Unit 3 - Week 1: Basics - What is sustainability, sustainable development and why do we need it?

Question Paper Week 1

The due date for submitting this assignment has passed. Due on 2019-08-14, 23:59 IST. As per our records you have not submitted this assignment.

1) Which one of the three is more sustainable?  1 point

Milk in a glass bottle

Milk in a tetrapack box

Milk in a plastic pouch

Milk in a glass bottle

Milk in a tetrapack box

Milk in a plastic pouch

Depends on the context of usage and needs to be calculated (can’t be predicted intuitively)

No, the answer is incorrect.

Score: 0
2) Design for sustainability requires a strong focus ________________

- most importantly on the Social Dimension
- on the Environmental and Economic Dimension
- on the Environmental Dimension
- on all the three dimensions: Social, Economic and Environmental

No, the answer is incorrect.
Score: 0
Accepted Answers:
on all the three dimensions: Social, Economic and Environmental

3) The ecological domain is defined as the practices and meanings that occur across the intersection between the social and the natural realms, focusing on the important dimension of human engagement with and within nature, but also including the built-environment. Which of the following fall under the ecology domain?

- Accounting and Regulation
- Beliefs and Ideas
- Consumption and Use
- Dialogue and Reconciliation
- Embodiment and Sustenance
- Enquiry and Learning
- Labour and Welfare
- Materials and Energy
- Organization and Governance
- Production and Resourcing
- Water and Air
- Wellbeing and Health

No, the answer is incorrect.
Score: 0
Accepted Answers:
Embodiment and Sustenance
Materials and Energy
Water and Air
4) A company makes denim trousers and jackets with recycled PET. The disposable water bottles are 1 point made of PET. Several waste collection companies are involved in collection of the used PET bottles. These are then sold to this garment making company who have developed a novel technique for processing PET bottles into yarn and converting them into garments thereafter. According to the company, they have helped in recycling hundreds of tons of discarded PET bottles in the last couple of years and upcycled them into value added products. This is an example of attempting to achieve sustainability by:

- Devising innovative solutions inspired by physical processes from the nature and putting them in innovative business model.
- Reusing the waste generated to produce new products
- Disintegrating a product into its component materials and redesigning each to either follow a biological cycle or a technical cycle.
- Devising strategies for an empowerment based model of sustainability for the overall sustainable development of a community.
- Devising product-service system design wherein sustainability is in the economic interest of the stakeholders.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Reusing the waste generated to produce new products

5) A washing machine is an expensive device to own. When owned by a family, it might be used ones 1 point a day or ones in two days depending on the size and washing behaviour of the family. It is also a large device, occupying precious space in the house. An automatic washing machine needs a constant water supply while a semi-automatic machine can work without constant water supply. An entrepreneur saw this as an opportunity for business in the slums of an Indian city. He converted the back seat of some scooters into mobile washing machine. The motor of the washing machine would run using the scooter engine. The scooter can itself be used to carry the washing machine from one place to another. Anyone interested in washing their clothes can call the entrepreneur. The person interested in washing the clothes uses stored water from his home and detergent of his own choice. The entrepreneur’s expense is the petrol that he spends in coming from his home/previous place of operation to this place plus the fuel he spends in running the washing machine. If he can optimise on the fuel expenses by optimising his employees’ daily work path, he will be able to make more money. Thus, he approaches people in his community who might be able to help him develop a solution which can help him in better route planning. This is an example of attempting to achieve sustainability by:

- Devising innovative solutions inspired by physical processes from the nature and putting them in innovative business model.
- Reusing the waste generated to produce new products
- Disintegrating a product into its component materials and redesigning each to either follow a biological cycle or a technical cycle.
- Devising strategies for an empowerment based model of sustainability for the overall sustainable development of a community.
- Devising product-service system design wherein sustainability is in the economic interest of the stakeholders.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Devising product-service system design wherein sustainability is in the economic interest of the stakeholders.
6) Watch this video - https://youtu.be/6UCuWxW1MaQ (https://youtu.be/6UCuWxW1MaQ). This is an example of attempting to achieve sustainability by:

- Devising innovative solutions inspired by physical processes from the nature and putting them in innovative business model.
- Reusing the waste generated to produce new products
- Disintegrating a product into its component materials and redesigning each to either follow a biological cycle or a technical cycle.
- Devising strategies for an empowerment based model of sustainability for the overall sustainable development of a community.
- Devising product-service system design wherein sustainability is in the economic interest of the stakeholders.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Devising strategies for an empowerment based model of sustainability for the overall sustainable development of a community.

7) Various approaches can be taken to achieve sustainability through Design. Some of these approaches are:

A. Devising product-service system design wherein sustainability is in the economic interest of the stakeholders.
B. Devising strategies for an empowerment based model of sustainability for the overall sustainable development of a community.
C. Disintegrating a product into its component materials and redesigning each to either follow a biological cycle or a technical cycle.
D. Selection of resources with low environmental impact

Arrange these approaches in increasing order of sustainability potential.

- A, B, C, D
- D, C, A, B
- A, C, B, D
- B, A, C, D

No, the answer is incorrect.
Score: 0
Accepted Answers:
D, C, A, B