Paper: Physics		Total Marks: 12
Month Test: Annual		Obt. Marks: _____
Theme/Unit: Full Book		Grand Total: 75
Objective:	Signature: _____	Time: 15 mins
Roll No: _____	class: 10th	Section: _____

Pre Board Exams

Q. No. 1: Encircle the correct option: /12

1. In SHM velocity at extreme position is:
   a. Maximum b. Minimum c. Zero d. Infinite
2. The unit of frequency is:
   a. N b. M c. Pa d. Hz
3. Conditions for total internal reflection are:
   a. 2 b. 3 c. 4 d. 5
4. 1uc = _____c.
   a. 10^{-3} b. 10^{-6} c. 10^{3} d. 10^{6}
5. The equation of electric intensity is:
   a. E = q/F b. q = EF c. $E = E/q_o$ d. F = Eq
6. If 0.5s charge passes through a wire in 10 seconds, then current will be:
   a. 20A b. 5A c. 50mA d. 5mA
7. The presence of magnetic field can be detected by:
   a. Small c. Stationary
   b. Mass d. +ve charge
8. A device which is used to increase or decrease the alternation voltage is called:
   a. Transformer c. Generator
   b. Motor d. Voltmeter
9. In tungsten filament the potential given to produce the beam of electron by thermionic emission is:
   a. 6v b. 7v c. 8v d. 9v
10. One byte is equal to:
    a. 10 b. 8 c. 6 d. 4
11. The brain of any computer system is:
    a. Monitor c. CPU
    b. Memory d. None
12. One of the isotopes of Uranium is $^{238}_{92}U$. Find the number of neutrons.
    a. 92 c. 238
    b. 146 d. 330

Paper: Physics Total Marks: 63

Month Test: Annual Obt. Marks: _____

Theme/Unit: Full Book Grand Total: 75

Subjective: Signature: _____ Time: 2 hours

Roll No: _____ class: 10th Section: _____

Pre Board Exams

Q. No. 2: Answer the following Questions: /10

1) Define Waves equation and write its formula?
2) Define and describe physical properties of musical sound?
3) On which factors does frequency of tuning forks depends?
4) On what principle D.C motor work?
5) State Lenz's law?

Q. No. 3: Answer the following Questions: /10

1) Define Snell's law? Write its formula.
2) Write conditions of total internal reflection?
3) What is telecommunication, write its two sources.
4) Where is coaxial cable wire used?
5) What is meant by half life?

Q. No. 4: Answer the following Questions: /10

1) What is relation between digital qualities and digital electronics?
2) What is meant by logic states?
3) Diamond does not conduct electricity however, it is good at conducting heat, explain.
4) How we measure e.m.f of a battery?
5) Describe the construction of capacitor?

Long Questions: /33

Q. No. 5: (a). Write the applications of Total internal reflection. (Any three). /6

(b). A sound waves has frequency of 2 kHz and wavelength 35cm. how long will it take to travel 1.5 km. /5

Q. No. 6: (a). Describe electrical energy with the help of Joule's law. /6

(b). A capacitor holds 0.03 coulombs of charge when fully charged by a 6v battery. How much voltage would be required for it to holds 2 coulombs of charge? /5

Q. No. 7: (a). Explain CRO and its components. /6

(b). Cobalt 60 is a radioactive element with half-life of 5.25 years. What fraction of the original sample will be left after 26 years? /5