Basic Concepts on Ecodesign

Unit 2: Traditional Design versus Ecodesign

Quiz and Assignment

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2.1. QUIZ

- PLEASE, CHOOSE THE CORRECT ANSWER:

1. ¿When did concepts such as “life cycle, “cradle to grave” or “industrial ecology” first appear?
    a. In the 80s.
    b. In the 90s.
    c. None of the above.

2. When Ecodesign is applied, which basic design requirements cannot be forgotten?
    a. Aesthetics, function and utility of a product.
    b. Safety of a product.
    c. Costs of a product.
    d. All of the above.

3. Ecodesign translates into…
    a. A change that provides aspects of sustainability to the traditional design requirements.
    b. A change that provides aspects of sustainability to substitute the traditional development and design requirements.
    c. A radical change in the traditional development and design process.

4. What is the aim of applying environmental requirements to the design and development steps of a product?
    a. To minimise materials and energy consumption in the manufacturing of a product to reduce costs.

b. To minimise materials and energy consumption and remove the generation of waste, emissions or dumping in all steps of the life cycle of a product.

c. To minimise materials and energy consumption and minimise environmental pollution generated in all steps of the life cycle of a product.

5. In the first step of design, “Strategic Planning”, what must be taken into account to incorporate environmental criteria?

    a. To put together a multidisciplinary team of Ecodesign subcontracting, if necessary, an expert on environmental subjects.

    b. To select a reference product to evaluate the improvement that has been made.

    c. a and b are correct.

    d. None of the above.

6. In the second step of design, “Information and Analysis”, what must be taken into account to incorporate environmental criteria?

    a. To collect environmental data and define improvement strategies in every step of the life cycle of a product.

    b. To collect environmental data and carry out an environmental analysis to detect environmental aspects and impacts and define strategies for improvement.

    c. None of the above.

7. In the third step of design, “Definition of Requirements”, what must be taken into account to incorporate environmental criteria?

    a. Internal and external environmental requirements, focusing on the critical points detected in the environmental analysis previously carried out.

    b. Internal and external environmental requirements, focusing on the legal and regulatory requirements.

c. Internal and external environmental requirements, focusing on the improvement of the product or company image.

8. In the fourth step of design, “Conceptual Design”, what must be taken into account to incorporate environmental criteria?

    a. The environmental improvements suggested by experts based on sectoral market studies.

    b. The environmental improvements posed by the proposed environmental strategies in steps previous to design.

    c. a and b are correct.

    d. None of the above.

9. In the fifth step of design, “Detailed Design”, what must be taken into account to incorporate environmental criteria?

    a. To define in detail each and every environmental improvement to be implemented.

    b. To define in detail some environmental improvement to be implemented.

    c. To suggest environmental improvements carried out by the competition.

10. In the sixth step of design, “Verification and Planning of Production and Marketing”, what must be taken into account to incorporate environmental criteria?

    a. To quantify the information and documentation of the new product to show the environmental improvements achieved and to decide which ones will be implemented and whether environmental communications will be carried out (eco-labels, certification, etc.).

    b. To assess again the environmental aspects and impacts of a product quantitatively designed to show the environmental improvements achieved and to decide which ones will be implemented and whether environmental communications will be carried out (eco-labels, certifications, etc.).

c. None of the above.

2.2. Assignment

- Please, propose the design and development of a new product, listing the steps of the design and indicating the traditional design requirements and environmental criteria that must be taken into account in each step of design and development.

  You can, for example, fill in a common form to collect data and information necessary for each step of design and development.