Assessment 8

This deadline is not a hinting assignment but a practical one. As the time draws closer to the deadline, you are advised to start working on this assignment.
1. A nuclear reactor can be termed as breeder only when the conversion ratio is greater than 1.6. It is greater than 1.6 is
   a. true
   b. false
   "true"

2. If the breeding gain is for a reactor in non-negative, there is a
   a. breed
   b. balanced circular
   c. non-breeder
   "balanced circular"

3. The conversion ratio for a thorium cycle is higher than the same for a uranium cycle because of
   a. lower fissile mass
   b. larger division of fissile mass
   c. lower activity of thorium
   "larger division of fissile mass"

4. Chemical composition of yellow cake is
   a. UO2
   b. UC2
   c. UC
   "UO2"

5. Uranium hexafluoride is a
   a. liquid
   b. amorphous solid
   c. crystalline solid
   "liquid"

6. During the process of uranium conversion and enrichment, yellow cake is treated with
   a. waste products and superconductors
   b. hazardous waste and hydrogen solids
   c. hydrogen solids only
   "hazardous waste and hydrogen solids"

7. Gas centrifuge is a very popular method of
   a. fuel milling
   b. fuel conversion
   c. fuel enrichment
   "fuel enrichment"

8. PUREX plant for
   a. plutonium uranium reprocessing
   b. plutonium uranium reenrichment
   c. plutonium uranium reenrichment
   "plutonium uranium reprocessing"

9. Leak of fuel in the enrichment plant in typical FFR is
   a. about 5%
   b. 0.5%
   c. more than 5%
   "more than 5%"

10. Liquid metal is preferred as the coolant in FBWR because of
    a. favorable heat transport properties of liquid metal
    b. unfavorable heat transport properties of liquid metal
    c. favorable heat transport properties of liquid metal
    "favorable heat transport properties of liquid metal"

11. Fuel value of water and its very low value in a pool of liquid metal
    a. fissured state, primary coolant pump and primary heat exchange are immersed in a pool of liquid metal.
    b. fissured state, primary coolant pump and primary heat exchange are immersed in a pool of liquid metal.
    "fissured state, primary coolant pump and primary heat exchange are immersed in a pool of liquid metal.

12. A major challenge of handling hot, but not extremely hot
    a. sludge, nuclear reaction towards water.
    b. compact heat transfer towards the reactor.
    "sludge, nuclear reaction towards water.

13. In a reverse inspection and repair of LWRs is not possible because of the _______ leave of liquid metal.
    a. rupture
    b. protection
    c. protection
    "rupture"

14. Diseconomies factor reactors propose to offer higher thermal efficiency compared to LWRs, because the higher operating
    a. temperature
    b. pressure
    c. pressure
    "temperature"