Assignment 8

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1) "Design synthesis process consists of five different processes whose inputs and outputs are not related to each other"  
The above statement is

☐ True  
☐ False

No, the answer is incorrect.

Score: 0

Accepted Answers:
False

1 point

2) 'The UAV should always communicate with the ground control station providing live video feeds and telemetry while maintaining mobility'

Whose mobility is being referred here?

☐ UAV’s  
☐ Ground control station  
☐ Both of the above  
☐ None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:
Ground control station

1 point

3) _______ is the main tool that helps to maintain consistency between functional architecture and designs based on those architecture.

Fill in the blank with the appropriate option below.

☐ RAS  
☐ TLS  
☐ QFD  
☐ Fishbone diagram

No, the answer is incorrect.

Score: 0

Accepted Answers:

1 point
4) Which is a false statement in regard to QFD?  
- QFD helps to identify new technology and functions to carry out operations to deliver a quality product.  
- Trade-offs are made in the design, strategically, rather than in the deployment, tactically.  
- QFD improves customer satisfaction, and shortens development cycles.  
- Conflicts in both characteristics and requirements can be identified and addressed only in very later stages in QFD.  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
Conflicts in both characteristics and requirements can be identified and addressed only in very later stage in QFD.

5) “Functional evaluation” is performed at which process of design synthesis?  
- Product verification  
- Product validation  
- Product integration  
- Product transition  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
Product integration

6) __________ provides an overview of concurrency, overlapping, and sequential relationships.  
- House of Quality  
- Timeline Analysis Sheet (TLS)  
- Requirement Allocation Sheet (RAS)  
- All of the above  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
Timeline Analysis Sheet (TLS)

7) Which of the following tool is normally NOT used in design synthesis?  
- Plan-Do-Check-Act  
- Concept Description Sheet  
- Functional Matrix Diagram  
- Schematic Block Diagram  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
Plan-Do-Check-Act

8) __________ is the process in Systems Engineering where verified and validated product is advanced to the end user.  
- Product Implementation
9) The Design Synthesis tool that helps to correlate various functions that are to be performed with the components of the system is known as _____________.

- Concept Description Sheet (CDS)
- Schematic Block Diagram (SBD)
- Functional Matrix Diagram
- Computer Aided Systems Engineering (CASE)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Product Transition

10) Concept Description Sheet (CDS) does not _________________.

- Provide sufficient information so that users can understand and appreciate the philosophy behind the design concept
- Completely decompose high level functions to low level functions
- Record how system will be integrated to next functional or performance requirements
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Completely decompose high level functions to low level functions