

Quiz for Chapters 1 - 3

1. Who does Barbour name as the dominant thinker of the Medieval period?
 - a. Thomas Aquinas
 - b. Abelard
 - c. Augustine of Hippo
 - d. Immanuel Kant
2. The work of which two men are considered the birth of modern science?
 - . Aristotle
 - a. Newton
 - b. Galileo
 - c. Pythagoras
 - d. Avicenna
3. According to Medieval theology one can arrive at the full truth in religion through reason and observations of nature alone. T F
4. What are the names of the two astronomical systems that came into conflict in the early 17th century?
 - a. Pythagorean
 - b. Ptolemaic
 - c. Copernican
 - d. Julian
 - e. Lamarckian
5. What technological innovation at the beginning of the 17th century facilitated the change in theories about the universe?
6. What term does Barbour use for the great 17th century, scientist, natural philosopher, theologians such as Newton and Boyle?
 - . The paradoci
 - a. The virtuosi

- b. The revolutionaries
- c. The seers

7. Neither conflict nor harmony dominated the discussions of religion and science in the 17th century. T F

8. What 17th century philosopher is best known for his thoughts on dualism?

- a. Albert the Great
- b. Thomas Merton
- c. Rene Descarte
- d. Soren Kierkegaard

9. In what century was the trial of Galileo?

- . 17th
- a. 18th
- b. 19th

10. Which philosopher has had the greatest influence on theology (by far)?

- . Wittgenstein
- a. Plato
- b. Boethus
- c. David Hume

11. What theologian and natural philosopher is associated with the idea that the universe is like a fine watch and by this watch we can infer a watchmaker?

- a. Martin Luther
- b. John Calvin
- c. William Paley
- d. Thomas Huxley

12. What does "reductionism" mean?

13. What two events challenged the idea that “it’s all about us...,” that humans may not be all that unique or valuable? One is a 17th c. even, the other 19th c.

- . Evolution
- a. The discovery of America
- b. The Industrial Revolution
- c. Copernican astronomy

14. What two philosophers dominated the 18th century?

15. What is “Deism?”

16. David Hume was an atheist. T F

17. Not surprisingly that in some quarters there were strong reactions to the emerging picture painted by the scientific leaders in the 17th and 18th centuries. What is the name of the secular version of this reaction?

18. And within religion, what were some of the reactions?

19. The concept of “SIN” was replaced with what idea in the 18th century?

20. While there were many advances in many fields in the 19th century the biggest one played itself out in what field?

- a. Biology
- b. Physics
- c. Chemistry
- d. Psychology

21. When was “The Descent of Man” published (within 10 years)

22. It was Thomas Huxley not Darwin that advocated the idea that natural selection implies social progress. T F

23. Which group had the most difficulty managing the theory of evolution, Catholics or Protestants?

24. In the United States what movement started in 1909 that set evolution and scripture on a collision course leading to the famous Scopes Trial in 1925?

Chapter Four

1. Barbour writes about four different ways folks have conceived of the relationship between science and religion. What are these four ways of relating science and religion? (1pt. each)
2. According to Barbour scientific materialism and biblical literalism both rely on a misuse of science. T F (78)
3. Scientific materialism and biblical literalism both rely on epistemological as well as metaphysical assertions that Barbour finds lacking. What do “epistemological” and “metaphysical” mean? (1 pt. each) (78)
4. The famous popularizer of astronomy, Carl Sagan, is, according to Barbour a good example of a scientist who makes the mistake of drawing metaphysical conclusions from the success of the scientific method that far exceed the authority of science. T F (79)
5. The question of whether we can account for all human experience by appeal to physics (through

chemistry, biology, and social sciences) is, according to Barbour what kind of question? (81)

- a. philosophical
- b. scientific
- c. psychological
- d. factual
- e. conceptual

6. Theism, according to Barbour, is a kind of scientific hypothesis. T F (81)

7. Biblical literalism and the idea of biblical “inerrancy” was the product of Medieval thinking originating with Thomas Aquinas T F (82-3)

8. Karl Barth and the movement known as “neo-orthodoxy” is an example of the belief that science and religion are completely independent. T F (85)

9. What is “existentialism?” (85)

10. According to George Lindbeck (my tutor at Yale, by the way!) we can view religious ‘doctrine’ in one of three ways: propositional, expressive, linguistic. One of these relies on the idea of a ‘religious use of language’; that religious language functions to recommend a certain picture of life and particular way of living. Which of these three views of religious doctrine fit that description? (88)

11. Barbour is committed to the view that science and religion are totally independent domains of discourse. T F (89)

12. According to theologian David Tracy the dialogue between science and religion focus on: 1) the moral questions concerning how we use science, and 2) the presuppositions that make science possible. T F (92)

13. Barbour is sympathetic with the idea that we could construct a spirituality not quite yet imagined by either science or contemporary religion. T F (98)

14. Richard Swinburne is major proponent of the integration model of science and religion, believing theism, conceived as a scientific hypothesis, has a probability of greater than 50%. T F (99)

15. What is the “Anthropic Principle” in contemporary cosmology? (99)

16. The major proponent of “Process Philosophy,” built on by a few contemporary theologians is: (104)

- a. Ludwig Wittgenstein
- b. Karl Barth
- c. Alfred North Whitehead
- d. John Rawls

Chapter Five

1. Science proceeds by *analogy*... that is it takes something that was known (for example a bacterium) and uses that as a _____ to postulate characteristics of something that was not known (a virus).
2. Barbour writes about *ad hoc auxiliary hypotheses* on page 107-8. What is an *ad hoc auxiliary hypothesis*? (hint: has to do with one way a theorist might protect a theory when data is introduced that appears to contradict the basic tenets of that theory.)

3. Who wrote, *The Structure of Scientific Revolutions*?

- a. Thomas Kuhn
- b. Immanuel Kant
- c. Ian Barbour
- d. Albert Einstein

4. According to Kant there is no such thing as theory-free data. T F

5. Barbour writes about six types of religious experience he considers to be one kind of “data” for religion. Name two. (111-112)

6. Barbour believes religious beliefs can be assessed in the same way that scientific beliefs can be assessed (agreement with data, coherence, scope, fertility). T F

7. A second kind of data takes the form of stories and ritual. T F

8. How do “complementary models” work in science?

- a. One model builds on another model until yet a new model emerges.
- b. Some models lead to the thing modeled.
- c. An entity is described using two or more models which are themselves in contradiction to each other.

9. Barbour asserts of religious models that “they are neither literal descriptions of reality nor useful fictions, but human constructs that help us interpret experience by imagining what cannot be observed.” (119) What does he call this?

- a. Open-ended realism
- b. Moderate realism
- c. Rorschach realism

d. Critical realism

10. What is a “numinous experience,” according to Barbour (121)? An example will suffice.

11. An important method for understanding the divine in many religious traditions is the *via negativa*. What is this method?

. We arrive at insight concerning what the divine is by contemplating what it is not.

a. If we focus on the reality of suffering honestly enough (as in Wiesel’s Night or Dostoevsky’s Brothers Karamozov) we will find God.

b. We find God in immanence rather than transcendence.

12. What is a “paradigm in either the scientific or religious?” (125)

13. According to the author of “The Structure of Scientific Revolutions” there are no rules for choosing between paradigms (126)

14. Barbour refers to a philosopher of science named Imre Lakatos. He suggests an alternative to Kuhn’s paradigms which he calls programs. His main insight is that one can preserve certain core beliefs even in radically changing paradigms. What might a “core belief” in religion be?

15. According to Barbour Basil Mitchell (134) ultimate religious commitment is to God not Christianity or any other system of belief. T F

16. According to Malcolm in “The Groundlessness of Belief” Wittgenstein said, “Doubt comes AFTER belief.” T F

17. In what sense is chemistry and religious belief equally “groundless” according to Norman Malcom?

Chapter Six

1. The first part of chapter six deals with historical explanation. According to Barbour in scientific as well as historical inquiry data is always, to some degree, “theory laden.” (141) T F
2. Barbour believes that if no Exodus occurred in history it would undermine the power of the Biblical story. (142) T F
3. What does it mean to say that, “theories (in science) are underdetermined by data?” (144)
4. Barbour writes about a variety of ‘critiques’ of science and religion. (144-148) His main point here is:
 - a. Science and religion both reflect interests but are not defined by them.
 - b. Religion, unlike science, is really about class and gender politics.
 - c. Science and religion both arose as a way for the rich to control the poor.
 - d. Science is about history. Religion is about story.
5. Again.... what is an *ad hoc* hypothesis? (148) Why are they important?
6. What does “intersubjective” mean? (149)
7. Roughly speaking, what does Barbour mean by objectivity
8. Objectivity implies “reductionism” for Barbour (150) T F

9. From the standpoint of feminist critiques of religion, religion is hopelessly male biased and should be rejected on that account. (151) T F
10. According Barbour there can be no self-authenticating experience of God (153) T F
11. Barbour poses the problem of religious pluralism. Roughly speaking, what is this problem? (154-157)
12. In his conclusion to chapter six, Barbour discusses religious traditions in terms of their, 1) agreement with data, 2) coherence, 3) scope, and 4) fertility. (158 - 159) Barbour's conclusion is that religion is as scientific as science when it comes to these criteria for good theory making. T F
13. The author of this weeks SLP article is:
- William James
 - Ian Barbour
 - Norman Malcolm
 - Aristotle