AP European History

Sample Student Responses and Scoring Commentary

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AP® EUROPEAN HISTORY 2017 SCORING GUIDELINES

Short Answer Question 4

0-3 points

Score 3

Response accomplishes all three tasks set by the question.

Score 2

Response accomplishes **two** of the tasks set by the question.

Score 1

Response accomplishes **one** of the tasks set by the question.

Score 0

Response accomplishes **none** of the tasks set by the question.

Score NR

Is completely blank

Scoring Guide

- a) One point for analyzing one way in which the Kepler quote reflects traditional views of the cosmos.
- b) One point for analyzing one way in which the Kepler quote challenges traditional views of the cosmos.
- c) One point for explaining how one example of a scientific discovery led to challenges to traditional views of the cosmos.

Scoring Notes

For parts (a) and (b) it is essential that the response engages the passage.

Acceptable responses for part (a) (not an exhaustive list):

- Points out that God created the universe.
- Notes that the earth is at the center of the universe.
- Mentions that the creation of the universe is part of a divine plan, following ideas expressed in the Bible (Old Testament).
- Mentioning that part of the passage is in tune with Christianity more generally will not suffice here. The response <u>must</u> address views of the <u>cosmos</u>.

Acceptable responses for part (b) (not an exhaustive list):

- Mentions the existence of moons orbiting around Jupiter (which calls into question the geocentric model, since everything in the cosmos does not revolve around the earth)
- Explains that the earth is no longer at the center of the universe and that there is more to the universe than man's creation
- Argues that the cosmos is more complicated and complex than traditionally believed (reference again to Jupiter's moons, sun spots, etc.)

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Short Answer Question 4 (continued)

- Raises the possibility of intelligent beings on other "Globes," which contradicts the notion that humans on earth are the only form of intelligent life in the universe.
- Again, the responses to this question must explain how the passage challenges traditional views of the cosmos. It is thus about science, and not about epistemology (ways of knowing, ways of thinking).

Acceptable responses for part (c) (not an exhaustive list):

This question asks for explanations of scientific <u>discovery</u> and its consequences for perspectives on <u>nature</u>. This is also not a question about ways of knowing. So, simply referring to Bacon, Descartes, or similar individuals, arguing that they encouraged people to question church teaching, to inquire directly into how nature worked rather than taking statements on faith, will not suffice to earn a point for part (c).

- That said, we have accepted the "discovery" of the heliocentric model (by Copernicus) and its popularization (by Galileo, and others) as a fundamental challenge to traditional views about nature that are embedded in the Ptolemaic geocentric model.
- Reference to Kepler's and Galileo's work on celestial orbits (they are not perfect circles ellipses in fact; they are also not fully regular they "wobble"), which contradict traditional views of planets traveling on perfectly circular orbits
- Referencing Newton's work on gravity and laws of motion, which challenged traditional views of
 nature in a number of ways, including further discrediting the notion of geocentrism and
 demystifying nature by demonstrating that it is knowable through rational inquiry.
- Explains how Harvey's discovery of the circulation of blood challenges prevailing understanding of the human body's functioning
- Notes that the "discovery" of the telescope permits humans to directly observe and thus question the organization and functioning of the universe (it is thus not simply a matter of following biblical or church teaching on the heavens)

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Write your answer to SECTION I: PART B, QUESTION 4 on this page only.
a) The provided passage reflects traditional views of the cosmus
in that it accepts that Good created the universe and
everything inside of it. Whileas later movements
preferred the explanation that the universe come into
being by other means such as wolution or the Big Bang Theory,
this passage accepts Gool's underjuble handinork in
the creation and experie of the cosmos as the most
probable explanation.
b) The provided passage questions traditional views of the cooking
in that it advicates the histence of life baan other planets.
traditionally Catholics held that humans were the only
intelligent life in the universe, but Kepler calls into question
the logic of that statement water oracop
C) The discovery of the movement of the planets by
Mepler and Galileo also challenged traditional views
of nature. It was discovered that planets or sited the sun
in ellopsis, not perfect circles, and that they moved
at different speeds. This undermined the belief of the
cas mus was made upof "treavenly spheres" created by
God in perfection. Previously, it was heldto betweethat
plement moved at the same speed in purfect aralants wish
holding with Greek views of the universe Star This new
holding with Greek VIEWS OF the universe of this new discovery undermined the alleged perfect creation of the wile is by Cook.

Write your answer to SECTION I: PART B, QUESTION 4 on this page only.
This refrects traditional views of the costnes because kepter refor all or the
things on Earth mule by God, Ellandry standlar basis of lander creationist Heavy
Supported by He Church and by the Bible, God is not below greathered within
this statement as texill be inthe Entures
On the other hand All's thinklesses the tradional views of the cosmos by
stotens telloscentric theories as apossed to governtil thurses supported by
He which and Ha 81612. It was common wars forth dry in the school community
Fint the Forth resolves would the sun of this point in time.
The Ideas of evolution chatteged the churches in Und oct Hat now was
ruck in the image of God. Charles Parum and his theory of Evolution
Says the applite, that man was evolved onen central from more primthre
animals such as montage or ages Foris upset the ehmen's Ideals and fed
te fotore reform

Write your answer to SHORT-ANSWER QUESTION 4 on this page only.

- a) They still mantain the thought that Good 15 the creator of the world, expressed as "vaviety of works and intention" of God". Religion and its belief on God still has a great impact on thoughts of interectually.
- b) They no longer support the geocentric theory, where they throught Bartho was the center of the universe. With support of observations of space (Grallifeoi) telescope etc) They aevelop heliocentic theory where sun is the centre of the universe and that there are planets other than Farth.
- c) Newton's (aw of motion and law of growthatmal force challenged the traditional trews of nature. They originally thought the god is the controller of the nature, but Newton scientifically proved that force exists that allows all the motions of object to happen. It led to Derst beliefs where they thought Good doesn't play a role in natural favority even though he still is a creekly of unineval.

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Short Answer Question 4

Overview

Responses were expected to demonstrate the ability to show how a particular historical source is representative of general changes and continuities in a given time period. Specifically, responses were expected to demonstrate an understanding of how the quote from Kepler was typical of the "new science" of the sixteenth and seventeenth centuries, in that it shows how traditional sources of authority coexisted with scientific methods and reason.

Sample: 4A Score: 3

The response to part a) earned 1 point by explaining how the quote reflects the belief that "God created the universe and everything inside of it." The response to part b) earned 1 point by noting that Kepler's raising of the possibility of the existence of life outside earth challenged the traditional view that humans were the only intelligent life. The response to part c) earned 1 point by noting the discovery of the elliptical orbits of the planets by Kepler and Galileo, which challenged the idea of planets moving in perfect circular orbits.

Sample: 4B Score: 2

The response to part a) earned 1 point by stating that the belief that all things were created by God was in keeping with the views affirmed "by the Church and by the Bible." The response to part c) earned 1 point by mentioning heliocentrism as a theory opposed to the geocentric theories supported by church authorities. Note that this part of the response is labeled as a response to part b), but it was credited as a correct response to part c). The intended response to part c) is off-topic, since Darwin was not a figure of the Scientific Revolution, and it earned no credit

Sample: 4C Score: 1

The response to part a) did not earn a point because the reference to God as the "creator of the world" is not a sufficient discussion of traditional views. The response to part b) did not earn a point because the mention of geocentrism and heliocentrism is not referenced in the passage and is not sufficiently developed. The response to part c) earned 1 point by discussing how Newton's development of the laws of motion and gravity challenged the concept of God as in control of natural forces.