

PASSAGE 1

Recent studies of sediment in the North Atlantic's deep waters reveal possible cyclical patterns in the history of Earth's climate. The rock fragments in these sediments are too large to have been transported there by ocean currents, they must have reached their present locations by traveling in large icebergs that floated long distance from their point of origin before melting. Geologist Gerard Bond noticed that some of the sediment grains were stained with iron oxide, evidence that they originated in locales where glaciers had overrun outcrops of red sandstone. Bond's detailed analysis of deep-water sediment cores showed changes in the mix of sediment sources over time: the proportion of these red-stained grains fluctuated back and forth from lows of 5 percent to highs of about 17 percent, and these fluctuations occurred in a nearly regular 1,500-year cycle.

Bond hypothesized that the alternation cycles might be evidence of changes in ocean-water circulation and therefore in Earth's climate. He knew that the sources of the red-stained grains were generally closer to the North Pole than were the places yielding a high proportion of "clean" grains. At certain times, apparently, more icebergs from the Arctic Ocean in the far north were traveling south well into the North Atlantic before melting and shedding their sediment.

Ocean waters are constantly moving. And water temperature is both a cause and an effect of this movement. As water cools, it becomes denser and sinks to the ocean's bottom. During some periods, the bottom layer of the world's oceans comes from cold, dense water sinking in the far North Atlantic. This causes the warm surface waters of the Gulf Stream to be pulled northward. Bond realized that during such periods, the influx of these warm surface waters into northern regions could cause a large proportion of the icebergs that bear red grains to melt before traveling very far into the North Atlantic. But sometimes the ocean's dynamic changes, and waters from the Gulf stream do not travel northward in this way. During these periods, surface waters in the North Atlantic would generally be colder, permitting icebergs bearing red-stained grains to travel farther south in the North Atlantic before melting and depositing their sediment.

The onset of the so-called Little Ice Age (1300-1860), which followed the Medieval Warm Period of the eighth through tenth centuries, may represent the most recent time that the ocean's dynamic changed in this way. If ongoing climate-history studies support Bond's hypothesis of 1,500-year cycles, scientists may establish a major natural rhythm in Earth's temperatures that could then be extrapolated into the future. Because the midpoint of the Medieval Warm Period was about AD.850, an extension of Bond's cycles would place the midpoint of the next warm interval in the twenty-fourth century.

Q1) According to the passage, which of the following is true of the rock fragments contained in the sediments studied by Bond?

- A) the majority of them are composed of red sandstone.
- B) they must have reached their present location over 1,500 years ago.
- C) they were carried by icebergs to their present location.
- D) Most of them were carried to their present location during a warm period in Earth's climatic history.
- E) They are unlikely to have been carried to their present location during the Little Ice Age.

Q2) In the final paragraph of the passage, the author is concerned primarily with

- A) answering a question about Earth's climatic history
- B) pointing out a potential flaw in Bond's hypothesis
- C) suggesting a new focus for the study of ocean sediments
- D) tracing the general history of Earth's climate
- E) discussing possible implications of Bond's hypothesis.

Q3) According to the passage, Bond hypothesized that which of the following circumstances would allow red-stained sediment grains to reach more southerly latitudes?

- A) Warm waters being pulled northward from the Gulf Stream
- B) Climatic conditions causing icebergs to melt relatively quickly
- C) Icebergs containing a higher proportion of iron oxide than usual
- D) The formation of more icebergs than usual in the far north
- E) the presence of cold surface waters in the North Atlantic

Q4) It can be inferred from the passage that in sediment cores from the North Atlantic's deep waters, the portions that correspond to the Little Ice Age

- A) differ very little in composition from the portions that correspond to the Medieval Warm Period.
- B) fluctuate significantly in composition between the portions corresponding to the 1300s and the portions corresponding to the 1700s
- C) would be likely to contain a proportion of red-stained grains closer to 17 percent than to 5 percent.
- D) show a much higher proportion of red-stained grains in cores extracted from the far north of the North Atlantic than in cores extracted from further south
- E) were formed in part as a result of Gulf Stream waters having been pulled northward

ANSWERS

QUESTION 1- C

QUESTION 2- E

QUESTION 3- E

QUESTION 4- C

PASSAGE 2

Inspired by earlier artists but developed as a genre in its own right in the last few decades of the twentieth century, installation art is now recognized by academic institutions. It has long been seen as an example of 'anti-establishment' artwork, since it is typically created in public spaces and involves the use of 'everyday' materials, unlike conventional artwork that, even though usually meant for public consumption, is created in a private space. Installation art in contemporary times also uses emerging forms of artistic representation such as videos, social networks and aspects of virtual reality. This form of art, like traditional art, can be either realistic or abstract in its representation of reality.

Straddling the boundaries between sculpture and painting, installation art gives more priority to the intention of the artist rather than the physical form or structure of the art: its purpose is often to relay a specific message through the medium chosen by the artist. Artists such as 'Banksy', known only by his pseudonym and famous for his street art that is meant as a caricature of political institutions, often use their art as a medium of socio-political activism.

From the audience's perspective, installation art also gives an unprecedented amount of importance to the viewer's subjective perception of the artwork. The intention of the artist is therefore supplemented by the way in which viewers perceive the artwork. This vision of art overturns the traditional Platonic view of image theory, which gives the form and intention of the artwork far more predominance than external perspectives on the work. There are no 'ideal' forms in the creation and exhibition of installation art. This attribute is as it should be: art, after all, requires both an artist and an audience in order to flourish, and nowhere is this creator-viewer relationship more prominent than in the study and appreciation of installation art, which embraces the flawed and fragmented nature of reality.

Q1. Which of the following CANNOT be inferred from the passage?

- A. Installation art as a separate genre of art is not more than a century old.
- B. Most artists from the genre of installation art use their art form as a medium of socio-political activism.
- C. Installation art contains elements of both sculpture and painting.
- D. It is unlikely that in the past, installation art was studied in school by students of art.
- E. Installation art is a less rigid form of art, laying out no guidelines for how art is to be created or viewed.

Q2. The author's reference to Banksy serves primarily to

- A. give an example of contemporary artists who often use pseudonyms.
- B. establish that contemporary art often criticizes political organizations.
- C. prove that caricatures can also be categorized as legitimate art.
- D. illustrate how street art forms a well-known part of installation art.
- E. to exemplify the use of installation art to convey messages

Q3. According to the author, which of the following is a feature of installation art but not of traditional art?

- A. sticks to ideal forms in the creation of art
- B. not created in a private space
- C. follows the Platonic model of image theory
- D. can be either realistic or abstract
- E. is used for social activism

Q4. Which of the following is the primary purpose of the passage?

- A. To argue that a certain art genre, though different from traditional art, should get the same status as most other art forms
- B. To analyze an art genre while differentiating it from conventional art
- C. To discuss the features of an art form that is by far the most unconventional of all art genres
- D. To trace the history of an art form that is a departure from traditional art
- E. To describe the relevance of the perspectives of the viewers of art who are given special importance by one art genre

ANSWERS

QUESTION 1- B

QUESTION 2- E

QUESTION 3 - B

QUESTION 4- B

PASSAGE 3

Defined as an aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production, plus and taxes, and minus any subsidies, on products not included in the value of their outputs, GDP is a basic standard to measure the standard of living in a country and in turn the economic well-being of the population. However, critics are of the opinion that national GDP figures do not reveal significant regional variations in output, employment and incomes per head of population. They justly contend that within each region there are areas of relative prosperity contrasting with unemployment black-spots and deep-rooted social and economic deprivation and that GDP figures on their own do not represent the distribution of income and the uneven spread of financial wealth.

The idea that rising national prosperity can still be accompanied by rising relative poverty is rightly at the heart of the criticism meted out for using GDP as a measure of the general well-being of the population of a region. Changes such as increase in pollution and other negative externalities can accompany rising national output. Also, output figures reflect nothing but little on the quality of goods and services produced. Not to mention that the quality of life for many could be severely diminished if the increase in national output has been achieved at the expense of the leisure time of the workers working longer than usual hours.

Q1.The author is primarily concerned with

- A. defining a concept while presenting two sides of an argument
- B. presenting the merits and demerits of a phenomenon
- C. describing the criticism meted out to the use of a parameter for a specific purpose
- D. criticizing a particular usage of a concept
- E. evaluating a phenomenon on the basis of certain unconventional, non-economic parameters

Q2.Which of the following can be inferred from the passage?

- A. In countries where there is little disparity in the distribution of wealth, GDP is the best measure of standard of living.
- B. Increase in pollution and other negative changes negate any increase in national output.
- C. An increase in the overall goods produced by a nation does not on its own signify a corresponding increase in the quality of these goods.
- D. The quality of life suffers when workers work for long hours.
- E. A country with a high GDP is very likely to have uneven spread of financial wealth.

3.Which of the following is mentioned in the passage?

- A. Unemployment black spots and social deprivation are two of the biggest threats to any economy.
- B. An increase in national prosperity is most likely accompanied by an increase in relative poverty.
- C. Even when there is an equal distribution of wealth, GDP fails as a measure of the income of a country.
- D. There is an inverse relationship between an increase in the output of goods in a country and the quality of this output.
- E. The usage of GDP as a measure of standard of living is linked to measuring the economic health of the population.

4. Which of the following most aptly describes the function of the first paragraph?

- A. To define and criticize the basis of an economic term
- B. To criticize the effort to ignore the marginalized sections in a society by using a particular measure
- C. To evaluate a particular term that is little understood by most countries
- D. To introduce criticism against a particular use of a concept
- E. To discuss measures that can increase the relevance of a particular concept

ANSWERS

QUESTION 1 - D

QUESTION 2 - C

QUESTION 3 - E

QUESTION 4 - D

PASSAGE 4

Frazier and Mosteller assert that medical research could be improved by a move toward larger, simpler clinical trials of medical treatments. Currently, researchers collect far more background information on patients than is strictly required for their trials – substantially more than hospitals collect – thereby escalating costs of data collection, storage, and analysis. Although limiting information collection could increase the risk that researchers will overlook facts relevant to a study, Frazier and Mosteller contend that such risk, never entirely eliminable from research, would still be small in most studies. Only in research on entirely new treatments are new and unexpected variables likely to arise.

Frazier and Mosteller propose not only that researchers limit data collection on individual patients but also that researchers enroll more patients in clinical trials, thereby obtaining a more representative sample of the total population with the disease under study. **Often researchers restrict study participation to patients who have no ailments besides those being studied.** A treatment judged successful under these ideal conditions can then be evaluated under normal conditions. Broadening the range of trial participants, Frazier and Mosteller suggest, would enable researchers to evaluate a treatment's efficacy for diverse patients under various conditions and to evaluate its effectiveness for different patient subgroups. For example, the value of a treatment for a progressive disease may vary according to a patient's stage of disease. **Patients' ages** may also affect a treatment's efficacy.

1. The passage is primarily concerned with
 - (A) identifying two practices in medical research that may affect the accuracy of clinical trials
 - (B) describing aspects of medical research that tend to drive up costs
 - (C) evaluating an analysis of certain shortcomings of current medical research practices
 - (D) describing proposed changes to the ways in which clinical trials are conducted
 - (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change

2. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 20 - 22 [**Often researchers restrict study participation to patients who have no ailments besides those being studied.**]?
 - (A) Its findings might have limited applicability.
 - (B) It would be prohibitively expensive in its attempt to create ideal conditions.
 - (C) It would be the best way to sample the total population of potential patients.
 - (D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.
 - (E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

3. It can be inferred from the passage that a study limited to patients like those mentioned in lines 20-22 [Often researchers restrict study participation to patients who have no ailments besides those being studied.] would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?
- (A) It would yield more data and its findings would be more accurate.
 - (B) It would cost less in the long term, though it would be more expensive in its initial stages.
 - (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.
 - (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
 - (E) It would enable researchers to assess the value of an experimental treatment for the average patient.
4. The author mentions patients' ages primarily in order to
- A. identify the most critical variable differentiating subgroups of patients
 - B. cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
 - C. indicate why progressive diseases may require different treatments at different stages
 - D. illustrate a point about the value of enrolling a wide range of patients in clinical trials
 - E. substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials
5. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?
- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.
 - (B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.
 - (C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.
 - (D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.
 - (E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

ANSWERS

QUESTION1-D

QUESTION2-A

QUESTION3-C

QUESTION4-D

QUESTION1-A

PASSAGE 5

The generally agreed upon definition of hallucinations is that they are actually perceptions in the absence of an external stimulus of the relevant sensory organ. These perceptions are accompanied by a persuasive sense of their reality. Hallucinations are not to be confused with illusions, which are misinterpretations of actual external stimuli. In other words, in the case of a hallucination, for a person hallucinating a sound for instance, the sound actually exists, but in reality it exists nowhere but in the person's mind; however, in the case of an illusion the stimulus that caused the illusion does exist in the real world. Although hallucinations are a key diagnostic feature of schizophrenia, a mental disorder that distorts the way a person thinks, acts, expresses emotions, perceives reality, and relates to others, they can occur in individuals devoid of any physical or mental disorder.

In order to understand why people hallucinate, some researchers have been studying people suffering from what is called the phantom limb syndrome, a condition in which people who have undergone amputation feel as though the missing body part were still very much present and attached to the body; for instance, it is not uncommon for a person who has lost a leg to unknowingly try to stand and walk without any external support after their surgery. One of the two main hypotheses behind the phantom limb syndrome offers an explanation that is possibly applicable to why people hallucinate in certain circumstances. As per this theory, the brain is programmed for a body where every body part is intact and in the appropriate place. Accordingly, when some signals go missing, because of the missing body part, the brain compensates for the lack of sensory input by triggering spontaneous nerve cell activity. Although this theory has limited applicability for understanding why patients such as those of schizophrenia hallucinate in conditions not deemed out of the ordinary, it is a step forward in understanding why people experience visual or auditory hallucinations when they are placed in solitary confinements; after all the different areas of the brain that were used to receiving signals through the senses start to stimulate themselves in to action.

1. Each of the following can be inferred from the passage EXCEPT
 - A. Solitary confinement is a condition that it is not necessarily deemed out of the ordinary.
 - B. An illusion follows an actual stimulus whereas a hallucination does not.
 - C. On detecting that a patient is experiencing hallucinations, a psychiatrist is likely to check the patient for schizophrenia.
 - D. When a body part is amputated, the brain stops receiving some of the signals it usually does.
 - E. The applicability of phantom limb syndrome is limited to some instances of hallucinations.
2. The author is primarily concerned with
 - A. Differentiating hallucinations from other forms of disorders and discussing the relevance of a theory.
 - B. Discussing the relevance of a proposed hypothesis while defining hallucination and differentiating it from another phenomenon.
 - C. Explaining why a theory does not provide full insight into the circumstances leading up to hallucinations.
 - D. Defining hallucination by citing a unanimously agreed upon definition and providing insight into why hallucinations take place in circumstances not regarded out of the ordinary.
 - E. Elaborating on a theory that deals with a phenomenon that is triggered by circumstances not dissimilar to hallucinations in certain conditions.
3. Which of the following is mentioned in the passage?
 - A. Hallucinations are caused by chemical imbalances in the brain, imbalances typical of people with mental disorders.
 - B. Hallucinations cannot be experienced at the same time as illusions.
 - C. A person suffering from the phantom limb syndrome is likely to suffer from hallucination at some point during the condition.
 - D. Auditory and visual hallucinations are the two most common types of hallucinations

experienced by people in solitary confinement.

E. An illusion happens after there has been a real external trigger for the same.

4. Which of the following most aptly describes the function of the first paragraph?

A. To elaborate a concept while differentiating it from other related concepts.

B. To define a phenomenon while discarding a common misunderstanding about its central feature.

C. To explain a key difference between two concepts.

D. To introduce a phenomenon while differentiating it from another.

E. To initiate a discussion about a concept that is normally mistaken for another phenomenon.

ANSWERS

QUESTION 1-A

QUESTION 2-B

QUESTION 3-E

QUESTION 4-D