

System Design for Sustainability

Week 5: Practice Questions

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1. Which of the following is an example of a Product-Service System (PSS) which is not necessarily sustainable?
 - (a) Mobile phone with pay-per-use data plan
 - (b) Smart watch and app combo, where developer does not attend to user feedback
 - (c) Solar water-heating service
 - (d) Ola or Uber car-for-hire on a per hour basis
2. Riversimple is an example of what type of S.PSS?
 - (a) product-oriented
 - (b) use-oriented
 - (c) result-oriented
 - (d) all of the above
3. Piramal Sarvajal (Water ATMs in India) are an example of what type of S.PSS?
 - (a) product-oriented
 - (b) use-oriented
 - (c) result-oriented
 - (d) all of the above
4. In what ways can a PSS be designed as sustainable?
 - (a) By enabling responsible consumption
 - (b) By elongating the product life
 - (c) By making the PSS more equitable
 - (d) By improving social cohesion
 - (e) By selling less of the product and more of the service

(f) All of the above.

5. When is a PSS socio-ethical?

- (a) When it improves employment and/or social working conditions
- (b) When it improves equity and justice in relation to stakeholders
- (c) When it empowers and/or enhances local resources
- (d) When it integrates the weaker and marginalised
- (e) All of the above

6. When can a PSS be considered to be eco-efficient?

- (a) When it enables system life optimization
- (b) When it enables waste valorization
- (c) When it is 50-50 combination of product and service offering
- (d) When it uses less toxic raw materials
- (e) When it is less reliant on non-renewable sources of enregy for its
manufacture and usage
- (f) All of the above