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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
(ONLINE)
SEMESTER I
SESSION 2020/2021**

COURSE NAME : TECHNOLOGY MANAGEMENT
COURSE CODE : BPA 21703
PROGRAMME CODE : BPB / BPC / BPP
EXAMINATION DATE : JANUARY / FEBRUARY 2021
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS.

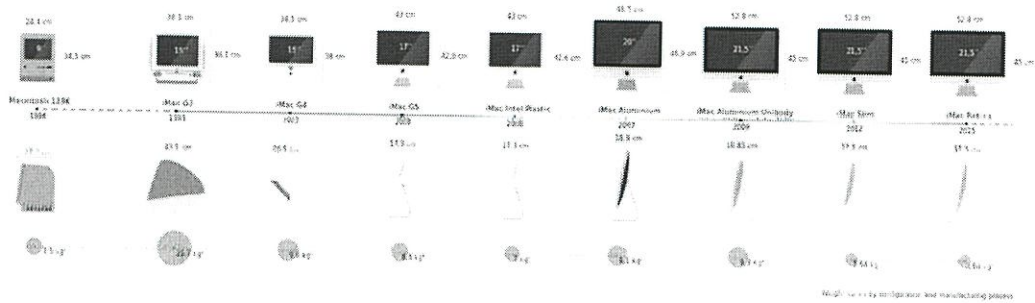
THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

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- Q1** The role of the technology management function in an organization is to understand the value of certain technology for the organization.
- (a) Define strategy. (2 marks)
 - (b) Explain **FIVE (5)** successful strategies that a company should follow to remain competitive. (5 marks)
 - (c) Effective technology management is based on successful strategies.
Compare the purpose between business strategies and technology strategies (4 marks)
 - (d) Formulate **SEVEN (7)** steps of technology strategy for a start-up medium manufacturing company by considering yourself as its CEO. (14 marks)
- Q2**
- (a) Explain technology forecasting with appropriate example. (3 marks)
 - (b) Demonstrate a technology discontinuity model for two different technologies indicated as M1 and M2. (10 marks)
 - (c) Analyse the technology discontinuity model in **Q2(b)** with appropriate technology examples of M1 and M2. (12 marks)

Q3



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Figure Q3. Apple Computer Development

- (a) Identify the hierarchical stages of technology development for the Apple computer in **Figure Q3**. (2 marks)
- (b) Explain the stage based on the answer in **Q3(a)** (4 marks)
- (c) Discuss why Apple needs to come out with new R&D product (6 marks)
- (d) Earlier this year, 2020, Apple acquired artificial intelligence startup Vilynx with the aim of improving the Siri voice assistant built into Apple devices. The Vilynx website is now defunct, but the company described itself as "AI for media," and it developed tools to help media companies compete against Netflix and other major media giants. Vilynx had a tool that catalogued raw video to make it searchable, providing metadata for video, text, and images. It processed video and then provided relevant content tags. The service also generated rich, motion previews of content offerings, and provided search tools for surfacing content across videos, articles, and images. It also included an AI-powered recommendations platform while also offering tools to see trending topics on websites and social media. Apple could potentially use the Vilynx technology to bolster Siri and other AI based software on Apple devices, such as Photos. Apple paid about \$50 million for the company.
 - (i) Identify what type of acquisition method applied by Apple in **Q3(d)**. (1 mark)
 - (ii) Compare acquisition strategy used in **Q3(d)(i)** with other external acquisition strategies. (12 marks)

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- Q4** The idea of the Kuala Lumpur-Singapore High Speed Rail (KL-SG HSR) was initiated through the Economic Transformation Programme to transform Malaysia into a high-income nation. The KL-SG HSR is an alternative travel mode between two of Southeast Asia's most vibrant and fast-growing economic engines. The iconic project will include 7 stations in Malaysia and one station in Singapore. The connectivity will enable businesses to be more productive and access a broader market place, while the public will enjoy an improved travel experience of shorter travel time (90 minutes from KL to Singapore) and a comfortable ride, through the HSR's city centre to city centre connection along the corridor. The project has attracted keen interest globally, with Japan's ambassador to Malaysia saying earlier in 2018 that the country could offer a "truly holistic" package towards the project. Japan is offering advanced facial recognition technology that would ensure smooth travelling between the cities of Kuala Lumpur and Singapore, as part of its bid for the project. The technology offered by a Japanese company would help to ensure swift immigration clearance when commuters travel between Malaysia and Singapore. Other than Malaysia, Japan had also offered their Shinkansen (Japan's bullet train) technology to Taiwan who are now operating the system themselves. Currently more than 150 of Japanese experts are working for transfer of technology with India for its 500 km HSR between Mumbai and Ahmadabad. Other bids are expected to come from China, South Korea and France for the project that is expected to be operational not earlier than 2026. Technology transfer within KL-SG HSR will ultimately change how people live, work and travel entirely.

(Source: www.myhst.com.my)

- (a) Define technology transfer. (2 marks)
- (b) Categorize **TWO (2)** types of technology transfer with appropriate examples relevant to KL-SG HSR project. (6 marks)
- (c) Outline **FOUR (4)** objectives of parallel transfer within KL-SG HSR project. (12 marks)
- (d) State **FIVE (5)** implications for Malaysia from the KL-SG HSR project in the article above. (5 marks)

- END OF QUESTIONS -