

Design, Technology and Innovation, May 2024

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Assignment 6

W6A6Q1-MSQ: What are the filters that should be kept in mind while designing a biomedical device as discussed by Prof. B Ravi?

1. Detailed design of the product
2. Significant market requirement
3. Capability and feasibility of the idea
4. Value proposition of the product

W6A6Q2-MSQ: In the lecture 'Systematic Approach to Biomed Innovation' by professor B. Ravi, which of the following topics are discussed?

1. The need of novel medical devices
2. How to develop and commercialize the medical devices
3. Some examples of indigenous medical devices
4. Some best practices to create your own success stories in the field of medical device innovation

W6A6Q3-MCQ: Why do we need to promote medical device innovation in India?

1. India's disease burden is different from other countries
2. To support the large number of medical device companies in India
3. To support medical tourism and healthcare service sector
4. To offset imports and make the devices affordable

W6A6Q4-MCQ: In reference to Prof. B. Ravi's lecture, what does the Develop stage mean in BETIC lab?

1. Concepts, Mock ups, Functional Prototype, Pilot production
2. Detailing of design, Virtual prototype, Rapid prototype and Functional prototype
3. Brainstorming, Ideation, Detailing of the design, Mock ups
4. Mock ups, Iterate, Ideate, Mock ups

W6A6Q5-MSQ: Why is a doctor's commitment necessary in Medical Devices?

1. Because they are sponsoring the project
2. Their Feedbacks are valuable to the designers as medical devices are much more complex
3. They might file a lawsuit against the project for which witness is necessary in each & every step

4. Medical Expert involvement ensures correct progression towards the solution

W6A6Q6-MCQ: Who are the stakeholders in BETIC?

1. Doctors, R&D, Engineers, Investors
2. Doctors, Researchers, Entrepreneurs, Investors
3. Designers, Researchers, Engineers and Investors
4. Physiotherapists, Police, Lawyers

W6A6Q7-MCQ: According to professor B. Ravi, in the four valleys of death, which transition is "not easy"?

1. Converting an idea into a Proof of Concept
2. Converting the Proof of Concept into a Prototype
3. Converting the Prototype into a Product
4. Converting the Product into a viable business model

W6A6Q8-MSQ: Why was Professor B. Ravi convinced that young entrepreneurs should carve a career in biomedical innovation?

1. Because it provides an opportunity to have a great social impact
2. Because it has already provided employment opportunities to many in other countries
3. Because healthcare is a universal need
4. Because there are fantastic funding avenues made available by the Government of India

W6A6Q9-MSQ: Referring to the lecture 'Systemic Approach to Biomed Innovations', which of the following are a reason for a startup to fail to reach the market?

1. The team members are weak in terms of determination and capabilities
2. The product-market fit was not correct
3. The team was not able to procure enough funding
4. The team could not use the facilities of an incubation centre

W6A6Q10-MCQ: Which of the following is the most critical to prevent other competitors?

1. Financial Management
 2. Intellectual Property Management
 3. Human Resource Management
 4. Product Quality Management
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