



**PAMIBIA UNIVERSITY**  
**OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION**  
**DEPARTMENT OF GOVERNANCE AND MANAGEMENT SCIENCES**

**MANAGEMENT SECTION**

<b>QUALIFICATION : BACHELOR OF BUSINESS MANAGEMENT HONOURS</b>	
<b>QUALIFICATION CODE: 08BBMAH</b>	<b>LEVEL: 8</b>
<b>COURSE CODE: MTC821S</b>	<b>COURSE NAME: MANAGEMENT OF TECHNOLOGY</b>
<b>SESSION: DECEMBER 2025</b>	<b>PAPER: THEORY</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	DR MOSES WAIGANJO
<b>MODERATOR:</b>	MR ERNEST MBANGA
<b>INSTRUCTIONS</b>	
The question paper consists of <b>two sections</b> . Section One is <b>compulsory</b> , while in Section Two students are required to answer any five questions of their choice.	
The total marks for this examination are 100 marks.	
<ol style="list-style-type: none"><li>1. Answer ALL the questions in the answer book provided.</li><li>2. Write clearly and neatly.</li><li>3. Number the answers clearly.</li></ol>	

***THIS EXAM PAPER CONSISTS OF 3 PAGES (Including this front page)***

## SECTION ONE (COMPULSORY)

(50 marks)

### Case Study: SolarTech Namibia

SolarTech Namibia is a medium-sized renewable energy company established in 2015. The firm specializes in the design and installation of solar home systems and solar-powered water pumps for rural communities.

Initially, SolarTech imported most of its technology from South Africa and Europe. However, rising import costs, long lead times, and frequent equipment incompatibility with local conditions forced the company to rethink its strategy. In 2020, the management decided to invest in in-house R&D and form a partnership with the Namibia University of Science and Technology (NUST) to adapt solar technologies to Namibia's unique climate and rural energy needs.

Through this collaboration, SolarTech developed a more durable solar pump that could withstand Namibia's high temperatures and sandy conditions. The innovation improved the reliability of rural water supply projects and attracted support from international donors.

Despite this success, SolarTech faces challenges:

- . Competing multinational firms have more advanced technologies and greater financial resources.
- . Recruiting and retaining skilled engineers in Namibia remains difficult.
- . Balancing the costs of continuous innovation with affordability for rural customers is a constant struggle.

### QUESTIONS

- 1) Why was it important for SolarTech to invest in local R&D rather than continuing to import technology? (10 marks)
- 2) What are the benefits and risks of SolarTech's partnership with NUST? (10 marks)
- 3) Identify and discuss two major challenges SolarTech faces in managing technology and suggest possible solutions. (10 marks)
- 4) How can SolarTech leverage its innovation in solar pumps to compete against multinational firms? (10 marks)
- 5) Why is it important for SolarTech to consider affordability and sustainability when managing its technology? (10 marks)

**SECTION TWO (CHOOSE ANY FIVE)**

**(50 marks)**

**QUESTION ONE**

What are the key criteria to consider when selecting an innovation project? (10 Marks)

**QUESTION TWO**

Describe the Stage-Gate process in innovation project selection. (10 Marks)

**QUESTION THREE**

In the Namibian context, what are the main types of intellectual property rights (IPR), and how do they protect innovation? (10 Marks)

**QUESTION FOUR**

What strategies can a firm employ to enhance the overall value of its technology and increase its chances of becoming the dominant design? (10 marks)

**QUESTION FIVE**

What traits seem to make individuals most creative, and are these the same traits that contribute to successful inventions? 10 marks

**QUESTION SIX**

Explain the concept of design thinking and its importance in organizing for innovation. (10 Marks)

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**END OF PAPER**