

The Open University of Sri Lanka  
Faculty of Engineering Technology



Study Programme	:	Master of Technology in Industrial Engineering - LEVEL 07
Name of the Examination	:	Final Examination
Course Code and Title	:	<b>MEX7118 – Technology Management</b>
Academic Year	:	2015/16
Date	:	28 <sup>th</sup> November , 2016
Time	:	0930 – 1230 hrs
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 paper consists of Four (04) questions. Answer all Questions.

---

**Question 01**

- a) Briefly describe the difference between invention and innovation.  
(10 marks)
- b) Briefly explain what “Technology Management” is.  
(10 marks)
- c) Industry giants like “Nokia” also can go to bankruptcy due to certain technological issues. Referring to the case study provided to you and other sources, discuss the contribution of technology management issues for the down fall of such organizations.  
(10 marks)

## Question 02

(a)

Mortality of New Technology Based Firms during their first years in business is shown in figure Q2(a). Explain how the Technology and innovation management can help such firms to survive, grow and expand.

**(10 marks)**

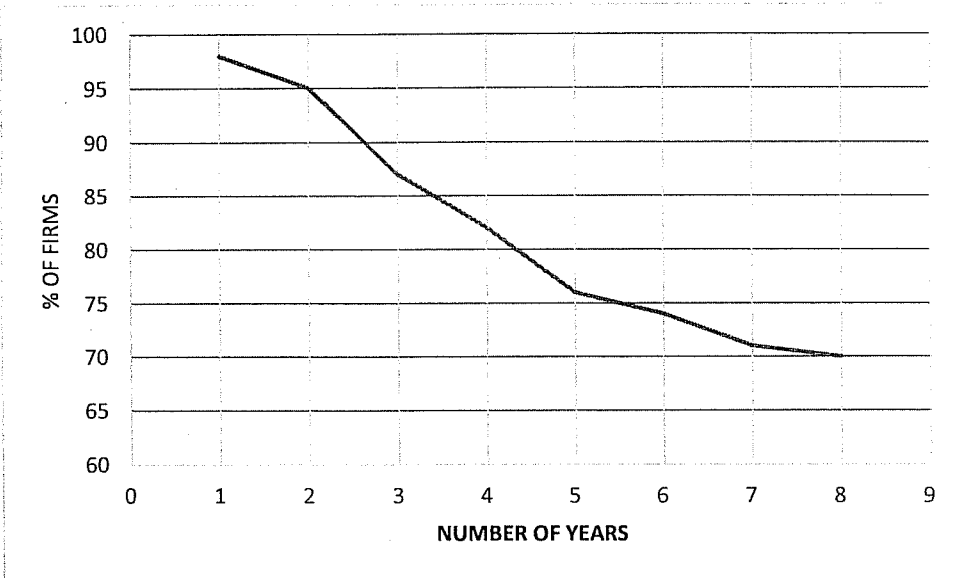


Figure Q2(a). - Mortality of New Technology Based Firms during their first years

(b)

The S curve for a product in a manufacturing organization is shown in the Figure Q2 (b).

i.

Briefly explain what is an S curve with respect to a product.

**(5 marks)**

ii.

Using the figure Q2 (b) briefly explain how an organization can sustain without failure.

**(5 marks)**

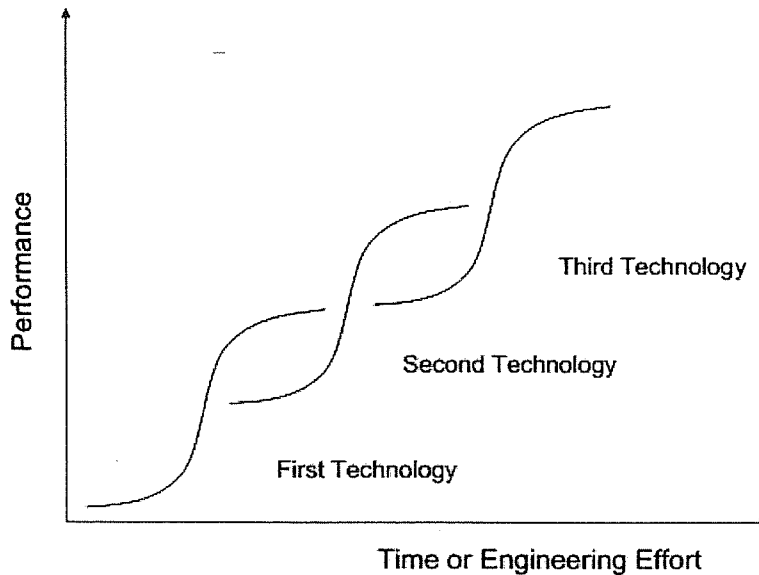


Figure Q2(b) – The S curve for a product manufactured

### Question 03

a)

Briefly explain how technology and technology management can lead an organization to achieve a competitive advantage over other competitors.

**(10 marks)**

b)

Technology Management is mainly carried out at two levels: At National Level and At Enterprise Level. Briefly explain the main objectives of:

i.

Enterprise Level technology management policy.

**(05 Marks)**

ii.

National level technology management policy

**(05 marks)**

### Question 04

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)**

**END.**