토플 적중 90 READING DAY 13.

Pre-Study

1. 점수 쑥쑥 동의어

1. epitomize	
2. fuse	
3. heritage	
4. incompatible	
5. inordinate	
6. luminous	

brilliant	inheritance
exemplify	excessive
in conflict with	combine

2. 한 눈 쑥쑥 지문 정리

Act 4-3 Population Distribution

P1 population distribution 의 3 type: clumped / regular / random & 이를 결정짓는 abiotic / biotic 요소

P2 abio & bio 요소 자세히 설명: abiotic (climatic / edaphic / social) / biotic (행동)

P3 clump distrib.: group (resource 불균형 장소) ex) 사막

P4 prey & predator 각각의 clump distrib. 장점

P5 regular distrib. : compete 결과 (특히 식물)

P6 random distrib. : rare, evenly distributed 자원 (no group, separated)

Lecture Actual Test 04-3 Population Distribution

학습목표

- ◆ **지문을 미리 풀어보고, 정답 / 오답의 정확한 단서를 파악한다.**
- ◆ **특히, 오답률이 높은 문제를 철저히 분석한다. (8, 14)**

1. Actual Test 04-3 Population Distribution

P1. All species of organisms that live on Earth inhabit an area that is referred to as that species' range. The boundaries of such an area are usually fluid as individuals may occasionally stray outside their normal range, and many species migrate seasonally. Within a species' range, the distribution of individuals usually takes on one of three forms of population distribution: clumped, regular, or random. [These different types of distribution can greatly affect the population density of a species as **they** determine the number of animals that are going to be found in a given region within the species' range.] The ways in which the population is distributed are determined by various factors that are categorized as abiotic or biotic.

1. The word **they** in paragraph 1 refers to
   (A) all species of organisms
   (B) individuals within the range
   (C) population density of a species
   (D) types of distribution

P1. All species of organisms that live on Earth inhabit an area that is referred to as that species' range. The boundaries of such an area are usually fluid as individuals may occasionally stray outside their normal range, and many species migrate seasonally.

2. According to paragraph 1, the boundaries of some species' ranges are fluid due to
   (A) population density
   (B) seasonal migration
   (C) average life span
   (D) abiotic factors

3. The word **adopt** in paragraph 2 is closest in meaning to
   (A) acknowledge
   (B) embrace
   (C) concede
   (D) oblige

P2. Abiotic factors include any nonliving physical or chemical factors in the environment. These factors are broken down into three subcategories: climatic factors, edaphic factors, and social factors. Climatic factors are those that determine the atmospheric environment, and they include the availability of sunlight, humidity, temperature, and salinity. Edaphic factors are those that determine the quality of the soil in a region, consisting of the local geology, the coarseness of the soil, acidity, and air penetration. Social factors that are categorized as abiotic include water availability and land use. Biotic factors are behaviors of organisms which directly or indirectly affect other organisms.

4. What is the function of paragraph 2 as it relates to paragraph 1?
   (A) To outline the similarities and differences between biotic and abiotic factors
   (B) To provide an explanation about factors influencing population distribution
   (C) To give an example of how climatic factors affect the environment
   (D) To suggest that abiotic factors are no different from biotic factors

P3. The most common form of species distribution found in nature is clumped distribution, wherein space between individuals is minimized to form close groups that are separated from other groups of the same species. **Clumped distribution** is typically found in environments where resources are unevenly distributed. In very arid regions, where water is continuously in short supply, most species will clump together around permanent water sources called oases. In other areas where resource availability varies seasonally, ~~~. Clumped distribution is also useful in defending against predation or increasing the likelihood of capturing prey.

5. What can be inferred about **species distribution** in paragraph 3?
   (A) Animals form clumped groups with their kin.
   (B) Animals in deserts typically display clumped distribution.
   (C) Clumped distribution is found primarily amongst predators.
   (D) Water is the main factor around which animals form clumps.

P4. Prey animals often form into herds for protection through safety in numbers, and this can occur deliberately or accidentally. Many species of animals will organize into groups with the young in the center and large adults around the perimeter to deter predators. Others form what are called selfish herds, where safety is achieved by moving towards the middle of the group,

increasing that organism's chances for survival with no thought for its fellow creatures. Predatory animals also form into groups such as wolf packs and prides of lions to maximize their hunting potential against prey herds. The greater the number of hunters working in coordination, the more likely they are to catch enough of their prey to survive.

6. According to paragraph 4, what are examples of animals' survival instincts?
Click on two answers.

(A) Hunting in groups
(B) Mobbing a predator to scare it away
(C) Forming selfish herds
(D) Scattering when being hunted

P5. Conversely, the availability of resources can also have an opposite effect, maximizing the distance between individual members of a population, which results in regular or even distribution. Some species not only compete with their own population and others for resources, but they can effectively deny others from using their resources. This is particularly **apparent** in the trees which form the canopy of a forest.

P5. Their outstretched branches collect the maximum amount of sunlight possible, with only a small amount filtering through to the forest floor. This results in the widely spaced arrangement of trees that often appears to be deliberate or planned. In reality, it is the result of successful tree saplings utilizing resources more effectively than other members of their population, and discouraging the others from growing any further.

7. The word **apparent** in paragraph 5 is closest in meaning to

(A) peculiar to
(B) obsolete
(C) pertinent
(D) evident

8. According to paragraph 5, what factor causes plants to grow in a uniform pattern?

(A) Competition
(B) Distribution of sunlight
(C) Size of roots
(D) Length of branches

P6. However, there are also species whose population distribution seems to have no **inherent** logic behind it. [These organisms live in an environment where they have equal access to sufficient resources, so competition between members of the population is virtually nonexistent, and they are neither encouraged to group together nor to separate.]

(E) 핵심정보 1. organi. live in 충분한 자원, 동일 접근
(F) 2. →경쟁 거의X → group nor separate

9. The word **inherent** in paragraph 6 is closest in meaning to
(A) instructive
(B) obvious
(C) rational
(D) built-in

10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
(A) When organisms live in an environment where competition between members of the population is virtually nonexistent, they are able to share access to resources.
(B) Living in an environment in which they have no access to resources, animals have no need to group together or disperse.
(C) In an environment with access to sufficient resources, the pressure to gather together or disperse is absent because of the lack of competition.
(D) When competition for resources between members of a population is nonexistent, there is no advantage for animals to either group together or separate.

P6. However, there are also species whose population distribution seems to have no inherent logic behind it. These organisms live in an environment where they have equal access to sufficient resources, so competition between members of the population is virtually nonexistent, and they are neither encouraged to group together nor to separate. Random distribution of a population is comparatively rare because abiotic and biotic factors typically cause populations to group together or to spread out. Therefore, this pattern of distribution is typically seen in organisms whose offspring disperse randomly throughout the environment. Plants ~~~~, as do animals with little social interaction ~~~ such as shellfish or arachnids.

11. According to paragraph 6, why is random distribution not common in nature?
(A) In most environments, resources are unevenly distributed.
(B) Not many organisms disperse their offspring randomly throughout the environment.
(C) Not all members of a population have equal access to resources.
(D) Animals like arachnids are not common in nature.

12. All of the following are mentioned in the passage as specific examples of population distribution pattern EXCEPT
(A) trees
(B) felines
(C) shellfish
(D) insects

13. Where would the sentence best fit?
→ However, most organisms live within one or more fairly well-defined areas throughout their lifetimes.

P1. All species of organisms that live on Earth inhabit an area that is referred to as that species' range. The boundaries of such an area are usually fluid as individuals may occasionally stray outside their normal range, and many species migrate seasonally. [■A] Within a species' range, the distribution of individuals usually takes on one of three forms of population distribution: clumped, regular, or random. [■B] These different types of distribution can greatly affect the population density of a species as they determine the number of animals that are going to be found in a given region within the species' range. [■C] The ways ~~~~ [■D]

14. Select the appropriate phrases from the answer choices and match them to the type of factors to which they relate. TWO of the answer choices will NOT be used.

[Answer choices]
(A) availability of sunlight
(B) disease
(C) coarseness of the soil
(D) temperature
(E) local geology
(F) average life span
(G) salinity

Climatic Factors
●
●
●

Edaphic Factors
●
●

P2. Climatic factors are those that determine the atmospheric environment, and they include the availability of sunlight, humidity, temperature, and salinity. Edaphic factors are those that determine the quality of the soil in a region, consisting of the local geology, the coarseness of the soil, acidity, and air penetration.

Tip!

문제 보는 순서

: 마지막 문제 먼저 확인 : Prose Summary or Category Chart
(지문 오른쪽 위 'NEXT' 버튼 이용)

* Category Chart: 5 / 7 or 7 / 9 ➔ 3점 or 4점

왜 틀려? 시간 부족 ➔ 특징 미리 Note-Taking

Prose Summary : Introductory Sentence 확인 ➔ 지문 주제 파악

1. 동의어
2. Insertion 문제의 출제 단락 / 대략적인 내용 확인