

Cultural Considerations in Engineering Design (New Engine)

1

Multiple Choice 1 point

Which book by E.F. Schumacher emphasized economics “as if people mattered”?

- ☐ Small Is Beautiful
- ☐ Design for the Real World
- ☐ The Design of Everyday Things
- ☐ Silent Spring

2

Multiple Choice 1 point

Don Norman's The Design of Everyday Things mainly focuses on:

- ☐ Government regulation of toxic waste
- ☐ Water resource management in developing countries
- ☐ Economic sustainability in rural communities
- ☐ Human-centered product and system design

3

Multiple Choice 1 point

The major public health issue discussed in Bangladesh relates to:

- ☐ Soil erosion from agriculture
- ☐ Urban air pollution
- ☐ Malnutrition
- ☐ Arsenic contamination in groundwater

4

Multiple Choice 1 point

The U.S. EPA ETV Program document cited in the readings addresses:

- ☐ Renewable energy deployment
- ☐ Energy efficiency standards
- ☐ Arsenic treatment technologies
- ☐ Transportation safety

5

Multiple Choice 1 point

In cultural considerations for engineering, "Small Is Beautiful" emphasizes:

- ☐ Focusing only on financial profit
- ☐ Maximizing industrial output regardless of cost
- ☐ Expanding global resource exploitation
- ☐ Designing systems with sensitivity to human and environmental needs

6

Multiple Choice 1 point

The journal article by Yingliang Zhao et al. (2023) deals with:

- ☐ Arsenic immobilization using waste-derived binders
- ☐ Energy distribution networks
- ☐ Policy impacts on global climate agreements
- ☐ Cultural anthropology in rural Asia

7

Multiple Choice 1 point

The work Design for the Real World by Victor Papanek argues for:

- ☐ Military applications of engineering design
- ☐ Purely aesthetic consumer product design
- ☐ Culturally sensitive and socially responsible design
- ☐ Market-driven globalization

8

Multiple Choice 1 point

Which phrase best reflects the link between culture and engineering design?

- ☐ Culture is irrelevant to global design standards
- ☐ Technical performance always outweighs cultural factors
- ☐ Local practices, beliefs, and values influence engineering solutions
- ☐ Design choices are independent of social context

9

Multiple Choice 1 point

The case of arsenic in Bangladesh illustrates that:

- ☐ Engineering projects in developing nations rarely face obstacles
- ☐ Cultural context is secondary to engineering economics
- ☐ Technological fixes alone can solve all problems
- ☐ Public health crises can arise from culturally blind water development practices

10

Multiple Choice 1 point

A key reason to evaluate cultural considerations in engineering projects is to:

- ☐ Focus exclusively on cutting-edge technology
- ☐ Ensure solutions are technically complex
- ☐ Increase the cultural and social acceptance of designs
- ☐ Reduce project duration at all costs