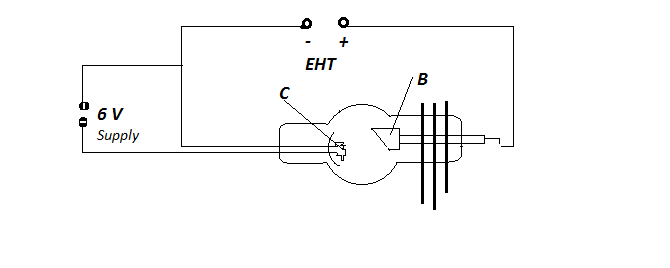
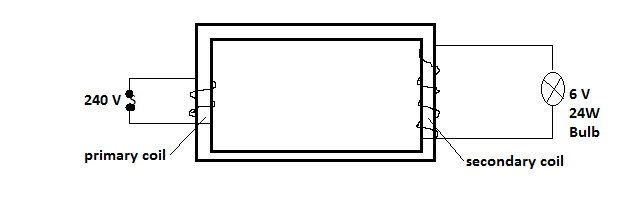
**PHYSICS REVISION QUESTIONS.**

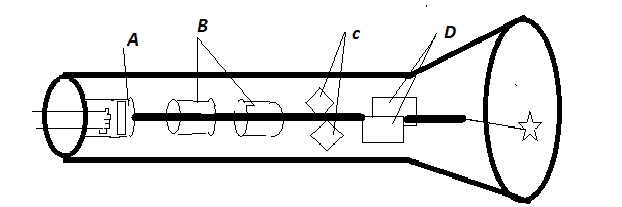
1. **State the purpose of the grid in the cathode ray oscilloscope. (1mk)**
2. **Explain why CRO is a more accurate voltmeter than a moving coil voltmeter. (1mk)**
3. **The figure below shows a circuit of a modern X-ray tube**

**i. Indicate the path of the X-ray beam supplied by the tube. (1mk)**

1. **Name the part labeled C and state its function. (1mk)**
2. **Name a suitable metal that can be used for the path labeled B and give a reason for choice.(2mks)**
3. **How can the intensity of X-rays of the tube be increased? (1mk)**
4. **An X-ray tube operates at i30kV through it is 2 mA, calculate the electric power dissipated. (3mks)**
5. **A transformer is connected to a d.c source. The secondary to a centre zero galvanometer. State and explain the observations made on the galvanometer. (2mks)**
6. **State three ways in which energy is lost in a transformer and how it can be minimized in each case. (3mks)**
7. **The figure below shows a transformer with 960 turns in the primary coil and N turns in the secondary coil connected to a 240 V supply. Given that the transformer is 100% efficient and it will operate a 6 V 24 W bulb, find;**

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1. **The number of turns in the secondary coil. (3mks)**
2. **The current flowing in the primary coil. (3mks)**
3. **The figure below shows a Cathode ray oscilloscope.**

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1. **Name the part labeled A and B. (2mks)**
2. **What are the functions of the part labeled C and D? (2mks)**
3. **Explain how electrons are produced. (2mks)**
4. **Give a reason why the tube is evacuated. (1mk)**
5. **a. Define radio activity. (1mk)**

**b. Radon gas has has a nuclide 222Ra decays to Polonium by emission of α**

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**particles. Show by use of an equation the transformation of the gas. (2mks)**

1. **(a) define specific heat capacity. (2mks)**

**(b) A block of metal is heated from 300c to 500c by an electric heater rated54 W. The process takes 8 minutes and 20 seconds. Calculate the heat capacity of the metal. (3mks)**

**(c) Define latent heat of vaporization. (1mks)**

**(d) Explain why it is dangerous to be burned by steam than boiling water. (2mks)**

**\*\*PRACTICE MAKES IT PERFECT\*\***

**MR. KARANJA BEN.**