remains same

**Q. 2 Attempt any SIX (6) questions. (6 X 3 = 18)**

1).Can a body in motion be in equilibrium? Verify your answer by strong reason.

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2) Prove that gravitational force is field force

3) If resistors are connected in series the derive a relation for their equivalent resistance

4).Why are Styrofoam's used in hot pots coolers and thermos flasks?

5). If at Lahore intensity level of sound is 90 dB then calculate its intensity

6). Briefly discuss working of DC motor

7).What is refractive index? Write its value for water and glass