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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2021/2022**

**COURSE NAME : INNOVATION AND COMMERCIALIZATION
MANAGEMENT**

COURSE CODE : BPB 32603

PROGRAMME CODE : BPA

EXAMINATION DATE : JULY 2022

DURATION : 3 HOURS

INSTRUCTION

- 1. ANSWER ALL QUESTIONS**
- 2. THIS FINAL EXAMINATION IS CONDUCTED VIA CLOSED BOOK.**
- 3. STUDENTS ARE PROHIBITED TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK**

THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES

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TERBUKA

- Q1** Manufacturing process can be defined as the process of covering raw materials, components, or parts into finished goods that meet customer satisfaction, while service process is defined as a valuable action, deed, or effort performed to satisfy a need or to fulfill a demand. Manufacturing organizations do not just offer products, while service organizations do not just offer services. Both types of organizations normally provide a package of goods and services. Generally, service organization cannot inventory their outputs, but manufacturing firms that make customized product also cannot inventory their output. Everyone in an organization has some customers, whether in service or manufacturing. Both organizations require hard labor, have a very good return on investment, have huge marketing potential, have forecasting and capacity planning to match supply and demand.
- (a) Define service innovation. (2 marks)
- (b) List **FIVE (5)** fundamental differences between manufacturing and service operations. (5 marks)
- (c) Differentiate **THREE (3)** fundamental differences from **Q1(b)** with appropriate examples related to the food industry. (18 marks)

- Q2** PETALING JAYA: Proton's recent tie-up with Chinese carmaker Geely provides Malaysia with a new platform to revive its stalled ambitions of becoming Southeast Asia's automotive hub. The country should ride on foreign carmakers who have invested in Malaysia as a springboard into the Asean market, such as European giant Peugeot and South Korea's Kia Motors. Zhejiang-Geely partnership with Proton is a rewarding tie-up which could be one way forward to fulfil Malaysia's ambition if equity ownership conditions are relaxed to allow majority control by the technology owner. China liberalised its foreign equity conditions for foreign automakers in 2018. Within a year, Elon Musk had decided to establish a 100%-owned subsidiary to manufacture Tesla electric cars in Shanghai.

Likewise, Putrajaya should take another look at the National Automotive Policy, the proposed revival of another national car project. Given the right incentives, transparency and dismantling of the National Automotive Policy's restrictive conditions, foreign carmakers would want to invest in Malaysia as their Asean hub. Proton's strategic partnership with Zhejiang Geely Holding Group (Geely) in 2017 led to the Chinese company acquiring a 49.9% stake in the national carmaker. Last month, Proton spread its wings, penetrating the market in Kenya, Pakistan, Brunei, Bangladesh and Egypt. The company said exports had increased by 49.8% in volume despite global restrictions caused by the Covid-19 pandemic, although the Malaysian automotive industry is expected to contract by an estimated 13%. Demand for Proton-Geely's new SUV almost doubled from the initial projection, with the flagship model of the vehicle fully booked until August.

Proton and Geely are not cost competitive in the Asean market where Japan's carmakers and their affiliated vendors dominate in Indonesia and Thailand. That is where the country needs to clearly communicate existing incentives like pioneer status and do not confuse investors with things like customised incentives. Protectionist policies had arrested competitiveness with Thailand initially, and now regionally. There is a lot of value in the automotive industry.

In Japan, the auto market is the leading industry in terms of employment with about 5 million direct and indirect employees. There is the new energy car market where electric vehicles are disrupting the old playing field. The country needs to change the National Adaptation Plan (NAP) or we get further left out of a new global industry.

The new global auto industry is all about digitalisation. Ironically, the NAP recognises the potential disruption but beyond that, the policy and its roadmaps are more visions than reality. Geoffrey Williams, an economist at Malaysia University of Science and Technology, said that foreign carmakers have looked to Indonesia not only to build cars, but also batteries and other parts. Malaysia should consider a pivot into the parts market and while it may find some scope for exports, it was not without issues such as poor scale of economies and quality issues in the supply chain. "But there are blue oceans out there through a focus on market tiers particularly looking at markets underserved by big players or emerging markets where incomes do not quite cover more expensive existing brands," he said referring to a popular marketing theory. Williams said there were very large customer segments in emerging economies shifting to higher motorcar use and away from motorcycles as incomes rise, not unlike where Malaysia was 20 years ago. He said the new models from Malaysia are actually quite attractive and value for money. Demand, he said, can be found in unexplored markets. "The key is value innovation which means maintaining quality and keeping price down at the same time. There is still a long way to go before existing model types are made obsolete by fully electric models."

(Source: www.freemalaysiatoday.com, 17 January 2021)

Based on the excerpt given, answer all questions.

- (a) Identify entities that have the potential to involve in strategic alliance. (5 marks)
- (b) Outline all the positive impacts of strategic alliance among companies in Q2(a). (6 marks)
- (c) Demonstrate a complete model for innovation collaboration for Proton with relevant explanations. (14 marks)

Q3



Figure Q3: Bread production floor

- (a) Illustrate the generic knowledge typology hierarchy relevant to **Figure Q3**. (9 marks)
- (b) Propose **TWO (2)** examples of each explicit knowledge and implicit knowledge that can be identified from **Figure Q3**. (6 marks)
- (c) Analyze Blackler's knowledge typologies accordingly from the most relevant to the least relevant that can be explained from **Figure Q3** with appropriate examples. (10 marks)

Q4 In a recently published report by Counterpoint Research, it was observed that 5G smartphones reached 51% sales penetration globally. Thereby, surpassing 4G smartphone shipments for the first time. It was quite a feat, as the 5G smartphone industry went from being a cynosure of doubt just two years back to becoming a sizable market opportunity in 2022. Today, as a large chunk of the population goes online, the appetite for super-fast data speeds and a digitally led lifestyle is only going to grow stronger with the advent of 5G technology in India and across the world. The choices for 5G smartphones are becoming more nuanced. Consumers want a complete, powerful 5G experience with many enhanced capabilities in camera, display, performance optimisation, power consumption, gaming, etc. At the same time, they want 5G devices to come in thin, light, and ultra-slim build in a striking design, without the trappings of a bulky exterior. The next phase of 5G device evolution will see more technological innovation from smartphone OEMs to bring thinner and lighter form factors, without compromising on the experience. It is anticipated that a large portion of R&D will be channelized to build the slimmest and lightest 5G phones, housing powerful chipsets, nonetheless.

(Source: www.financialexpress.com, 13th May 2022)

Based on the excerpt given, answer all questions.

- (a) Intellectual property is a mean of protecting the results of innovation and creative activity.

Describe **TWO (2)** characteristics of intellectual property with appropriate examples.
(5 marks)

- (b) Propose the intellectual property protections that are ideal to create value of a smartphone with examples.
(12 marks)

- (c) Justify the ownership of all intellectual properties stated in **Q4(b)**.
(8 marks)

– END OF QUESTIONS –