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SECTION 2
Time — 25 minutes
24 Questions

Turn to Section 2 (page 4) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

Example:

Hoping to ------- the dispute, negotiators proposed a compromise that they felt would be ------- to both labor and management.

(A) enforce . . useful
(B) end . . divisive
(C) overcome . . unattractive
(D) extend . . satisfactory
(E) resolve . . acceptable

Ⓐ Ⓑ Ⓒ Ⓓ ●

1. Women in the United States gained ------- long after Black American men did, but Black citizens had greater difficulty exercising their new voting rights.

(A) restitution (B) suffrage (C) solace
(D) initiatives (E) levies

2. Marketing firms rely heavily on ------- information: statistical data about the size, growth, and distribution of human populations.

(A) classified (B) demographic (C) conjectural
(D) qualitative (E) anecdotal

3. Electing not to stay in subordinate positions in large firms, some attorneys -------, seeking more ------- and independence elsewhere.

(A) compromise . . servility
(B) persevere . . competence
(C) acquiesce . . banality
(D) resign . . autonomy
(E) recant . . conformity

4. The kiwi bird's wings are -------: that is, they are rudiments of wings and serve no function.

(A) ostentatious (B) vestigial (C) prodigious
(D) invasive (E) kinetic

5. Because all members of this organization are idealists, they ------- any assertion that political enterprises should be purely -------.

(A) ignore . . universal
(B) criticize . . visionary
(C) condemn . . benevolent
(D) denounce . . pragmatic
(E) condone . . indulgent

6. The critic noted that the ------- tone that characterizes much of the writer's work stands in stark contrast to his gentle disposition.

(A) benign (B) somber (C) stoic
(D) conciliatory (E) strident

7. Peter was ------- without being -------: he held fast to his beliefs but avoided arguing about them with others.

(A) decisive . . philanthropic
(B) haphazard . . quarrelsome
(C) sentimental . . litigious
(D) resolute . . polemical
(E) steadfast . . acquiescent

8. African American poet Lucille Clifton writes in a notably ------- style, achieving great impact in a few unadorned words.

(A) incantatory (B) economical (C) disaffected
(D) unstinting (E) evenhanded

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The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

Questions 9-12 are based on the following passages.

Passage 1

Because chimpanzees exhibit behavior so remarkably similar to some human behavior, scientists observing them in the wild often develop a degree of empathy with the individuals being studied. In itself this is not a bad thing. Subtle communication cues among chimpanzees are more readily detected and recorded once an observer has established this empathy.

However, scientists must guard against the constant danger of automatically interpreting what they see as if chimps act from human motivations. Their observations must be as objective as possible. Intuitive interpretations may initially be based on an understanding stemming directly from empathy, but they must be tested afterward against the facts set out in the data.

Passage 2

My first day observing a community of forest chimpanzees showed me a richer and more satisfying world than I had imagined. I suddenly recognized why I, a nonscientist, or anyone should care about what happens to them: not, ultimately, because they use tools and solve problems and are intellectual beings, but because they are emotional beings, as we are, and because their emotions are so obviously similar to ours.

I was moved by the play, the adult male chasing a toddler round and round a tree, the mother nibbling her baby's toes and looking blissful, the three females playing with and adoring a single infant. They feel! That was my discovery.

9. Both passages support which generalization about wild chimpanzees?

(A) Their family structures are somewhat similar to those of humans.
(B) Their behavior often resembles that of humans.
(C) Their actions are prompted by strong psychological urges.
(D) Their facial expressions can be interpreted accurately by nonspecialists.
(E) Their reactions differ from those of other apes.

10. The primary purpose of Passage 2 is to

(A) describe a typical day's work on a scientific project
(B) report details about an attempt to train wild chimpanzees
(C) propose an alternative method of studying animal behavior
(D) convey an unexpected and memorable insight
(E) relive an unusual and fleeting experience

11. The experience described in Passage 2 most directly suggests that the statement about the "danger" (line 9, Passage 1)

(A) accurately assesses the strength of a common human impulse
(B) needlessly exaggerates the risks a person faces among wild chimpanzees
(C) appropriately warns professionals about the necessity of keeping their research current
(D) discourages overly optimistic observers from expecting to make new discoveries
(E) fails to consider the consequences of a flawed research methodology

12. The author of Passage 1 would most likely respond to lines 26-27 in Passage 2 ("They . . . discovery") by

(A) applauding the author for maintaining scientific objectivity
(B) chiding the author for not submitting findings for scientific review
(C) criticizing the author for having poorly defined research goals
(D) urging the author to rely less on observations made in the wild
(E) cautioning the author against failing to verify a conclusion

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Questions 13-24 are based on the following passage.

This passage, adapted from a 1998 book, discusses the ability of some sea creatures to emit light, a phenomenon known as bioluminescence.

Sailing at night in luminescent seas is something splendid that is not given to everyone. On a quiet night, with just enough wind to ghost along without the engine, it can be euphoric. Euphoria is worth seeking; we don't often achieve it in this rush-around world. You need a pause, or you miss it. Sitting in the cockpit on a night watch, it takes a little time to become adapted to the dark and to realize how much is going on in the sea around you. What you generally see first is a cloudy luminescence.

One source of such luminescence is an alga* called *Noctiluca*. Each of these organisms is barely a millimeter across and practically transparent, so that it is difficult to see even if you know what you are looking for. It is not much to look at if you haven't got a microscope aboard, but a more interesting question is not what *Noctiluca* looks like, flashing or quiescent, but why it bothers to flash. Isn't it suicidal to advertise your presence in this blatant way, when you are near enough invisible if you sit tight and do nothing? The answer, for the alga, is copepods, the next step up in the food chain and the most abundant small predators in the sea. Crustaceans, copepods are related to shrimps, crabs, and lobsters. But they are only three or four millimeters long—big enough to see in a bucket, if you shine a bright light and watch for their shadows, for they, too, do their best to be transparent. Copepods move in jerks, pouncing on yet smaller prey.

They don't like prey that flashes. Grab it, it explodes into light in their scratchy little arms, and they drop it. An odd bit of behavior, really, because the alga, so far as we know, doesn't taste nasty, or sting, or do anything unpleasant to the predator, and you might reasonably expect the copepod to habituate to the flashes after a few tries. But it does not, apparently, and since practically every animal that has ever been studied habituates to stimuli that repeatedly prove harmless, there must be some other explanation. The most likely possibility is that the copepod itself wishes to remain invisible. Chomp down the alga, and the unfortunate copepod would be, for a while, lit up by the glow in its gut, a sitting target for a fish or anyone else with a taste for seafood.

In some of the larger luminescent species, in which the patterns of light differ between sexes, it is a fair bet that luminescence serves as an identification signal, a means of bringing the sexes together in places that have so little light that shapes and normal, reflected colors won't do. Others use lights to attract prey, like deep-sea anglerfish, with luminous-tipped rods that wave seductively in front of cavernous mouths, invisible in the abyssal dark. Or searchlights. One outstandingly devious group of deep-sea predatory fish, *Malacosteus*, has developed a system of red searchlights that are probably invisible to everybody except themselves. Red light hardly penetrates beyond the first few meters of water, even at the sea surface, and most mid-to-deep-water marine animals have visual systems that cannot perceive red light. *Malacosteus*, one must suppose, has the jump on almost everybody around: night sights to target prey that will never even be aware that they have been spotted.

But by far the most widespread use is camouflage. Deep down, or even in shallow water at night, an animal is often invisible except as a silhouette against the feeble light filtering from above. A predator can come up from below, itself invisible to a victim in the water above it. Lights along the underside, carefully matched to the light coming from above, can destroy the silhouette. In principle, the system would work in broad daylight. Indeed, a system like this was used briefly at the beginning of the Second World War, to hide military aircraft hunting submarines. It reduced the range at which planes could be spotted from a dozen miles to around two, uncomfortably close for a submarine recharging its batteries at the surface and needing time to crash dive. But then radar became commonplace, and lights became obsolete.

*singular of "algae"

13. The passage as a whole is best characterized as

(A) a case study of an unusual type of bioluminescence
(B) a survey of popular misconceptions about the function of bioluminescence
(C) a discussion of the evolutionary origins of bioluminescence
(D) an overview of the various functions of bioluminescence in sea creatures
(E) an examination of luminescent species that use camouflage

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14. In line 2, "given" most nearly means

(A) inclined
(B) transported
(C) devoted
(D) applied
(E) granted

15. The phrase "ghost along" (line 3) primarily serves to suggest

(A) misleading appearance
(B) labored motion
(C) unexplained phenomena
(D) alarming effects
(E) silent travel

16. In line 7, "adapted" most nearly means

(A) evolved
(B) committed
(C) acclimated
(D) predisposed
(E) altered

17. The author suggests that the best answer to the "more interesting question" (line 15) is that flashing

(A) serves to deter potential predators
(B) enables *Noctiluca* to see its environment better
(C) helps *Noctiluca* attract a mate
(D) improves *Noctiluca*'s chances of finding an adequate food supply
(E) functions as a mode of communication with other algae

18. The question in lines 17-19 ("Isn't it . . . nothing?") primarily serves to

(A) reveal the scientific community's limited understanding of *Noctiluca*
(B) imply that some research on luminescence is flawed
(C) suggest that an adaptation serves no biological purpose
(D) note an apparent drawback to luminescence in *Noctiluca*
(E) indicate that luminescence can serve a variety of functions

19. In line 25, the author most likely mentions that copepods "do their best to be transparent" in order to

(A) explain why they are luminescent
(B) account for their apparent dislike of eating *Noctiluca*
(C) account for their relative abundance
(D) reinforce the point that they are more difficult to detect than are *Noctiluca*
(E) indicate what makes them so successful as predators

20. The author argues that copepods "don't like prey that flashes" (line 27) because they

(A) are confused by the lights
(B) want to avoid detection by predators
(C) rarely encounter luminescence
(D) know that luminescent animals taste bitter
(E) are temporarily blinded by the flashes

21. In line 29, the author describes the copepod's "behavior" as "odd" because it

(A) is rarely seen in aquatic animals
(B) is a rapid response to prolonged stimuli
(C) seems to defy typical response patterns in animals
(D) does not appear to help the organism locate food
(E) occurs sporadically rather than regularly

22. The expression "fair bet" (line 42) is used to make the point that

(A) a hypothesis is most likely accurate
(B) a prediction will probably prove fruitless
(C) a theory is likely to be rejected
(D) an event will probably occur
(E) an observation is likely to be understood

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23. The luminescence of *Malacosteus* (line 50) differs from that of other species in that it

(A) is only possible in deep water
(B) temporarily startles other animals
(C) is more obvious near the surface of the ocean
(D) is most likely visible only to a *Malacosteus*
(E) often protects *Malacosteus* from its predators

24. A "submarine recharging its batteries at the surface" (line 71) is most analogous to a

(A) crab temporarily outside of its protective shell
(B) shark continually foraging for food in the ocean
(C) koala living in captivity in a zoo
(D) bat emitting sounds to track an insect
(E) goose flying south for the winter

NOTE: The reading passages in this test are brief excerpts or adaptations of excerpts from the published material. The ideas contained in them do not necessarily represent the opinions of the College Board or Educational Testing Service. To make the test suitable for testing purposes, we may in some cases have altered the style, contents, or point of view of the original.

S T O P

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.