Radiation Circuit Assignment

Instructions: Answer the following questions. Write short, clear responses.

1. What are the three main parts of the x-ray circuit?
2. Which side of the circuit (primary or secondary) is connected to the x-ray tube?
3. What is the function of the autotransformer in the x-ray circuit?
4. What does the step-up transformer do in the secondary circuit?
5. Which transformer is responsible for heating the filament?
6. What is the purpose of the rectifiers in the x-ray circuit?
7. Where is the timer circuit located—primary or secondary side?
8. What determines the quantity of x-rays produced in the circuit?
9. What determines the quality (penetrating power) of x-rays?
10. What is the purpose of the exposure switch in the primary circuit?
11. Which type of current (AC or DC) is needed by the x-ray tube?
12. Why are rectifiers necessary in the circuit?
13. What does the filament circuit control?
14. What is the relationship between mA and the filament circuit?
15. Why is the secondary side of the circuit sometimes called the high-voltage side?