

Date:- 18.11.24

Subject PHYSICS

TENDER HEART HIGH SCHOOL, SEC-33B, CHD

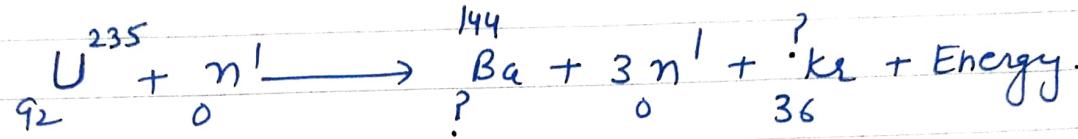
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CLASS-X [ASSIGNMENT-I]

Ch-12 (Radioactivity) (Questions for practice)

⇒ Ques 1: → Define Nuclear fission.

⇒ Ques 2: → Complete the following Nuclear reaction by filling the atomic number of Ba and mass no. of Kr.



⇒ Ques 3: → Why is a nuclear fusion reaction is called a thermo-nuclear reaction?

⇒ Ques 4: → (i) How does the atomic number of an element change, if it emits Beta particle.

(ii) What name is given to elements having same atomic number but different mass numbers?

⇒ Ques 5: → (i) The nucleus of ${}_{?}^{202}\text{X}$ emits alpha particle to form nucleus Y. Represent this change in the form of an equation.

(ii) What change will take place in mass number and atomic number of the nucleus Y, if it emits gamma radiation?

⇒ Ques 6: → A radioactive nucleus emits three types of radiation.

(a) Name the radiation which is least penetrating.

(b) Name the radiation of largest mass.

(c) Name the radiation which is electromagnetic in nature.

⇒ Ques 7: → (i) Differentiate b/w Nuclear fission and Nuclear fusion.

(ii) State one safety precaution in the disposal of Nuclear waste.

(iii) Why there is no change in the rate of radioactivity

When radioactive element undergoes a
Chemical Change?