

## **Attachment (D) Post-Assessment, Part 3 Answer Key and Questions**

### Post-Assessment, Part Three Answer Key for Questions

1. How is design utilized in engineering technology?

Design in engineering technology integrates aesthetics and functionality using tools like CAD to ensure systematic problem-solving and sustainable product development.

2. Why is prototyping important

Prototyping is crucial for validating design concepts, obtaining user feedback, and reducing risks, serving as a tangible communication tool for refining products before full-scale production.

3. List the differences between a prototype and a final product

Prototypes are smaller in scale and may use different materials than the final product, providing a testable model for adjustments before mass production.

4. What industries do you think prototyping would be particularly valuable

Prototyping is particularly valuable in product design, electronics, automotive, and medical devices, ensuring efficient testing and refinement of concepts before mass production.

5. What did you learn from this project

This project provided insights into the importance of systematic design, the role of prototyping in risk mitigation and user satisfaction, and the value of early feedback for refining and improving final products.