Write a short essay (not more than 3 pages typewritten, about 750 words) on any of the following topics. You do not have space for much text so concentrate on ideas and not on biography. Feel free to consult the web as well as the library; give footnotes and complete references. Please go beyond Wikipedia!

(1) Consider one or two of the following Pre-Socratic philosophers. Not all of these following made direct statements about cosmology (the structure of the heavens), but they made contributions to our understanding of reality. They tried to answer questions concerning the relationship between things that change and things that do not change. They considered the problem of being and becoming, of permanence and mutability, perhaps of eternity and time. These concepts clearly have cosmological implications. Thus, link your discussions to their astronomical implications. If you write on more than one person compare and contrast their responses to these problems.

- Thales of Miletus
- Heraclitus
- Parmenides and Zeno
- Pythagoras
- The atomists Leucippus, Democritus and Epicurus

(2) Harrison writes, “Three great cosmic systems – Epicureanism, Aristotelianism and Stoicism – dominated the Hellenic world and survive to this day imprinted in the cultures of modern societies.” Compare briefly these systems and comment on Harrison’s statement.

(3) What is Plato’s allegory of the cave? How does it explain Plato’s approach to the cosmological problem? The natural philosophy of both Plato and Aristotle is teleological, that is it is a search for purpose and not cause. From the cave to cosmology, show how purpose permeated Plato’s processes.

(4) “All other things being equal, the preferred universe explains the observed world with the fewest and simplest ideas,” Harrison. This is an expression of Ockham’s razor. What is Ockham’s razor, and how would you apply it to the discussions and readings we have followed?
(5) How did the atomist philosophy satisfy both the idea of a permanent reality, as required by Parmenides, and also enable the changing reality of the senses, the permanent flux as demanded by Heraclitus? Why were Aristotelians and others loath to accept this description of nature?