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Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2018/2019**

COURSE NAME : TECHNOLOGY MANAGEMENT
COURSE CODE : BPA 21703
PROGRAMME CODE : BPA
EXAMINATION DATE : JUNE / JULY 2019
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

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THIS QUESTION PAPER CONSISTS OF **THREE (3) PAGES**

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- Q1** The process of technological innovation is a complex set of activities that transforms ideas into scientific knowledge and ultimately into real-world applications.
- (a) Discuss **FOUR (4)** lessons that can be drawn from Xerox case of technological innovation based on the perspective of technology management. (10 marks)
- (b) Elaborate **TWO (2)** of the eight stages of technological innovations with appropriate examples. (15 marks)
- Q2**
- (a) Define **FOUR (4)** components of technology. (10 marks)
- (b) Distinguish the degree of sophistication of **THREE (3)** technology components in **Q2(a)** and their implications by using appropriate examples. (15 marks)
- Q3**
- (a) Differentiate between “contracting out for Research and Development (R&D)” and “licensing in of technology” with appropriate examples. (6 marks)
- (b) Explain **TWO (2)** attributes of applied research stage in technology development using appropriate examples. (7 marks)
- (c) In October 1998, Nokia became the best-selling mobile phone brand in the world. Nokia’s operating profit went from \$1 billion in 1995 to almost \$4 billion by 1999. The best-selling mobile phone of all time, the Nokia 1100, was created in 2003. In 2007, Apple introduced the iPhone. By the end of 2007, half of all smartphones sold in the world were Nokia’s, while Apple’s iPhone had a mere 5 percent share of the global market. In 2010, Nokia launched the iPhone “killer” but failed to match the competition. The quality of Nokia’s high-end phones continues to decline. In just six years, the market value of Nokia declined by about 90 percent and the decline accelerates by 2011, where finally it was acquired by Microsoft in 2013.
- Explain **THREE (3)** types of research and development (R&D) needs that Nokia must consider in their product planning, based on the above scenario. (12 marks)

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- Q4** (a) Discuss **FOUR (4)** objectives of parallel transfer in technology transfer. (8 marks)
- (b) Distinguish **TWO (2)** stages of technology transfer process. (8 marks)
- (c) Compare **THREE (3)** types of technology transfer with appropriate examples. (9 marks)

- END OF QUESTIONS -

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