

## Physics - 10th Class Physics English Medium Chapter 16 Preparation

Q1. What is the use of electron gun.

**Ans 1:** It is used to investigate the properties of electron beam.

Q2. Name two factors which can enhance thermionic emission .

**Ans 1:** i. Increasing strength of the battery and voltage.  
ii. By increasing temperature.

Q3. Why filament is heated.

**Ans 1:** Filament is heated for emission of electrons. If metal is heated to a high temperature, some of free electrons may gain sufficient energy to escape metal surface.

Q4. Give the examples of cathode ray tubes from your daily life.

**Ans 1:** The picture in our T.V. set and display terminal of most computers are cathode ray tubes.

Q5. What is cathode ray oscilloscope?

**Ans 1:** An instrument which is used to display the magnitude of rapidly changing electric current or potential.

Q6. Name some use of oscilloscope.

**Ans 1:** i. Displaying wave forms.  
ii. Range finding  
iii. Measuring voltages.  
iv. Echo sounding .  
v. Displaying heartbeats.

Q7. What is the use of grid in cathode ray oscilloscope.

**Ans 1:** In the electron gun the grid is used to control the flow of electron, thus control brightness on fluorescent screen.

Q8. Write some benefits of using digital electronic over analogue electronic.

**Ans 1:** i. There is no interference in digital signal

ii. Its easy to read digital quantities.

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Q9. How digital electronic devices work.

**Ans 1:** Digital electronics devices store and process bites electronically.

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Q10. What is meant by Boolean algebra?

**Ans 1:** It is a branch of mathematics which deals with the relationships of logic variables.

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