

The Open University of Sri Lanka
Faculty of Engineering Technology



Study Programme	: Master of Technology in Industrial Engineering – Level 7
Name of the Examination	: Final Examination
Course Code and Title	: MEX7118 – Technology Management
Academic Year	: 2016/17
Date	: 20 th November 2017
Time	: 0930-1230h
Duration	: 3 hours

General instructions

1. Read the questions carefully before answering.
2. Please note that you should write your registration number and your index number in each pages of your answer book. Do not write your name.
3. In case of doubt, please consult the supervisor or an invigilator conducting the examination.
4. This question paper consists of Four (04) questions. Answer all Questions.

Question 01

- a) Creation, deployment and protection of national technological knowledge base is of great importance to a nation. Briefly explain how the creation, deployment and protection of national technological knowledge base has to be carried out by a strong nation.
(10 marks)
- b) During Technology Decline, technology and its related products show sharp decline in usage and sales. Briefly explain why this situation arises to products and how an organization can overcome such a crisis.
(10 marks)

Question 02

- a) Explain what is innovation and why it is important? (10 marks)
- b) Explain what is the Management of Technology? (10 marks)
- c) Explain how does Management of Technology support the innovation and new product development? (10 marks)

Question 03

- a) Explain why is an understanding of Technology cycles and “S” curves important for effective Innovation Management? (10 marks)
- b) Explain the differences between product and process innovation. (5 marks)
- c) Explain why do innovations often come from outside the industry? (5 marks)
- d) Explain why do first movers often fail? (10 marks)

Question 04

- a) What is competitive advantage and how can it be achieved? (10 marks)
- b) “Companies such as Qualcomm, Bosch and Texas Instruments supply chips and sensors for the iPhone 6” Taking into consideration the above statement explain when would a collaborative strategy be appropriate. (10 marks)