Design, Technology and Innovation, May 2024

Course Instructor: Prof. B.K. Chakravarthy Teaching Assistant: Arnav Bhagawati

Assignment 1

W1A1Q1-MCQ: What was the vision of Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS)?

- 1. Physical, economic and social rehabilitation of the disabled
- 2. Psychological and Physical rehabilitation of the cancer patients
- 3. Provide Jaipur foot to every slum resident
- 4. Scholarship to the disabled students with monetary benefits

W1A1Q2-MCQ: How does BMVSS manage to take the exact size & shape of the stump for making the Jaipur Foot?

- 1. Using a digital measuring tool
- 2. Measuring by Vernier Calipers
- 3. Using plaster cast
- 4. Using wax cast

W1A1Q3-MCQ: What made the Jaipur foot better than other commercial prosthetic legs?

- 1. Each user had a customized version
- 2. All orthopedic hospitals used to provide it
- 3. Made of Titanium
- 4. It has many brilliant colors

W1A1Q4-MCQ: Why did Mr. Ram C Sharma approach Dr. P K Sethi in the project of Jaipur Foot?

- 1. For more innovative idea
- 2. For anatomical details of the prosthesis
- 3. To discuss the pricing & distribution from Dr. P.K Sethi's accountant
- 4. To attend operations and learn by seeing amputation in person

W1A1Q5-MSQ: Why Jaipur leg had a good product-market fit specially in the Indian context?

- 1. The materials utilised were suitable for Indian environments
- 2. Because it looked like a bare foot
- 3. Offered more flexibility to the users while sitting
- 4. Because it looked premium

W1A1Q6-MCQ: What are the three disabilities stated by D R Mehta?

- 1. Amputation, Extremely Poor & Illiterate
- 2. Amputation, Physically Weak & Belong to remote areas

- 3. Amputation, Depressed & Lack of education
- 4. Amputation, Poor & Lonely

W1A1Q7-MSQ: What are the characteristics final helmet design offers to its users?

- 1. Protection for the jaw
- 2. It ventilates well
- 3. The helmet may be stored in tight locations
- 4. The user can easily put on sunglasses or glasses.

W1A1Q8-MCQ: Which material inside the helmet is most important for the protection of the brain?

- 1. Thermocol (Expanded polystyrene) & PU padding and inner liner
- 2. Outer shell of molded ABS plastic
- 3. Nylon made chin strap
- 4. Polycarbonate face shield

W1A1Q9-MCQ: Daily two-wheeler office commuters are most prone to accidents. True OR False.

- 1. True
- 2. False

W1A1Q10-MSQ: Why do two-wheeler riders rarely wear helmets?

- 1. Due to forgetfulness
- 2. Buckling is a lengthy process
- 3. Riders worry about the buckle not coming out
- 4. Often, buckles are rusty
