

[I]

Read the following article carefully and answer the questions. For each question, choose ONE BEST answer. On your answer sheet, find the number of the question and fill in the space that corresponds to the number of the answer you have chosen. For Writing Answer Question “A”, write your answers in the corresponding spaces provided on the Writing Answer Sheet.

(Based on Enrico Coen, 2012. “*Cells to Civilizations: The Principles of Change That Shape Life.*”)

① Most of the ocean is in perpetual darkness, but near its surface there is sufficient light to support a thriving community of microscopic plants. These unicellular algae*¹ form a vast lawn of marine plankton. There are, however, hazards to this way of life. Plankton is helplessly swept along by currents and turbulent seas. If the microscopic plants are carried down to the lower depths, light levels rapidly fall and they may die in the vast darkness, unless they can swim or float back to the surface. Closer to the shoreline, the shallowness of the seas prevents the fall to gloom. But there is no guarantee that a plant living near the coast might not be swept away into the immense ocean, unless it attaches itself to a rock. Some species of unicellular algae fasten onto the seabed, allowing them to live permanently near the coast. These cells often have two different ends — one is specialized for holding onto the rock and the other is specialized for harvesting energy from sunlight. With this arrangement, they embody an aspect of their surroundings; the interface between opaque, solid rock and transparent, fluid seawater.

② [Q2] this way of life, individuals that are able to extend upwards and grow away from the rock will gain more light. Their chances for survival may be better than those of their overshadowed neighbors, and they therefore may be favored by natural selection. One means of achieving this growth would be for the cells themselves to become bigger. But there are limits to how large a single-celled organism can grow. As size increases, it becomes more difficult for processes to be coordinated across a large volume of cytoplasm*². A partial solution to this difficulty is the inclusion of many nuclei in the cell; this is often the case in the largest single-celled creatures. Still, continual mixing of cytoplasm can make it difficult to establish patterns of gene activity.

③ Another solution to these problems is for cells to adhere to one another after division, allowing the organism to grow into a multicellular individual. With several cells, each with their own nucleus, the possibility arises of switching different genes on in different

cells. Cells near the rock face might switch on genes for [Q3a], while cells at the exposed water end could switch on genes involved in [Q3b]. The evolution of such specialized cells does not require a completely new set of mechanisms. It could arise by the combination of ingredients that were already present in the unicellular organisms. Principles that apply to single cells can apply to several cells in proximity. Then the interface between rock and sea can be dealt with in a new way, through differences between cells rather than within them. The alga*¹ has captured or embodied a spatial feature of its environment, the distinction between rock and the sea around it, through its organization of cell types. It has carved up the world by carving up itself.

④ Our primitive alga is able to achieve this organization by following a relatively simple, circuitous path in developmental space. The initial cell of the alga starts with a particular combination of regulatory proteins, corresponding to one location in developmental space. This context provides the molecular conditions that drive the cell to divide and produce a few more cell types in the early embryo, some better suited to gripping the rock and others to harvesting light. The embryo has been propelled to a new location in developmental space. This in turn provides the context that drives the next step. Eventually, cells are also set aside for the formation of the reproductive cells that give rise to the next generation. In this way, the alga [Q7] a looped path through developmental space, governed by a set of molecular and cellular principles that were already operating in its unicellular ancestors.

⑤ This scenario demonstrates how ingredients already present in the unicellular world may have come together during evolution to provide a basic recipe for development. Once this recipe was in place, more elaborate forms of development could evolve. Our simple multicellular algae stuck to the rock strive for light, so forms that can proliferate and grow taller during their life cycle may be favored by natural selection. In growing taller, additional issues crop up, like the stresses brought about by the plant being wrenched by currents, or the problems of cells at the rock face staying alive as they lie further from the photosynthetic cells. Additional cell [Q9] may be helpful, such as a collar of stronger cells that prevent the plant from being torn off by the currents, or a transportation system for moving sugars from the tip to the base of the plant. No fundamentally new mechanism is needed for such [Q9] to evolve. They can arise from the same process of patterning being repeated as the organism develops. By recurrently building pattern upon pattern as the organism grows, different forms of [Q9] can arise in an organized fashion. The overall result is that our looped path through developmental space has become extended and modified.

⑥ Many single-celled animals live successfully by consuming other organisms. But there are some advantages for animals being larger, including the ability to swallow other creatures, and avoid being swallowed in return. Increasing size by becoming multicellular has the added benefit of allowing different cells to acquire specialized jobs; some cells might be dedicated to eating and others to digesting food. And as the animals living at a greater scale encounter further challenges, such as moving around effectively or coordinating different body parts, further cell types and arrangements could arise through recurrent patterning that deal with these challenges.

⑦ Greater size and complexity does not come without some costs. For example, it delays reproduction because the organism needs more [Q10] to grow to its mature form. The benefits of size therefore need to be set against the costs of an increased generation time. Trade-offs like this abound in the living world because improving in one way can often be at the expense of growing worse in another. For this reason multicellular organisms have not replaced unicellular ones: single-celled creatures like bacteria continue to vastly outnumber their many-celled relatives. As Stephen Jay Gould*³ has pointed out, we still live in the “Age of Bacteria,” a period which has lasted about 3.5 billion years. Rather than an overall progression of life to ever greater size and complexity, ecosystems contain many different forms that coexist, each capturing relationships at various scales, from the microscopic to the macroscopic.

*¹ alga/algae (plural): a primitive plant that grows near or in water.

*² cytoplasm: the fluid-like material filling much of the inside of cells.

*³ Stephen Jay Gould: (1941–2002) An American evolutionary biologist who taught at Harvard University.

Q 1 . In paragraph ① (line 7), the author's usage of the underlined phrase is meant to emphasize the point that —

- 1 . Happiness is a desirable state.
- 2 . Despair must not be allowed to occur.
- 3 . The loss of available light is the enemy.
- 4 . There is hopelessness in the waters nearest to the land.
- 5 . Strong water movements resulting in turning over must be allowed to happen.

Q 2 . In paragraph ② (line 1), which of the following words could best be added to [Q2] ?

- 1 . Because
- 2 . Concluding
- 3 . Fixed
- 4 . Inside
- 5 . With

Q 3 . In paragraph ③ (lines 4 and 5), which of the following contains a set of words that could be best added in [Q3a] and [Q3b], respectively ?

	Q3a	Q3b
1 .	attaching	photosynthesizing
2 .	breathing	diving
3 .	concentrating	moving
4 .	expanding	diminishing
5 .	standing	spreading

Q 4 . In paragraph ③ (line 8), the underlined phrase is closest in meaning to —

- 1 . almost
- 2 . apart
- 3 . mostly
- 4 . nearby
- 5 . often

Q 5. Which of the following can best be inferred from the author's discussion in paragraph ③?

1. Genes orchestrate the way a life form adjusts to its surroundings.
2. Different principles apply to single and multicellular environments.
3. The structural features of genes precisely mirror the cells and the habitat perfectly.
4. As many ingredients as possible always make for the best recipe for genes to be matched.
5. Adjacent nuclei come together to form a single physically enlarged nucleus that controls all mechanisms.

Q 6. Which of the following accurately describes the light harvesting process mentioned in paragraph ③? (Note: the details of the process are not specifically discussed in the text.)

1. Carbon dioxide and water are reactants yielding oxygen and glucose as products.
2. Water and oxygen react together to produce carbon dioxide and glucose as products.
3. Sugars and water are reactants that yield both oxygen and carbon dioxide gas as products.
4. Oxygen and carbon dioxide combine to produce simple sugars and water as reactant products.
5. Oxygen and sugars combine as reactants to produce carbon dioxide and water as end products.

Q 7. In paragraph ④ (line 9), which of the following words could best be added to [Q7]?

1. attends
2. cranks
3. forges
4. ranks
5. wets

Q 8 . In paragraph ④ (line 10), the underlined word is closest in meaning to —

- 1 . alternatives
- 2 . children
- 3 . colleague
- 4 . neighbors
- 5 . roots

Q 9 . In paragraph ⑤ (lines 8, 11, and 13), which of the following words (same word for all three blanks) could best be added to [Q9] ?

- 1 . concentration
- 2 . globalization
- 3 . immortalization
- 4 . recommendation
- 5 . specialization

Q10. In paragraph ⑦ (line 2), which of the following words could best be added to [Q10] ?

- 1 . light
- 2 . money
- 3 . size
- 4 . time
- 5 . value

Writing Answer Question “A” (includes A 1 and A 2)

On the Writing Answer Sheet, write the appropriate words in the blocks provided in the Writing Answer Question “A” (A1 and A2) section to complete the summary sentence below. A1 requires exactly nine letters and A2 requires exactly seven letters. The words required appear in the main text. You must use the appropriate word from the main text that correctly completes the meaning and context of the sentence. You must use the appropriate word exactly as it appears in the main text. Please write clearly.

The overall main process driving most life from simple to more complex organisms is referred to as [A 1], but many different types can [A 2].

[II]

Read the following article carefully and answer the questions. For each question, choose ONE BEST answer. On your answer sheet, find the number of the question and fill in the space that corresponds to the number of the answer you have chosen. For Writing Answer Question “B”, write your answer in the corresponding spaces provided on the Writing Answer Sheet.

(Based on Joanna Bourke. 2014. “*The Story of Pain: From Prayer to Painkillers.*”)

- ① Figurative languages are indispensable when we seek to communicate unpleasant sensations to ourselves and to others. The metaphors we choose have a profound impact on the way we *feel* pain as well as upon the ways our suffering is treated. If we are to understand how people in the past suffered, we need to pay attention to the languages they seized hold of in order to overcome some of the obstacles to pain-speech.
- ② It may be useful to begin with a very few words about figurative languages in general before moving on to a more detailed analysis of the ways people-in-pain employ them. Figurative languages are rhetorical figures of speech that employ association, comparison, or resemblance, as in analogies between two things (‘pain gnawed*¹ at his stomach’), similes*² (‘the pain felt like a rat, gnawing his stomach’), and metonyms*³ (‘the gnawing continued’). As shorthand, the term ‘metaphor’ will be used to refer to all these figures of speech.
- ③ Abstract, metaphorical concepts emerge from bodily experiences and environmental interactions. Bodies are actively engaged in figurative processes and social interactions that constitute painful sensations. And culture collaborates in the creation of physiological bodies and metaphorical systems.
- ④ Metaphorical clues are often extremely complex (for example, when a person describes their pain as ‘sharp’, do they mean ‘narrowly confined, of high intensity, or of short duration’?). They are also often confusing, especially if taken literally. For instance, what does it mean to say that a pain ‘hurts like blue blazes’? [Q13a] of a man who states that ‘I literally felt a physical pain in my gut. [Q13b]: a physical pain — like an elephant kicking me in the ribs’? Not only is the biological distance between guts and ribs fairly well determined, but readers might also ask how he knows what being kicked by an elephant might ‘literally’ feel like.
- ⑤ In 1957, a physician from the National Hospital in London observed that “we say ‘pins and needles’, knowing that the common experience so described does not resemble the

actual sensation provide my multiple and successive applications of 'real' pins and needles. 'Burning' and 'tearing' pains are manifestly unlike the feeling of being burnt or torn".

⑥ The 'selection of metaphors' seems to be 'based on an entirely different principle from an extension of the effects of a tool or weapon on the human body'. Instead, the metaphor is itself an analogy, based largely on visual and temporal correspondences. Thus, "if a painful experience has a temporal form of starting suddenly and ending abruptly, while being limited spatially to a small region, we call it a shooting pain. It resembles the 'visual form' of a shot, not the painful properties of the shot's consequences. . . . A 'sawing' pain projects the temporary structure of sawing (rhythmic, repetitive, and possessing frequent highs and lows) on to the visual characterizations of a saw". What is being described is the 'spatiotemporal patterns of the sensation'. Correspondences between the body and metaphor are central to understanding the way people experience their worlds, including painful ones.

⑦ Wild descriptions actually express the pain for the sufferer. Similar to words such as 'absolute, infinite, and eternal', they marked the negation of definitive conception and helplessness of thought'. They reveal the 'extreme disabling effect' of pain on the sufferer's most basic self. Perhaps even more importantly, the use of immoderate descriptions was an attempt to "excite in the minds of others a proportionate feeling of the really inexpressible misery of the strange and confusing sensation. They are endeavors not to convey ideas, but to express feelings that are inexpressible".

⑧ Through language, then, sufferers not only attempted to render their own worlds less chaotic, but they also sought to reach out to others for help and sympathy. Human experience 'emerges from our bodily being-in-the-world'. People are born into worlds that are not of their own making: they must navigate within this world, and they do so by employing not only the existing metaphorical tools but also the ability to imaginatively create other conceptual domains from bodily experiences. These metaphors don't merely reflect pain but are crucial in constituting it, within interactive social contexts.

*1 gnawed: chewed or to be troubled.

*2 similes: comparison words.

*3 metonyms: substitute words.

Q11. Which of the following is true of the author's description in paragraphs ①, ②, and ③?

1. Figurative explanations are non-symbolic and vary little worldwide.
2. Metaphors represent dissimilar ways of expressing facts, common to all cultures.
3. The language used to communicate pain is superficial and has a modest bearing on how suffering is treated.
4. Literal expressions of feelings are crucial to understanding a person's interactions with pain and suffering.
5. Rich varieties in manners of communication and expression exist and reflect the many different ways that humans interact with their world.

Q12. Select the proper example representing a metaphorical clue as discussed in paragraph ④ (first mentioned in line 1) —

1. "I lost 10 kilograms in 6 months."
2. "My heart races into my neck when I worry."
3. "My field of vision is worsening year by year."
4. "I feel I have a high fever of about 39 degrees."
5. "I can't move my right ankle, because of the pain."

Q13. In paragraph ④ (lines 4 and 5), which of the following contains a set of phrases that could be best added in [Q13a] and [Q13b], respectively?

	Q13a	Q13b
1.	Can there be another way	In an instance
2.	Is it not clear at all	For the experience
3.	Is there no literal meaning	Indirectly speaking
4.	What are we to make	I mean that
5.	When it is said	A straightforward episode

Q14. In paragraph ⑥, the main message that the author intends to convey is that —

1. The world is experienced only through metaphors.
2. The timing of pain does not strongly influence the way it is seen.
3. The location of discomfort is equally as important as the day it occurs.
4. The perception of pain can involve various senses and the imagination.
5. Describing the way devices cut into our world is the single way to comprehend physical impacts.

Q15. In paragraph ⑦ (line 4), the underlined phrase is used to convey the meaning that —

1. Suffering can never be expressed in an untamed manner.
2. Long and tedious explanations help others understand better.
3. All feelings expressed are marginal to the concerns of daily life.
4. One is able to adequately show how they deal with life's problems.
5. Such expressions are based on the sum of one's experiences to being human as a whole.

Q16. When the underlined word imaginatively (paragraph ⑧, line 5) is pronounced, one part (syllable) of the word should be emphasized the strongest. Which of the following has the same part that needs to be emphasized the strongest when pronounced ?

1. audiovisual
2. cardiovascular
3. discriminatory
4. incomprehensible
5. underestimated

Q17. Which of the following is NOT mentioned in this article ?

1. Word replacements are needed to relay the suffering one goes through.
2. There are constraints imposed on the ability to share distressing events.
3. Pain expressions involve descriptions incorporating both time and space.
4. Different environments in which one grows up can impact the manner in which feelings are communicated.
5. It is easy to adequately compare physical experiences with subjective feelings by use of literal language.

Writing Answer Question "B"

On the Writing Answer Sheet, put the following words into the proper order necessary to complete the summary sentence about Article [II]. Please put them in the order that makes the best sense within the context of the entire article. Write your answer in the space provided in the Writing Answer Question "B" section. The word "The" should be the first word and the word "is" should be the sixth word.

[background] [based] [expresses] [he/she] [his/her] [on] [pain] [way]

The [] [] [] [] is [] [] [] [].

[III]

Read the following article carefully and answer the questions. For each question, choose ONE BEST answer. On your answer sheet, find the number of the question and fill in the space that corresponds to the number of the answer you have chosen. For Writing Answer Question “C”, write your answer in the corresponding spaces provided on the Writing Answer Sheet.

(Based on David H. Rosen and Uyen B. Hoang. 2017. “*Patient-Centered Medicine: A Human Experience.*”)

① To become ill, even slightly so, is always disruptive. We forget just how disruptive, of course, as soon as we recover; but think back and recall how troublesome your last cold actually was. A cold is trivial enough, yet at the infection’s height you probably could not think clearly and felt too uncomfortable to enjoy reading, music, friendship, or even food — and this was just a cold. When a person enters the realm of more serious illness, wrenching disruptions and profound feelings of anxiety and loss are inevitable. Moreover, illness forces change in a person: altered expectation, dashed hopes, and a fragmented self image. Ill people do not choose to change; they must. In fact, the Chinese symbol for crisis is composed of two characters representing danger and opportunity, respectively.

② Much attention has been given to the phenomenon of health-seeking behavior. What are the factors that lead people to identify themselves as patients? What motivates them to call a healthcare professional for an appointment or to drive to an emergency room and seek medical care actively? Obviously, the answer is multifaceted and based on much more than the mere presence or absence of a given symptom. *Who* these people are is critical, as is their previous experiences with illness, their perception of healthcare professionals, the reactions and pressures of their family, and the symbolism of the symptom; these and many other influences go into any person’s decision to seek help.

③ Health-seeking behavior is also affected greatly by the emotional, psychological, and social context in which physical symptoms appear. A complete and thorough healthcare professional *must* include an assessment of these as part of the evaluation of any patient. Consider, for example, the hypothetical case of two young mothers. Both are 26 years old and both have 5-month-old nursing infants. Let us assume also that both have “identical” headaches located in the same place, with attributes that are completely alike. Yet, the headaches turn out to be vastly different for each when we consider the life setting in which they occur. Mother “A” feels overwhelmed currently and terrified. At times she

feels suicidal. This is something she has not told anyone and does not tell her doctor voluntarily unless they discern how distraught she is and tactfully, but firmly, inquire into her depression. This mother will tell her doctor (*if they asked*) how, everyday, she struggles with an urge to beat her screaming, colicky*¹ infant. On several occasions, in fact, she has come close. She is terrified that the urge will get out of hand. Nor would such an occurrence be foreign for her. As a young child she was beaten repeatedly and severely by her own mother. When she calls her doctor for an appointment, however, she reports only “headaches.”

④ Mother “B”, our other woman with headaches, can fortunately be dealt with more briefly. Her life is reasonably happy, her family setting is safe and secure, and she is well integrated psychologically, with a stable sense of self-esteem. She does not, in fact, think to call the health professional. Two aspirin tablets seem to do the trick and she never actually picks up the phone.

⑤ Identical headaches, but vastly different problems. To discern this, however, healthcare professionals must appreciate their patients’ difficulty at different levels of the systems hierarchy. A note in the chart that reads “tension headaches likely, rule out CNS*² tumor or bacterial infection” is just not adequate. Yet, some health professionals limit the focus of their inquiry to just this degree. If a health professional were to put on such blinders in her assessment of Mother “A”, she would doubtless leave the office with a muttered, “Thank you,” most likely with a prescription*³ in her hand (that may never be filled*⁴, much less taken, or conversely, might be filled and taken all at once). She will have left with her real pain unexpressed, possibly to go home and explode. And the healthcare professional might well believe that they have a satisfied patient and have done a competent job.

⑥ Finally, we wish to emphasize one [Q21a], yet [Q21b] point regarding the management of these “identical” headaches. The proper intervention is derived from an understanding of systems theory; it is not a matter of “bedside manner” or “clinical intuition.” Nonsystems-oriented healthcare providers might or might not see value in inquiring about patients’ circumstances and life. They might think of this as interpersonal warmth, humanism, viewing the patient holistically — or they might consider such matters basically trivial. Healthcare providers who understand systems theory know differently; viewed from this perspective, understanding patients comprehensively is essential. A systems approach makes it clear that mother “A’s” headache is affected, possibly even precipitated, by the [Q23] she faces. To inquire of her about these is not being “kind” or “sensitive,” it is being diagnostically complete. The rage, frustration, and despair that mother “A” feels at the

level of the two-person system (she and the child) and at the family level of the system (Where is her husband? What roles has her own child abuse played in her life?) have effects at the organ system level. The precise nature of these effects has yet to be well delineated, although research continues to be promising. For example, high levels of stresses (and chronic stress) such as the ones mother “A” is experiencing are reported in patients with tension headaches, and is said to alter protective adaptive responses of the brain with resultant pathophysiological*⁵ changes in brain structure and function, including immunological changes.

⑦ The reason why it is so critical to grasp the highly interactive nature of different levels in the systems hierarchy is because, without such an understanding, health professionals are not able to prescribe the best treatment for their patients. For mother “A”, this treatment obviously involves more than the prescription of pain tablets. It is true that a relaxant may relieve her muscle spasm and a pain killer, the subjective experience of pain, but these interventions do nothing to alter the disturbances at higher levels in the systems hierarchy that are precipitating the problem. The healthcare professional must help mother “A” to deal with her concerns about her parenting capacities and the current relationship with her husband and child, whether through referral to a psychotherapist for individual therapy or through family and parenting support services in the community. It is the only rational treatment strategy to be applied in this case. Finally, healthcare professionals who truly understand systems theory (after proper diagnosis and treatment at all levels of the system) do understand *why* the headache got better — and why the 20-minute counseling session the therapist conducted with mother “A” and her husband was a potent therapeutic intervention resulting in effective treatment of her headaches and painful situation.

⑧ Others have proposed that one way to conceptualize reactions to illness is to view serious illness as a *development crisis*, occurring within the overall context of a person’s life. From such a perspective, illness may be viewed as a new, and sometimes critical, challenge to a person’s homeostasis*⁶ and sense of identity. Bear in mind, however, that people are inevitably more complicated than the outlines we use to categorize them. Still, there may be some value in recognizing that illness is an evolving process with often critical implications for human development, and not just some unfortunate moment frozen [Q25] time, quickly to be forgotten.

*¹ colicky: discomfort or pain in the stomach area.

*² CNS: central nervous system.

*³ prescription: a medication order from a doctor

*⁴ fill: a pharmacy or pharmacist distributing the doctor ordered medications to a patient

*⁵ pathophysiological: pertaining to a state of abnormal body function.

*⁶ homeostasis: a biological state of balance or equilibrium.

Writing Answer Question “C”

According to the underlined phrase (the last sentence of paragraph ①), write the most appropriate Japanese word consisting of two KANJI characters in the blocks provided on the Writing Answer Sheet Question “C” section, that most corresponds to the concepts discussed in the text. Please write clearly.

Q18. In paragraphs ② and ③, the author’s usage of the underlined phrase in the first sentence of each paragraph means —

1. The patient’s disease is the only concern here.
2. Optimum daily lifestyle choices are preventative.
3. A person’s word should speak louder than their actions.
4. There are motivations to turn to others to provide relief.
5. Violence can be hidden and may not always be easily seen.

Q19. In paragraph ④ (line 4), the author’s usage of the underlined phrase is meant to emphasize the point that —

1. The problem was eliminated.
2. Good luck is mentally encouraging.
3. Pieces to the puzzle magically came together.
4. More pleasure was added to the nuclear family unit.
5. Not being able to make the telephone call forced the decision.

Q20. In paragraph ⑤ (line 7), the underlined word is used to convey the meaning that —

1. The speaker's source of pain was properly addressed.
2. The speaker expressed a form of dissatisfaction.
3. The speaker clearly and gratefully stated their pleasure with the results.
4. The speaker was happy to be able to share their problems with the health professional.
5. The speaker was genuinely relieved, but simply too shy to adequately express their gratitude.

Q21. In paragraph ⑥ (line 1), which of the following contains a set of words that could be best added in [Q21a] and [Q21b], respectively ?

	Q21a	Q21b
1.	abstract	secondary
2.	important	feeling
3.	major	minor
4.	puzzling	incomplete
5.	subtle	critical

Q22. In paragraph ⑥ (line 8), the underlined word is closest in meaning to —

1. generously
2. obviously
3. personally
4. specifically
5. totally

Q23. In paragraph ⑥ (line 10), which of the following words or phrases could best be added to [Q23] ?

1. aspirin tablets
2. CNS tumor
3. emotional stresses
4. fever
5. virus

Q24. Which of the following is true regarding the author's descriptions in paragraph ⑥ ?

1. A non-systems level evaluation considers societal factors.
2. The context from which the sufferer arises could exert causal effects.
3. A systems level approach refers to only the human body organ systems.
4. Identical symptoms for non-identical patients appear from identical system origins.
5. Deemphasizing a whole body approach is the best way for health management.

Q25. In paragraph ⑧ (line 7), which of the following words could best be added to [Q25] ?

1. against
2. below
3. in
4. on
5. to

Q26. Which of the following could best serve as an appropriate title for this entire article ?

1. Non-System Abnormality Patients
2. Minor Causes of Disease in Patients
3. Social Context Disease Considerations
4. Organ System Centered Focus: Primary Concern
5. Temporary Spatiotemporal Disease Non-Systems

[IV]

Read the following question carefully and answer the question. Choose ONE BEST answer. On your answer sheet, find the number of the question and fill in the space that corresponds to the number of the answer you have chosen. The following question pertains to all three articles (I , II, and III).

Q27. Which of the following expresses a statement that correctly summarizes and could be considered representative of the overall concepts for all three articles (I , II, and III) ?

- 1 . Complexities in system organizations require figurative communication methods.
- 2 . Identical patterns of human, cellular, and language communication create the best formed systems.
- 3 . It takes many generations of slow, temporary change to improve the general quality of health, pain, and suffering.
- 4 . Bacterial diseases cause inexpressible pain and suffering in systems, requiring optimal organization and approaches.
- 5 . An active effort to approach and evaluate things from deeper and multiple perspectives is very important for a better understanding.