

UNIVERSITY OF COLOMBO, SRI LANKA FACULTY OF GRADUATE STUDIES

Postgraduate Diploma in Manufacturing Management (2022/2023) Programme

(Semester - II) Examination - October 2023

PGDip MM 5207 / 507 – Technology and Innovation Management Three (03) Hours

Answer ANY FOUR (04) Questions.

 i. Define 'technology management' and 'innovation management'. How do these concepts differ from each other, and how are they interconnected?
 (10 Marks)

ii. Explain the importance of technological innovation in today's competitive business landscape. Provide examples to support your argument.

(15 Marks)

(Total: 25 marks)

 Define the concept of state's role in innovation. Briefly explain why is it important for governments to actively participate in fostering innovation

(12 Marks)

ii. Explain the concept of public-private partnerships (PPPs) and its role in fostering innovation. How do these collaborations help bridge the gap between government and industry for mutual benefit?

(13 Marks)

(Total: 25 marks)

 Define strategic alliances in the technology sector and discuss the different forms of strategic alliances commonly found in that sector

(15 Marks)

ii. Explain the reasons for entering a strategic alliance in innovation and technology transfer.

(10 Marks)

(Total: 25 marks)

4. Describe the technology management concept presented by Utterback and Abernathy and the technology cycle theory introduced by Tushman and Rosenkopf.

Analyze the similarities and differences between these two frameworks concerning technology innovation and management.

(25 marks)

5. i. Discuss the Concurrent and Sequential Product Development approaches with appropriate examples

(18 Marks)

ii. Explain the Kano Model and its significance in new product development.

(07 Marks)

(Total: 25 marks)