Section 7: The Business of IT – Study Companion

What is Information technology?

What is IT governance?

What is the software development life cycle?

What is project management frameworks?

What are digital enterprises?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Communication | Data Collection & Management | Information Security Management | Consumer Relationship Management | Process Improvement |
| Description |  |  |  |  |  |
| Advantages and/or Disadvantages |  |  |  |  |  |

What is the role of IT within an organization?

What are strategic goals?

What are tactical goals?

What are operational goals?

What does IT governance provide the company’s IT function with?

How does IT governance support the company’s compliance with regulations and support initiatives?

Describe the IT organizational system.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Network Admin | System Admin | Web Admin | Database Admin | Cybersecurity Analysts | Technical Support Specialist |
| Responsibilities |  |  |  |  |  |  |
| Examples |  |  |  |  |  |  |

What is outsourcing?

What is offshoring?

What is nearshoring?

What is project outsourcing?

What is insourcing?

What is the purpose of project management frameworks?

What are the 4 phases of the project management life cycle?

Project Management Phases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Project Initiation | Project Planning | Project Execution | Project Closure |
| Description |  |  |  |  |
| Tasks/Activities |  |  |  |  |
| Documentation |  |  |  |  |
| Purpose |  |  |  |  |

SMART Goals

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | S | M | A | R | T |
| What does the letter stand for? |  |  |  |  |  |
| Description |  |  |  |  |  |
| Example |  |  |  |  |  |

CLEAR Framework

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | C | L | E | A | R |
| What does the letter stand for? |  |  |  |  |  |
| Description |  |  |  |  |  |

Project Planning Documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Scope Statement | WBS | Milestones | Communication Plan | Risk Management Plan |
| Description |  |  |  |  |  |

Mitigating Risks

|  |  |  |  |
| --- | --- | --- | --- |
|  | Risks in Execution | Risks in Integration | Risks of the Unknown |
| Description |  |  |  |
| How do you mitigate the risks? |  |  |  |

What are some issues that can deem a project unsuccessful?

How do you handle risks during the Project Planning Phase?

Common Risks

|  |  |
| --- | --- |
| Scope Creep |  |
| Budget Risk |  |
| Resistance to Change |  |
| Resource Risk |  |
| Contract Risk |  |
| Disputes or Disagreements between project participants |  |
| Project dependencies |  |
| Project assumptions risk |  |
| Benefit shortfall |  |
| Requirements Quality Risk |  |
| Force majeure Risk |  |

What are the phases of the system development life cycle?

What is CASE?

What are IDEs?

What is requirement analysis?

What are the 3 steps of the requirements analysis process?

What is system requirement specification (SRS)?

Compare requirements analysis versus design.

What is system maintenance?

What are some of the activities in system maintenance?

What are the 4 primary categories of software maintenance?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Corrective Maintenance | Adaptive Maintenance | Perfective Maintenance | Preventative Maintenance |
| Purpose |  |  |  |  |
| Example |  |  |  |  |

What is the Pareto Principle?

What is Bases Path Testing?

What is Glass-box Testing?

What is Black-box Testing?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Alpha | Beta (Pilot Testing) | User Acceptance |
| What stage is it? |  |  |  |
| Description |  |  |  |
| Example |  |  |  |

Documentation

|  |  |  |  |
| --- | --- | --- | --- |
|  | User Documentation | System Documentation | Technical Documentation |
| Description |  |  |  |

What is the Waterfall Model?

What is prototyping?

What is Rapid prototyping?

What is the Agile Model?

What is Scrum?

What are the steps of Scrum?

What is the extreme programming (XP) model?

What are disaster recovery plans?

What are business continuity plans?

Strategies for Disaster Recovery and Business Continuity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Data Mirroring | Data Backups | Off-Site Storage | Hot-Storage | Cold-Storage |
| Description |  |  |  |  |  |
| Advantages/Disadvantages |  |  |  |  |  |

What are the 5 criteria for assessing off-site storage?

Emerging Trends in IT

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mobile Computing | The Internet of Things (IoT) | Globalization |
| Description |  |  |  |
| Examples |  |  |  |
| Advantages/Disadvantages |  |  |  |

Describe how Globalization and the IT Revolution are interconnected.