Pressurized Heavy Water Reactor

K.S. Rajan

Professor, School of Chemical & Biotechnology

SASTRA University

Table of Contents

1 QUIZ.		3
1.1	QUESTIONS	3
1.2	ANSWERS	3

1 Quiz

1.1 Questions

1. Which of the following reactor houses calandria?

a) Pressurized water reactor b) Pressurized heavy water reactor c) boiling water reactor d)gas cooled reactor

2. Name the moderator used in PHWR.

3. Name the primary and secondary coolants in pressurized heavy water reactor.

4. Why is enriched uranium not required as fuel in PHWR?

5. Which one of the following describes calandria in the best possible way?

(a) a vertical vessel with provisions for pressure tubes

(b) a horizontal vessel with provisions for pressure tubes

(c) a vertical vessel with central downcomer

(d) all the above

6. What does CANDU stand for?

7. Does PHWR contain pressurizer?

1.2 Answers

1. (b) Pressurized heavy water reactor

2. Heavy water

3. Primary coolant – Heavy water; Secondary coolant – Light water

4. Heavy water is a better moderator. Hence with natural uranium, fission can be sustained.

5. (a) a vertical vessel with provisions for pressure tubes

6. Canada Deuterium Uranium

7. No