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| **No. of Questions** | **04** |
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UNIVERSITY OF SRI JAYEWARDENEPURA

**Faculty of Technology**

# Bachelor of Information and Communication Technology Honours Degree Academic Year 2021/2022

**Fourth Year Second Semester Examination - April 2024**

**ITC4212: Information Systems Strategy and IT Governance**

# Duration: Two (2) Hours

**Read and follow the instructions given below:**

* This paper contains four (**4**) questions in three (**3**) pages.
* **“Index number”** should be written on top of each page of the answer script, and pages must be

**numbered appropriately**

* Answer **all** questions

**Question 1 Total Marks 25**

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| A. | State four (4) symptoms of poor IT alignment.   * Cancelled projects * Slow progress * Systems and tools not fully utilized * Business users unsatisfied with IS services * Never enough resources; fighting for resources | (4 Marks) |
| B. | Define IT maturity.  IT maturity refers to the level of effectiveness, efficiency, and strategic alignment of an organization's IT capabilities in supporting business objectives. | (3 Marks) |
| C. | Explain the stages of IT maturity and the characteristics associated with each stage.  0 Non-existent - Management processes are not applied at all. no involvement of the top management in IT-related decisions  1 Initial - Processes are ad hoc and disorganized  2 Repeatable - Processes follow a regular pattern  3 Defined - Processes are documented and communicated  4 Managed - Processes are monitored and measured  5 Optimized – Best practices are followed and automated. IT is fully aligned with business strategy. | (6 Marks) |
| D. | Discuss the evolution of IT functions in an organization with the help of a diagram. | (6 Marks) |
| E. | Assess the impact of the external environment on the implementation of IT governance strategies.   * Regulatory Compliance – Laws such as GDPR require organizations to adopt strict IT governance. * Technological Changes – Emerging technologies like AI and cloud computing demand adaptable IT governance. * Market Competition – Firms need agile IT strategies to remain competitive. * Cybersecurity Threats – IT governance must address increasing risks of data breaches. | (6 Marks) |

**Question 2 Total Marks 25**

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|  | “An organization without an IT governance framework is currently implementing a suitable IT governance framework to optimize the efficient use of its IT resources.” Answer the following questions based on this scenario. |  |
| A. | List three (3) ITG frameworks that can be used by the organization   * COBIT * ITIL * ISO 17799 | (3 Marks) |
| B. | Discuss two (2) potential risks and challenges associated with the lack of a structured ITG framework.   * Inefficient Resource Utilization – Lack of governance leads to redundant IT spending and inefficiencies. * Security and Compliance Risks – Failure to comply with industry regulations can result in legal penalties. | (3 Marks) |
| C. | Evaluate the impact of three (3) different organizational factors on selecting an appropriate IT governance framework.   * Company Size – Large organizations may prefer COBIT for control, while smaller ones may opt for ITIL. * Industry Regulations – Heavily regulated industries (e.g., finance, healthcare) may need strict compliance frameworks. * Corporate Culture – Organizations with a structured culture may implement rigid IT governance, whereas flexible cultures may prefer agile frameworks. | (6 Marks) |
| D. | Stakeholder involvement is crucial in the selection process of an IT governance framework. Justify the statement with examples.   * Executive managers ensure IT governance aligns with business goals. * IT Teams provide technical feasibility insights. * End Users help ensure usability and efficiency. * *Example*: A financial institution involving compliance officers when selecting COBIT ensures regulatory alignment. | (6 Marks) |
| E. | Provide a brief overview of the implementation plan for the selected IT governance framework within the organization   * Assessment – Evaluate existing IT governance practices. * Framework Selection – Choose a framework (e.g., COBIT). * Policy Development – Define governance policies. * Implementation – Deploy tools and train employees. * Monitoring & Improvement – Continuously review and refine governance processes. | (7 Marks) |

**Question 3 Total Marks 25**

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| A. | State the main components of a Business Strategy Plan.  Values  Vision  Mission  Strategic objectives  Actions and KPI’s | (5Marks) |
| B. | Explain the ever-increasing importance of Information Systems in modern organizations. | (6 Marks) |
| C. | Explain the differences between Vision and Mission statements, considering their focus, timeframe, and content. | (6 Marks) |
| D. | Describe the Information Systems Strategy Triangle with the help of a neat diagram    The **Information Systems Strategy Triangle** represents the alignment between three key organizational strategies:   1. **Business Strategy** – Defines the company’s overall goals and competitive approach. 2. **Organizational Strategy** – Involves structure, culture, and processes that support the business strategy. 3. **Information Systems Strategy** – Focuses on the technology and digital infrastructure that enable business and organizational strategies.   These three elements must be aligned to ensure successful implementation and value creation through information systems. | (8 Marks) |

**Question 4 Total Marks 25**

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| A. | Explain Porter's Competitive Advantage model with examples. | (5 Marks) |
| B. | Examine the benefits and strategic advantages of adopting social business strategies within today’s environment. | (6 Marks) |
| C. | Are Information Systems Strategies critical for implementing strategies in dynamic environments? Justify your answer with the help of an appropriate model. | (8 Marks) |
| D. | “The strategic planning process encompasses three phases-situation  analysis, strategy formulation, and strategy implementation”. Discuss the statement. | (6 Marks) |

*\*\*\*\*\* End of the paper \*\*\*\*\**