

31. Code A

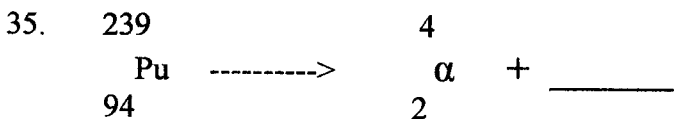
32 - 34 Using the choices below, give the characteristic for the following types of radiation.

- a) no mass - no charge
- b) no mass - positive charge
- c) no mass - negative charge
- d) 4 AMU - negative charge
- e) 4 AMU - positive charge

32. Alpha particle

33. Gamma rays

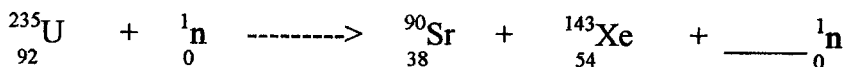
34. Beta radiation - Positron



- a) U b) Th c) Cm d) Pb

36. Bombarding uranium with a neutron causes a chain reaction. This is an example of nuclear
 a) fission b) fusion

37. How many neutrons are released from the following reaction?



- a) 1 b) 2 c) 3 d) 4 e) 0

38. An element has a half life of 1 month. Given 1000 radioactive atoms, how many radioactive elements will remain after 3 months?

- a) 333 b) 500 c) 250 d) 125 e) 62

39. ${}_{24}^{51}\text{Cr}$ is used in diagnosing the pathology of the spleen. The nucleus of this isotope captures an electron. What is the product?

- a) Sn b) Te c) V d) Mn

40. Given : ${}_{56}^{141}\text{B}$ (boron) emits an electron. The resultant element will have an atomic number ____

- a) the same as boron b) greater than boron c) less than boron