**Group (B): (1 hour / 24 marks)**

1. **What is the effects of radiation on the following:- (8 marks)**
2. Breast (2 marks)
3. Heart (4 marks)
4. Liver (2 marks)
5. **Compare between the ionization chamber and proportional counter? (3 marks)**
6. **Define the following:- (4 marks)**
7. Ionizing radiation.
8. Stay time.
9. **Explain the following:- (9 marks)**
10. Protons are more penetrating than alpha particles.
11. Lead is a common shielding material for x-rays and gamma radiation.
12. Ionizing radiation used for cancer treatment.