UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL

FINAL EXAMINATION
OCTOBER 2024 SEMESTER

COURSE CODE	:	**ECB20903**
COURSE NAME	:	**TECHNOLOGICAL INNOVATION IN BUSINESS DEVELOPMENT**
PROGRAMME NAME	:	**BACHELOR OF BUSINESS ADMINISTRATION (HONS) IN MANAGEMENT AND ENTREPRENEURSHIP**
DATE	:	**3 FEBRUARY 2025**
TIME	:	**2.00 PM – 5.00 PM**
DURATION	:	**3 HOURS**

INSTRUCTIONS TO CANDIDATES

1. **Please CAREFULLY read the instructions given in the question paper.**
2. **This question paper has information printed on both sides of the paper.**
3. This question paper consists of **THREE (3) Sections; Section A, Section B and Section C**.
4. Answer **ALL** questions in **Section A, Section B and Section C**.
5. Please write your answers on the OMR answer sheet and answer booklet provided.
6. All questions must be answered in **English** (any other language is not allowed).
7. **This question paper must not be removed from the examination hall.**

THERE ARE SIX (6) PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 10 marks)

INSTRUCTION: Answer ALL questions.

Please use the objective answer sheet provided.

1. Which of the following pressures is best addressed by implementing AI technologies?
   A. Regulatory pressure
   B. Demand for real-time data-driven decisions
   C. Reduction in manual labor costs
   D. Employee retention challenges

2. Which of the following represents an open-source innovation model?
   A. Proprietary software with restricted licenses
   B. Innovations kept secret for decades
   C. Closed patent licensing
   D. Software and ideas that allow public collaboration and modification, like Linux.

3. Why do companies sometimes share their intellectual property?
   A. To remain secretive
   B. To eliminate competition
   C. To foster collaboration, build ecosystem, and drive industry growth
   D. To avoid innovation

4. What is a benefit of open innovation models regarding intellectual property?
   A. Increased secrecy of ideas
   B. Higher barriers for startups to innovate
   C. Greater collaboration and faster technological advancement
   D. Reduced sharing to innovate

5. Which innovation model encourage sharing intellectual property for mutual growth?
   A. Open innovation
   B. Closed innovation
   C. Traditional supply chain
   D. Proprietary software models

6. Which type of innovation is most likely to succeed through community participation?
   A. Innovations driven purely by internal stakeholders
   B. User-centered, practical innovations addressing real-world problems
   C. Completely isolated product designs
   D. Ignoring market needs

7. In which phase of product development do communities provide the most value?
   A. Initial idea generation and prototype feedback
   B. Final packaging and distribution
   C. Solely in production
   D. During financial audits

8. What is one challenge of incorporating communities into innovation?
   A. Increased customer loyalty
   B. Faster product delivery
   C. Reduced development costs
   D. Managing diverse ideas and filtering for viability

9. Why do businesses encourage user-generated content in their innovation models?
   A. To limit creativity
   B. To reduce engagement
   C. To harness external perspectives and ideas for innovation
   D. To eliminate collaborative development

10. Which company successfully uses community-driven innovation to enhance its products?
   A. Apple (closed ecosystem)
   B. LEGO Ideas (crowd sourced product suggestions)
   C. Traditional brick-and-mortar stores
   D. Solely hardware manufactures

SECTION B (Total: 50 marks)

INSTRUCTION: Answer ALL questions.
Please use the answer booklet provided.

Question 1

(a) Describe the difference between an idea and an opportunity.

(4 marks)

(b) Name an entrepreneur that you personally admire. Discuss why you consider this person to be an entrepreneur?

(6 marks)

Question 2

(a) Consider a software application you use regularly. What task(s) does it improve or enable? Suggest three (3) ways the application could be improved.

(6 marks)

(b) How would you define Google's vision? Construct a mission statement for Google.

(4 marks)

Question 3

Discuss the **FIVE (5)** opportunities and **FIVE (5)** threats for a business organization.

(10 marks)

Question 4

(a) Discuss the **SIX (6)** forces model of competitive forces in an industry.

(6 marks)

(b) Netflix has created a new business market. Discuss in your own word their challenges in this business.

(4 marks)

Question 5

Podcasting, blogging, online photo sharing, online video and tweeting are five technologies that are enabling a much broader set of content publishers and content consumers. Discuss the nature of all five industries above that makes them popular.

(10 marks)

SECTION C (Total: 40 marks)

INSTRUCTION: Answer only ONE question ONLY.
Please use the answer booklet provided.

Question 1

Screen Wars – CRT versus LCD

TV sets became consumer products in the years after World War II. There were a mere 15,000 in the UK in 1947, but by the time of the coronation of Queen Elizabeth in 1953 there were 1.5 million and by 1968 numbers had risen tenfold to 15.1 million. The early sets used thermionic valves with a cathode ray tube (CRT) for the display screen. CRTs were bulky and heavy and initially TV screens were small, varying in size between 10 inches and 14 inches. They were often contained within large wooden cabinets with doors at the front so that when not in use they looked like a piece of furniture.

Over the course of the 1950s and 1960s TVs gradually got bigger. By the 1970s when colour TV came in, the average size of screen increased from 14 inches to 21 inches. Although TV screens had got even bigger by the mid-1990s most were still fitted with a CRT screen. However, CRTs were rapidly reaching their limits. Although it was possible to make large screen TVs using CRT technology, the resulting sets were large, bulky and very heavy, making them impractical.

The mid-1990s saw the introduction of so-called flat screen TVs. These utilised a completely new technology in the form of liquid crystal display (LCD) screens. These were both much thinner and much lighter than sets using the old CRT technology and were more energy efficient. LCD technology had been invented in the 1960s and in the 1970s was used for electronic devices like watches and calculators. The first TVs to utilise LCD technology were introduced by Sharp in 1988. However, they gave a very poor quality picture and attracted little interest. As a result few expected LCD to catch on. More promising was plasma technology first introduced for TVs in 1997. However, plasma technology proved short-lived. Although it gave excellent picture quality it was only available as large screen displays of 42 inches or more, was not particularly energy efficient and was expensive. It was to remain a niche product confined to specialist applications (e.g. high quality home cinema applications).

Meanwhile despite its deficiencies CRT continued to dominate the market. By 2006 almost 80 per cent of the TVs sold still used CRT technology. However, at this point developments in LCD technology began to yield dramatic performance improvements in terms of picture quality and lower costs. More important, however, was the fact that LCD technology was very flexible. It was capable of being scaled down to small sets in the 14-30 inch range as well as being scaled up for sets in the 40-50 inch range. This feature was to prove decisive. It meant LCD technology could be used for other applications such as PC screens, resulting in high volume production and lower costs. Even so it was not until the fourth quarter of 2007 that LCD sets outsold CRT ones for the first time. From this point onwards changes came rapidly. Sony, one of the leading TV makers, closed its last CRT plant early in 2008. Sales of flat screen LCD sets meanwhile rose from 105 million in 2008 to 187.9 million in 2010.

(a) Based on the article above, what technology innovation that has threatened the CRT technology in television sets.

(10 marks)

(b) What are the challenges that CRT sets facing when LCD sets been introduce into the market.

(10 marks)

Question 2

Blu-ray

The home entertainment industry is emerging from a period of flux brought on by the arrival of high definition (HD) television. Nowhere has this flux been more apparent than in the DVD market. The home DVD market is worth £12.3 billion a year, but has lately contracted in the face of uncertainty surrounding the format for the new generation of high definition DVDs. There has been intense competition between two competing new formats, Toshiba's HD DVD and Sony's Blu-ray.

Toshiba was first into the market and initially seemed to have the upper hand. Its HD DVD appeared to have a number of advantages. Its discs were cheaper to produce and sales were initially strong in Japan. In the movie field Toshiba was quick to sign up Dreamworks, while in the computer games field it signed up Microsoft, maker of the best-selling X-box 360 videogames console.

However, Sony's Blu-ray now appears to have the upper hand. Its discs, though more expensive, have 25 gigabytes of storage compared to Toshiba's 15 gigabytes. Sony held back the launch of its own videogames console, PlayStation 3, and picked up much criticism from consumers at the time, precisely because it wanted to ensure that it came with Blu-ray installed. The Microsoft X-box 360 on the other hand, while it supports the HD DVD format, requires a separate plug-in HD DVD player. As sales of PlayStation 3 have now passed the 10 million mark this has helped to ensure a substantial base for Blu-ray among videogame users. By contrast only about 1 million HD DVD players have been sold and then mainly in Japan.

With the two formats competing neck and neck, Toshiba was dealt two severe blows in the early months of 2008. First, Warner Bros, the world's largest DVD producer, opted to stop selling the new style DVDs in both formats opting instead for Blu-ray alone. Warner, which accounts for about a fifth of the lucrative US DVD market, was the last big Hollywood studio producing discs in both formats. MGM, Fox, Walt Disney and Sony Pictures had already signed up to the Blu-ray format. The second major blow was the decision by Wal-Mart, the world's largest retailer, to dump HD DVD across its 4,000 stores in the US. Wal-Mart's move followed a similar decision by consumer electronics retailer Best Buy and online video rental firm Netflix.

These twin blows effectively sealed the fate of Toshiba's HD DVD and confirmed the place of Blu-ray as the dominant design for high definition DVDs. Sony's success was in sharp contrast to its experience with VCRs where its Betamax system lost out to the rival VHS system produced by arch rival JVC.

Source: Wray and McCurry (2008).

(a) What are the technological changes that have happened in the above case study?

(10 marks)

(b) Explain in your own words, why technological innovation create challenges in new product based on the case study above.

(10 marks)

END OF EXAMINATION PAPER