

ENGLISH LANGUAGE QUESTIONS

Each set of questions in this section is based on a single passage. Please answer each question on the basis of what is stated or implied in the corresponding passage. In some instances, more than one option may be the answer to the question; in such a case, please choose the option that most accurately and comprehensively answers the question.

1.

The people of India are also diverse in appearance, providing visual testimony to mixture. A stroll down a street in any Indian city makes it clear how diverse Indians are. Skin shades range from dark to pale. Some people have racial features like Europeans, others closer to Chinese. It is tempting to think that these differences reflect a collision of peoples who mixed at some point in the past, with different proportions of mixture in different groups living today. But it is also possible to overinterpret physical appearances, as it is known that appearances can also reflect environment and diet.

The first genetic work in India gave seemingly contradictory results. Researchers studying mitochondrial DNA, always passed down from mothers, found that the vast majority of mitochondrial DNA in Indians was unique to the subcontinent, and they estimated that the Indian mitochondrial DNA types only shared common ancestry with ones predominant outside South Asia many tens of thousands of years ago. This suggested that on the maternal line, Indian ancestors had been largely isolated within the subcontinent for a long time, without mixing with neighbouring populations to the west, east, or north. In contrast, a good fraction of Y chromosomes in India, passed from father to son, showed closer relatedness to West Eurasians – Europeans, central Asians, and Near Easterners – suggesting mixture.

Some historians of India have thrown up their hands and discounted genetic information due to these apparently conflicting findings. The situation has not been helped by the fact that geneticists do not have formal training in archaeology, anthropology, and linguistics – the fields that have dominated the study of human prehistory – and are prone to make elementary mistakes or to be tripped up by known fallacies when summarising findings from those fields. But it is foolhardy to ignore genetics. We geneticists may be the barbarians coming late to the study of the human past, but it is always a bad idea to ignore barbarians. [1] We have access to a type of data that no one has had before, and we are wielding these data to address previously unapproachable questions about who ancient peoples were. [1]

[Extracted, with edits and revisions, from *Who We Are and How We Got Here: Ancient DNA and the New Science of the Human Past*, by David Reich, Oxford University Press, 2018.]

1.1 Why does the author say that “it is... possible to overinterpret physical appearances”?

- (a) Since people often disguise themselves in public.
- (b) Since people often undergo plastic surgery to alter their appearance.
- (c) Since physical appearances can be affected by factors such as one’s surroundings and food habits, in addition to genetic mixtures.
- (d) Since Indians as a group have never mixed with other groups in the past.

(Answer: (c))

Rationale:

The correct answer is (c) – since physical appearances can be affected by factors such as one’s surroundings and food habits, in addition to genetic mixtures. The author begins the passage by talking about how there is a diversity in the physical appearance of Indians, suggesting some mixture in the past, and ends the first paragraph by saying that environment and diet can also affect physical appearances. The fact that such mixture relates to genetics is clear from the later paragraphs of the passage. Given all these, option (c) is the only possible correct answer. There is nothing in the passage to support either option (a) or option (b), and so, neither can be the correct answer. Whether or not Indians have mixed with others in the past is,

according to the passage, something that has led to a lot of confusion, and the author does not offer a clear answer to this in the passage; therefore, option (d) cannot be the correct answer.

1.2 Which of the following most accurately describes the results of the first genetic work done in India?

- (a) Results relating to the maternal line suggested that Indian ancestors had been isolated for a long time, but results relating to the paternal line suggested mixture with West Eurasians.
- (b) Results relating to the paternal line suggested that Indian ancestors had been isolated for a long time, but results relating to the maternal line suggested mixture with West Eurasians.
- (c) The results were lost in a fire, and could not be interpreted.
- (d) The results showed that Indian historians have not received formal training in archaeology, anthropology, and linguistics.

(Answer: (a))

Rationale:

The correct answer is (a) - results relating to the maternal line suggested that Indian ancestors had been isolated for a long time, but results relating to the paternal line suggested mixture with West Eurasians. This is set out clearly in the second paragraph of the passage (the father to son line can also be called the 'paternal' line). Since option (b) directly contradicts this, it is wrong, and cannot be the correct answer. There is nothing in the passage to support option (c), and so, it cannot be the correct answer. The author says that geneticists do not have formal training in the areas mentioned in option (d); as such, the author's statement does not relate to Indian historians, and so, option (d) cannot be the correct answer.

1.3 What does the expression 'to throw up one's hands' mean?

- (a) To volunteer for a difficult task.
- (b) To conduct deep genetic research.
- (c) To cheer on loudly with vigorous hand waves.
- (d) To give up in annoyance.

(Answer: (d))

1.4 In what context does the author say that it is 'always a bad idea to ignore barbarians'?

- (a) Barbarians often have access to knowledge passed down verbally from one generation to the other, and such knowledge may hold the key to fighting modern illnesses.
- (b) Geneticists have access to data that others do not, and while they may have started studying the human past only recently, it would be foolish to ignore them.
- (c) Barbarians can conduct sneak attacks on cities and other centres of civilization, and so, one should always ensure the armed forces are vigilant against them.
- (d) Anthropologists and linguists can learn a lot from studying barbarian practices, and so, they should study them closely to advance their knowledge.

(Answer: (b))

Rationale:

The correct answer is (b) – geneticists have access to data that others do not, and while they may have started studying the human past only recently, it would be foolish to ignore them. This is apparent from the last three sentences of the passage: the author says it would be 'foolhardy' to ignore geneticists, that while geneticists may have only recently come to study the human past, they have access to a type of data that no one else has had before, and that they are using this data to address questions that had previously been unapproachable. All these points are captured in option (b). There is nothing in the passage to support any of the other options, and so, none of them can be the correct answer.

1.5 Which of the following is true about the sentence enclosed within '[1]' in the passage above?

- (a) There is a grammatical error in the portion of the sentence which reads '...wielding these data...'; 'these' should be replaced with 'this'.
- (b) There is a spelling error in the portion of the sentence which reads '...wielding these data...'; the word 'data' should be spelt 'datum' here.
- (c) There is a spelling error in the portion of the sentence which reads '...who ancient peoples were...'; the word 'peoples' should be spelt 'people' here.
- (d) None of the above.

(Answer: (d))
