1. Read the text and determine if the sentences are True or False. Justify the false sentences.

The New New Product Development Game

Moving the Scrum Downfield

From interviews with organization members from the CEO to [young engineers], we learned that leading companies show six characteristics in managing their <u>new product development processes</u>:

- 1. Built-in instability
- 2. Self-organizing project teams
- 3. Overlapping development phases
- 4. "Multilearning"
- 5. Subtle control
- 6. Organizational transfer of learning

These characteristics are like pieces of a jigsaw puzzle. Each element, by itself, does not bring about speed and flexibility. But taken as a whole, the characteristics can produce a powerful new set of dynamics that will make a difference.

Built-in Instability

Top management kicks off <u>the development process</u> by signaling a broad goal or a <u>general strategic direction</u>. It rarely hands out a clear-cut new product concept or a <u>specific work plan</u>. But it offers a project team a wide measure of freedom and also establishes extremely challenging goals. For example, Fuji-Xerox's top management asked for a radically different copier and gave the FX-3500 project team two years to *come up with* a machine <u>that could be produced</u> at half the cost of its high-end line and still perform as well.

Top management creates an element of tension in the project team *by giving* it great freedom to *carry out* a project of strategic importance to the company and by setting very challenging requirements. An executive in charge of development at Honda remarked, "It's like putting the team members on the second floor, removing the ladder, and telling them to jump or else. I believe creativity *is born by pushing* people against the wall and pressuring them almost to the extreme."

Self-organizing Project Teams

A project team takes on a self-organizing character as *it is driven to a state* of "zero information"—<u>where prior knowledge does not apply</u>. Ambiguity and fluctuation abound in this state. Left to stew, the process begins *to create its own dynamic* order.2 The project team *begins to operate* like a *start-up* company—it takes initiatives and risks, and develops <u>an independent agenda</u>. At some point, the team begins to create its own concept.

A group possesses a self-organizing capability when it exhibits three conditions: autonomy, self-transcendence, and cross-fertilization. In our study of the various new product development teams, *we found all three conditions*.

Autonomy. [...] This kind of autonomy was evident when IBM developed its personal computer. A small group of engineers began working on the machine in a converted <u>warehouse</u> in remote Boca Raton, Florida. Except for quarterly corporate reviews, headquarters in Armonk, New York allowed the Boca Raton group to operate on its own. The group got the go-ahead *to take* unconventional steps such *as selecting* outside suppliers for its microprocessor and software package.

We observed other examples of autonomy in our case studies:

• The Honda City project team, whose members' average age was 27, had these instructions from management: to develop "the kind of car that the youth segment would like to drive." An engineer said, "It's incredible how the company called in young engineers like ourselves to design a car with a totally new

concept and gave us the freedom to do it our way."

• A small group of sales engineers who originally sold microprocessors built the PC 8000 at NEC. The group started with no knowledge about <u>personal computers</u>. "We were given the go-ahead from top management to proceed with the project, provided we would develop the product by ourselves and also be responsible for manufacturing, selling, and servicing it on our own," remarked the project's head.

Multifunctional learning. Experts are encouraged to accumulate experience in areas other than their own. For instance:

• All the project members who developed Epson's first miniprinter were mechanical engineers who knew little about electronics at the start. So the leader of the project team, also a mechanical engineer, returned to his alma mater as a researcher and studied electrical engineering for two years. He did this while the project was underway. By the time they had completed the miniprinter project, all the engineers were knowledgeable about electronics. "I tell my people to be well-versed in two technological fields and in two functional areas, like design and marketing," the leader said. "Even in an engineering-oriented company like ours, you can't get ahead without the ability to foresee developments in the market."

- a. Top management in new product development processes provides a detailed and clear product concept to the team from the beginning.
- b. Self-organizing teams operate like a start-up company, taking initiatives and developing their own agendas.
- c. In the development of Epson's first miniprinter, mechanical engineers were already knowledgeable in electronics before the project started.
- d. Autonomy within project teams allows them to make independent decisions, such as selecting their suppliers.
- e. Multifunctional learning encourages project members to specialize only in their own areas of expertise to ensure focus and efficiency.
- 2. State the different functions of the words that are underline or in bold and italic.
- a. new product development processes
- b. that will make a difference.
- c. the development process
- d. by signaling
- e. general strategic direction
- f. specific work plan.
- g. come up with
- h. that could be produced at half the cost of its high-end line and still perform as well.
- i. by giving
- j. carry out
- k. is born by pushing
- I. it is driven to a state
- m. where prior knowledge does not apply

- n. to create its own dynamic begins
- o. begins to operate
- p. start-up
- q. an independent agenda
- r. we found all three conditions
- s. warehouse
- t. to take
- u. as selecting
- v. , whose members' average age was 27
- w. to design
- x. A small group of sales engineers who originally sold microprocessors built the PC 8000 at NEC.
- y. personal computers.
- z. are encouraged to accumulate
- aa. the project members who developed Epson's first miniprinter were mechanical engineers who knew little about electronics at the start.
- bb. a mechanical engineer,
- cc. they had completed
- dd. human resource management program.
- ee. *learning by doing*
- ff. keep them up to
- gg. It also serves as a basis for creating a climate that can bring about organizational transition.

3. Translate the following sentences:

- a. An executive in charge of development at Honda remarked, "It's like putting the team members on the second floor, removing the ladder, and telling them to jump or else. I believe creativity is born by pushing people against the wall and pressuring them almost to the extreme."
- b. The Honda City project team, whose members' average age was 27, had these instructions from management: to develop "the kind of car that the youth segment would like to drive." An engineer said, "It's incredible how the company called in young engineers like ourselves to design a car with a totally new concept and gave us the freedom to do it our way."
- c. By the time they had completed the miniprinter project, all the engineers were knowledgeable about electronics. "I tell my people to be well-versed in two technological fields and in two functional areas, like design and marketing," the leader said. "Even in an engineering-oriented company like ours, you can't get ahead without the ability to foresee developments in the market."