〔I〕次の英文を読んで後に続く質問 1〜12 にもっとも適する答えを選びなさい。

Throughout the entire world of life, evolution has brought about only two types of reproduction-asexual and sexual. Asexual reproduction does not require a mate and is less complicated than sexual reproduction. It is used by simple life forms, such as bacteria; complex one-celled organisms, such as amoebas and diatoms; certain worms, such as flatworms; fungi; and some plants. In asexual reproduction, one parent transmits all of its genetic information to the offspring, and the offspring is therefore identical to the parent.

Asexual reproduction typically is a rapid and reliable method of reproduction. It is limited, however, because the genetic uniformity in the offspring makes them all equally susceptible to a change in the environment. If a new disease, a new predator, or a climate change is lethal to one individual, it is lethal to all genetically identical organisms. Such changes can effectively wipe out entire populations of genetically identical organisms.

In contrast to asexual reproduction, sexual reproduction---the predominant form of reproduction among plants, animals, and most other organisms---requires two parents. Each parent creates sex cells, or gametes, that contain half the parent's genetic information. Human sex cells---sperm and eggs---contain 23 single, unpaired chromosomes rather than the 23 paired chromosomes found in all other body cells, or somatic cells. When egg and sperm unite in the process called fertilization, they form one cell that contains 23 pairs of chromosomes, the normal number for human body cells. The cell develops into a child that has a mixture of genetic information from both parents. As a result, the child is similar to each of the parents but not identical to either of them. This genetic diversity that results from sexual reproduction enables populations to withstand changing environments through evolution.

1. According to the text, asexual reproduction
   (a) requires two parents
   (b) creates offspring which genetically differ from their parents
   (c) results in less genetic uniformity
   (d) is simpler than sexual reproduction

2. Which of the following is most likely to reproduce asexually?
   (a) A mushroom
   (b) An insect
   (c) A primate
   (d) A complex multi-cellular organism

3. The word "typically" in line 8 is closest in meaning to
   (a) always
   (b) preferably
   (c) characteristically
   (d) naturally

4. What is the main disadvantage of asexual reproduction?
   (a) It is endangered by environmental changes.
   (b) It is slow.
   (c) It transmits genetic information to the offspring.
   (d) It is reliable.

5. The word "them" in line 10 refers to
   (a) genetic uniformity
   (b) offspring
   (c) changes in the environment
   (d) genetic information

6. The word "susceptible" in line 10 is closest in meaning to
   (a) resistant
   (b) vulnerable
   (c) dangerous
   (d) unlikely

7. The word "lethal" in line 11 is closest in meaning to
   (a) deadly
   (b) perilous
   (c) unfortunate
   (d) beneficial

8. The word "predominant" in line 14 is closest in meaning to
   (a) only
   (b) principal
   (c) unusual
   (d) strongest

9. All of the following are necessary for sexual reproduction EXCEPT
   (a) gametes
   (b) somatic cells

(c) fertilization
(d) chromosomes

10. According to the text, gametes
(a) have 23 paired chromosomes
(b) contain one parent's complete genetic information
(c) unite at fertilization
(d) are also called somatic cells

11. The word "diversity" in line 23 is closest in meaning to
(a) variation
(b) information
(c) similarity
(d) fertilization

12. The two different forms of reproduction are a result of
(a) the transmission of genetic information
(b) offspring
(c) cellular development
(d) evolution

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