

ANSWERS AND RATIONALE: LOGICAL REASONING QUESTIONS – SAMPLE SET FOR MAY 24, 2020

1.1 Answer: (b)

Rationale:

The correct answer is (b) – if some scientific theories were presented in a simpler manner, more people would understand them. The author says “most people believe that real science is too difficult and complicated for them to understand”, and that “most people can understand and appreciate the basic ideas if they are presented in a clear way without equations”; both these statements are addressed in option (b). Option (a) directly contradicts the author’s statement that “the world would soon grind to a halt if we all tried to do theoretical physics”, and so, it cannot be the correct answer. Option (c) contradicts the author’s statements at the beginning of the passage, and so, it cannot be the correct answer. There is nothing in the passage to support option (d), and so, it cannot be the correct answer.

1.2 Answer: (c)

Rationale:

The correct answer is (c) – they are based on irrational or supernatural ideas, and have replaced old myths about how the world came to be. The author talks about how old ‘creation accounts’ seem less relevant and credible nowadays, and how science fiction books and futuristic television series, which the author thinks are “superstitions”, have replaced them. There is nothing in the passage to support either option (a) or option (d), and so, neither can be the correct answer. Option (b) contradicts the author’s opinion that such books and television series are “superstitions”, and so, it cannot be the correct answer.

1.3 Answer: (a)

Rationale:

The correct answer is (a) - she should simplify the language in the essay, and avoid using equations. In the third paragraph of the passage, the author says that most people would understand scientific ideas if “they are presented in a clear way without equations”. Since option (b) directly contradicts this statement, it cannot be the correct answer. While adding illustrations may make the essay “clearer”, option (c) does not address the author’s point about removing equations from the presentation of scientific ideas, and so, option (c) cannot be the correct answer. There is nothing in the passage to support option (d), and so, it cannot be the correct answer.

1.4 Answer: (a)

Rationale:

The correct answer is (a) – most people are only interested in things of immediate concern to them; they do not care about larger issues. The author says that most people are interested in the answers to big questions; that he has, as a scientist, tried to answer such questions; and that most people would be able to understand and appreciate such ideas if they were presented in a simple manner. If the statement in option (a) were true, it would contradict the author’s premise that most people are interested in answers to the big questions, and so, it is the correct answer. Since option (b) supports the author’s ideas about how scientific ideas should be presented, it cannot be the correct answer. Given this, neither option (c) nor option (d) can be the correct answer.

1.5 Answer: (b)

Rationale:

The correct answer is (b) – before we saw the Earth from space, humanity had never seen itself as a whole. If this statement were true, it would provide strong support to the author’s statements on the

effect that seeing the Earth from space had on humanity, and which he describes in the last three sentences of the passage. If option (a) were true, it would mean that seeing the Earth from space did not alter how humanity saw ourselves, and so, would not support the author's description of the perspective the space age has given humanity of ourselves; therefore, option (a) cannot be the correct answer. Option (c) contradicts the author's description of the effect that seeing the Earth from space had on humanity, and so, it cannot be the correct answer. The author says that the image of the Earth seen from space had a 'compelling' message, and humanity sees the 'unity' among ourselves in that image; given this, option (d) cannot be the correct answer, since it contradicts the author's statements.
