

Question: 1

Which of the following accounts for the maximum energy release in the nuclear fission process?

- (A) Kinetic energy of fission products
- (B) Kinetic energy of neutrons
- (C) Instantaneous release of gamma rays
- (D) Radioactive decay of fission products

Ans: A

Kinetic energy of fission products

Question: 2

Main source of _____ is monazite sand.

- (A) Thorium
- (B) Hafnium
- (C) Polonium
- (D) Uranium

Ans: A

Thorium

Question: 3

Thermal shield is used in high powered nuclear reactors to

- (A) Protect the fuel element from coming in contact with the coolant
- (B) Protect the walls of the reactor from radiation damage

(C) Slow down the secondary neutrons

(D) Absorb the fast neutrons

Ans: B

Protect the walls of the reactor from radiation damage

Question: 4

Fuel for a fast breeder reactor is

(A) Neptunium

(B) Uranium

(C) Radium

(D) Plutonium

Ans: A

Neptunium

Question: 5

Coolant used in boiling water reactor is

(A) A mixture of water and steam

(B) Steam

(C) Water

(D) Hydrogen gas

Ans: B

Steam

Question: 6

_____ nuclear reactor does not require a heat exchanger to supply steam to power turbine.

- (A) Pressurised water
- (B) Boiling water
- (C) Helium cooled
- (D) Molten sodium cooled

Ans: B

Boiling water

Question: 7

Which of the following is not used as a nuclear fuel cladding material?

- (A) Stainless steel
- (B) Ceramics
- (C) Cadmium
- (D) Zircalloy

Ans: C

Cadmium

Question: 8

Ordinary water is not used as moderator, because it

- (A) Absorbs neutrons
- (B) Does not absorb neutrons
- (C) Has a low scattering cross section

(D) Has a low absorption cross section

Ans: A

Absorbs neutrons

Question: 9

Fast breeder reactors are most usable in India, because of our largest _____ deposits.

(A) Uranium

(B) Plutonium

(C) Thorium

(D) None of these

Ans: C

Thorium

Question: 10

The main ore of thorium is

(A) Galena

(B) Limonite

(C) Monazite

(D) Pitchblende

Ans: C

Monazite