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UNIVERSITI
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## FINAL EXAMINATION
## MAY 2024 SEMESTER

COURSE    :    **TFB2053 - ENTERPRISE ARCHITECTURE**

DATE      :    **5 AUGUST 2024 (MONDAY)**

TIME      :    **9:00 AM - 12:00 NOON (3 HOURS)**

## INSTRUCTIONS TO CANDIDATES

1.    Answer **ALL** questions in the Answer Booklet.

2.    Begin **EACH** answer on a new page in the Answer Booklet.

3.    Indicate clearly answers that are cancelled, if any.

4.    Where applicable, show clearly steps taken in arriving at the solutions and indicate **ALL** assumptions, if any.

5.    **DO NOT** open this Question Booklet until instructed.

**Note** :

    i.    There are **SIX (6)** pages in this Question Booklet including the cover page

    ii.   **DOUBLE-SIDED** Question Booklet.

1.  a.  Zachman and The Open Group Architecture Framework (TOGAF) are well-known EA frameworks. Explain **TWO (2)** advantages and **TWO (2)** disadvantages of each of these frameworks.

    [8 marks]

    b.  Explain the **FOUR (4)** phases of the EA implementation methodology.

    [8 marks]

    c.  Discuss **TWO (2)** reasons that how EA improves and maximizes the value of an organization.

    [4 marks]

2.   a.   A financial services company aims to enhance its digital services by aligning its EA with its strategic business goals. The company has chosen to implement TOGAF to achieve this alignment. To do so, they need to understand the core elements of EA and how each element contributes to the overall architecture.

   i.   Illustrate **FIVE (5)** core elements of EA

[5 marks]

   ii.   Based on the illustration in **part (a)(i)**, describe each of the core elements

[10 marks]

   b.   Elaborate why it is critical for Enterprise Architects to consider the people and culture of an organization as a factor in implementing an appropriate EA framework.

[5 marks]

3.   a.   Laksa Preparation is a business function of Laksa Enterprises. It helps to order processing service to the customers. It may involve several interactions and processes to make the Laksa. For instance, the order placed event triggers the laksa making process. After the laksa is prepared, the laksa preparation process triggers take-away process or dine-in process. Both processes, either the laksa is dine-in or take-away, triggers the payment process. Finally, the close order is triggered at the end.

          i.   Describe the Business Layer of ArchiMate and its importance.

[5 marks]

          ii.   List any **FOUR (4)** active structure business layer elements in ArchiMate.

[4 marks]

          iii.   Identify services, functions, processes, events, and relationships from the case given above.

[5 marks]

   b.   Identify **THREE (3)** values and **THREE (3)** risks that can be associated with the implementation of EA.

[6 marks]

4. InnoWave Technologies is an innovative software development company based in Kuala Lumpur. They are working on various projects, including a cutting-edge IoT-based home automation system for a client. The project manager is planning to hire a team of developers from India to work remotely on this project to leverage their expertise and cost-effectiveness.

a. Identify the best organizational structure for InnoWave Technologies.

[2 marks]

b. Analyse the correlation of your identified organizational structure for InnoWave Technologies by mapping with $EA^3$ cube framework functional level.

[10 marks]

c. Describe **TWO (2)** relevant Line-of-Business (LoB) for InnoWave Technologies.

[4 marks]

d. Explain any **TWO (2)** types of risk that could affect the successful implementation of the project by InnoWave Technologies.

[4 marks]

5.  a.  Identify the **THREE (3)** organizational level in Parson & Thompson model.

[3 marks]

b.  Based on your answer in **part (a)**, describe the following for each organizational level:

i.  Structure (Parson's perspective).

[ 6 marks]

ii.  Function (Thompson's perspective).

[ 6 marks]

c.  Explain how the decision making can be improved with the implementation of EA.

[ 5 marks]

- END OF PAPER -