

This **Sample Paper** is provided just to give you an idea about how the exam booklet will look like. **The following questions are NOT actual questions from the final exam.**

DO NOT TREAT these as any suggestions/tips for the Final Exam. These sample questions merely serve as a **guideline to offer insight into the format and style of the final exam, and nothing beyond that.**

We are NOT going to provide any sample answers for these questions as short questions can have multiple correct answers. We do not want students to consider sample answers as only correct answers and memorize them without understanding the concepts/topics which may impact your final exam preparation and your marks. You can follow the evaluation criteria we used to consider for the weekly exam style question reviews.

You all are encouraged to discuss among your group members /other students which will help you to understand the concepts in an efficient way. MCQ Questions answers can be found easily if you thoroughly review & understand all the weekly lecture & lecture slides.



Sample PAPER

This paper is a sample paper

Sample Question paper

INFO5990 Professional Practice in IT (Paper)

For Examiner Use Only

EXAM WRITING TIME: 2 hours
READING TIME: 10 minutes

This cover page will be similar in the final exam paper which consists of 15 pages.

EXAM CONDITIONS:

Calculator - non-programmable

This is a RESTRICTED OPEN book exam - Students are allowed to bring 1-A4 size cheat sheets of notes (double-sided)

MATERIALS PERMITTED IN THE EXAM VENUE:

(No electronic aids are permitted e.g. laptops, phones)

None

MATERIALS TO BE SUPPLIED TO STUDENTS:

1 x 15-page answers book

Answer sheet: Gradescope MCQ (single-sided - 100 Qs)

Blank scratch paper (student will be provided with answer booklet)

INSTRUCTIONS TO STUDENTS:

- a) **Calculators are permitted.**
- b) **This exam contains 2 sections:**
- c) **Section A:** 16 multiple-choice style questions - tests core knowledge (16 marks).
- d) **Section B:** 8 x short written answers (target ~50-200 words) - tests your ability to analyze information and synthesize ideas (3 marks each, total 24 marks)
- e) **Answer all questions in the allocated space.**
- f) **Questions are worth equal marks. The mark to be awarded for each part is indicated.**

Please tick the box to confirm that your examination paper is complete. ☐

Q (Sec A)	Mark
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
SEC A Total	

Q (SEC B)	Mark
1	
2	
3	
4	
5	
6	
7	
8	
Sec B Total	

Total Score _____

Section A:

Multiple-choice style questions - tests core knowledge

Note: Here we have provided 24 MCQ questions in the sample paper for your practice. In the final exam 16 MCQ questions will be given to you.

40min

-7

1. Business landscape is changing. Nowadays customers are becoming__ (Select all the options that best apply) [1 mark]

- a) More discerning
- ☒ b) More sophisticated
- c) More assertive
- ☒ d) More demanding

2. Why diversity is very important in high tech industries? [1 mark]

- a) Maintain a status quo in hiring practices
- b) Obtaining more government funding
- ☒ c) More diverse perspectives to solve problems
- d) Gaining competitive advantage and monopolize the industry

3. What elements/components are essential to develop an IT operating model that eventually generate organizational value? (Select the best possible answer) [1 mark]

- a) Business goals and IT strategy
- b) Business Model and IT capabilities
- ☒ c) Business operating model and IT strategy
- d) Business capabilities and IT capabilities

4. Which is **Not** considered as IT resources within an organization? [1 mark]

- a) Applications
- b) Skills and Knowledge
- c) Contracts
- ☒ d) None of the above

5. Which software development process model's culture and practices, DevOps integrate with ITSM? [1 mark]

a) Scrum

b) Iterative

c) Agile

d) V-shape

6. Which is considered an important enabler of the continuous IT lifecycle? (Select the best possible answer) [1 mark]

a) Enterprise Architecture

b) Agile Methodology

c) ITSM

d) Iterative approach

7. What are the three states of the change process? [1 mark]

a) Current state, transition state, past state

b) Current state, transition state, future state

c) Transition state, past state, ideal state

d) Transition state, past state, ideal state

8. Which of the following is the key focus of change management? (Select the best possible answer) [1 mark]

a) Implementation of new technologies and processes smoothly

b) People side of transitions

c) Technical side of transitions

d) Fulfilling stakeholders' expectations

9. Imagine you are working on a capstone project which is about signal analysis for ECG reconstruction. To start with the project, you need to gather some relevant information for a better understanding of the project and its approach. Which of the following sources can be considered more reliable? (Select the best possible answer) [1 mark]

a) Peer-reviewed journals

b) News article

c) Blogs written by Industry/relevant experts

d) All of the above

10. Which project estimation model can be used to predict but not explain the behavior of the system? [1 mark]

- a) COCOMO Model
b) Expert Judgement
c) Sum of the parts
d) Empirical Model

11. Which of the following statements is true for Quality Assurance (QA)? [1 mark]

- a) QA aims to identify and improve the defects
b) Verification is an example of QA
c) The Statistical Technique used in QA is known as Statistical Quality Control (SQC.)
d) None of the above

12. Which of the following is **NOT** a part of the Demming Cycle? [1 mark]

- a) Check
b) Analyze
c) Plan
d) Do

13. Imagine an e-commerce platform is going to offer a special discount day to its customers. The team is expecting heavy concurrent user traffic on that day. The developer team and the QA team want to make sure that the system can handle 5000 users concurrently. Which testing will ensure that? (Select the best possible answer) [1 mark]

- a) Stress Testing
b) Performance Testing
c) Load Testing
d) Soak testing

14. Which type of testing is typically performed during deployment (Select all the options that best apply) [1 mark]

- a) Soak Test
b) Performance Test
c) System Test
d) Integration Test

15. What is one of the key features of the General Data Protection Regulation (GDPR)? **(Select the best possible answer)** [1 mark]

- a) It sets new standards for data protection only in certain EU countries
- ☒ b) It aims to enhance privacy rights and address data processing risks
- c) It applies only to large organizations and exempts small businesses from data protection
- d) It imposes penalties for non-compliance

16. Which of the following is considered the **main objective** of Disaster Recovery?

[1 mark]

- a) IT system Recovery
- b) Short Term Recovery
- ☒ c) Minimize IT downtime
- d) Ensure business continuity

17. An attacker figured out a vulnerability in a web application where the application did not use salt in password hashes and the application used poor techniques. So, the attacker was able to steal the hashes and able to decrypt the password hashes using a precomputed table to obtain the passwords.

From the scenario, which type of attack, the attacker performed?

[1 mark]

- a) Dictionary attack
- b) Brute Force attack
- c) Password Guessing
- ☒ d) Rainbow attack

18. Which of the following is a component of virtualization?

[1 mark]

- a) Hypervisor
- b) Virtual Network
- c) Virtual Storage
- ☒ d) All of the above

19. How can you determine if a paragraph is written effectively?

[1 mark]

- a) If there are multiple ideas introduced without cohesion ☒
- ☒ b) Every sentence relates to the topic sentence and main idea ☒
- c) Including as much as information in one long sentence ☒
- d) None of the above

20. Which of the following is the characteristic of professional writing? [1 mark]

- a) Clarity
- b) Precision
- c) Brevity
- d) All of the above

21. In terms of corporate ethics, what does the fourth bottom line refer to? [1 mark]

- a) Profit and people
- b) Profit, people, planet, and progress
- c) Personal values and beliefs
- d) None of the above

22. Imagine you are a doctor. You are facing a dilemma of whether you have to disclose confidential information of your patient to prevent harm to others or not. You have a moral obligation to your patient for not disclosing information. On the other hand, if you do not disclose it might lead to potential harm to others. You have decided not to disclose information as you took the decision based on your duty and moral obligation rather than thinking about consequences.

In the scenario described, which ethical framework is likely adhering to **(Select the best possible answer)** [1 mark]

- a) Teleological ethic
- b) Deontological ethic
- c) Ethical pluralism
- d) Utilitarianism

23. What does OLAP stand for in the context of data analysis and business intelligence? [1 mark]

- a) Online Analysis Platform
- b) Open-source Analytical Processing
- c) Online Analytical Processing
- d) Operational Analytics Processing

24. Which of the following is **NOT** the characteristic of a data warehouse? [1 mark]

- a) Integrated
- b) Subject-oriented

- c) Nonvolatile ✓
- d) Time invariant ✗

Sample Paper

Section B:

12 short written answers (target ~50-200 words. please write your answers inside the allocated space)

Tests your ability to analyse information and synthesize ideas

Note: Here we have provided 12 questions in the sample paper for your practice. In the final exam 8 questions will be given to you.

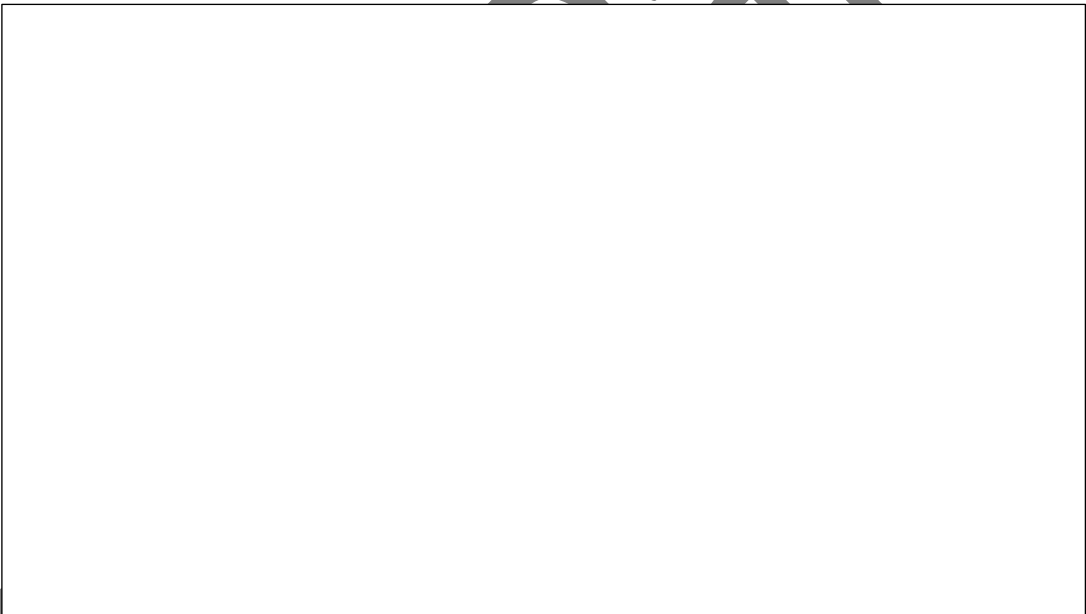
1. Imagine you are working in an IT organization which has several branches across Australia. Your company's CEO came to visit Sydney branch. The CEO noticed that there is a lack of diversity in the office and urges you to promote diversity and inclusion within the organization. Describe how you are going to promote diversity with examples. **[3 marks]**

2. Explain the difference between top down and networked organizational structure with examples **[3 marks]**

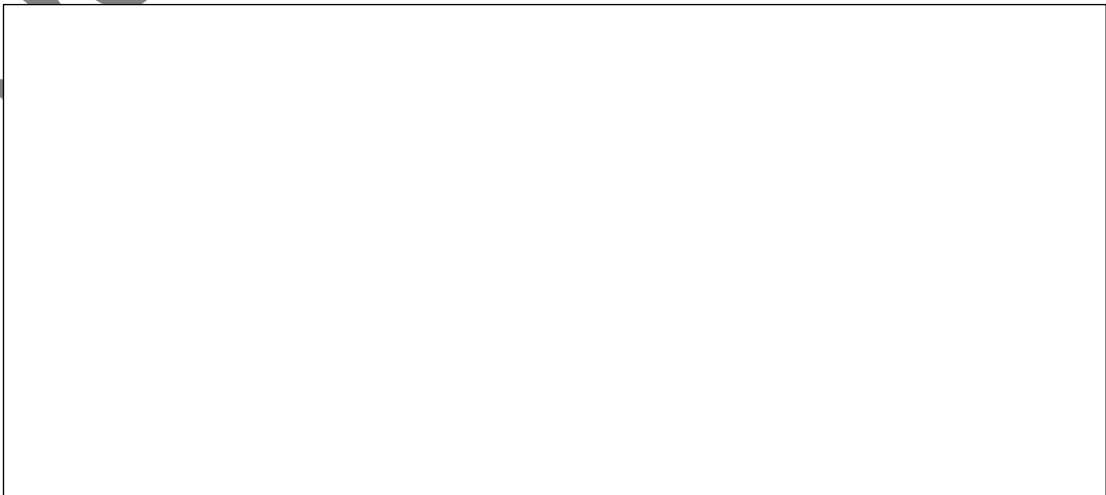


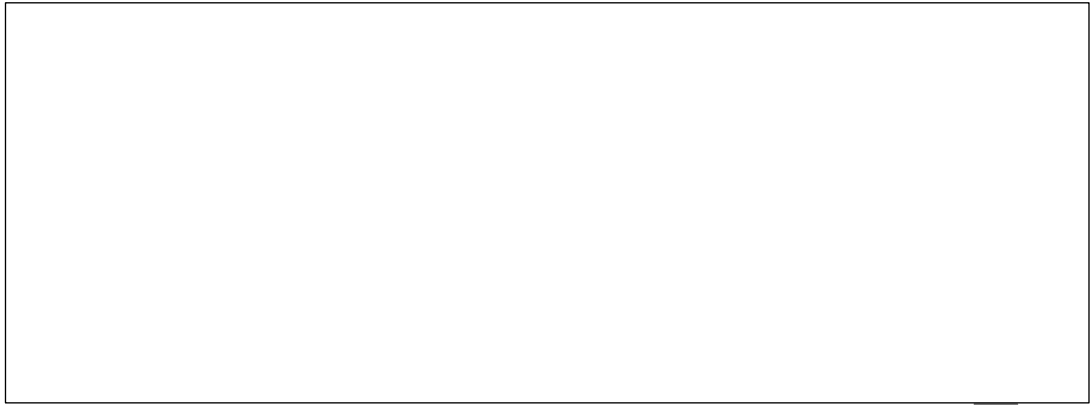
3. Imagine you are working in a tech company and you have a very tight deadline to deliver a product to the client which has multiple components and features. So, you have decided to integrate developer team and the operational team and work as a single team throughout the entire application lifecycle.

Given the scenario, which software development model will be most appropriate for you to consider and why? Justify your answer. **[3 marks]**



4. Do you think active sponsorship is desirable and necessary for a successful change management? Justify your answer **[3 marks]**

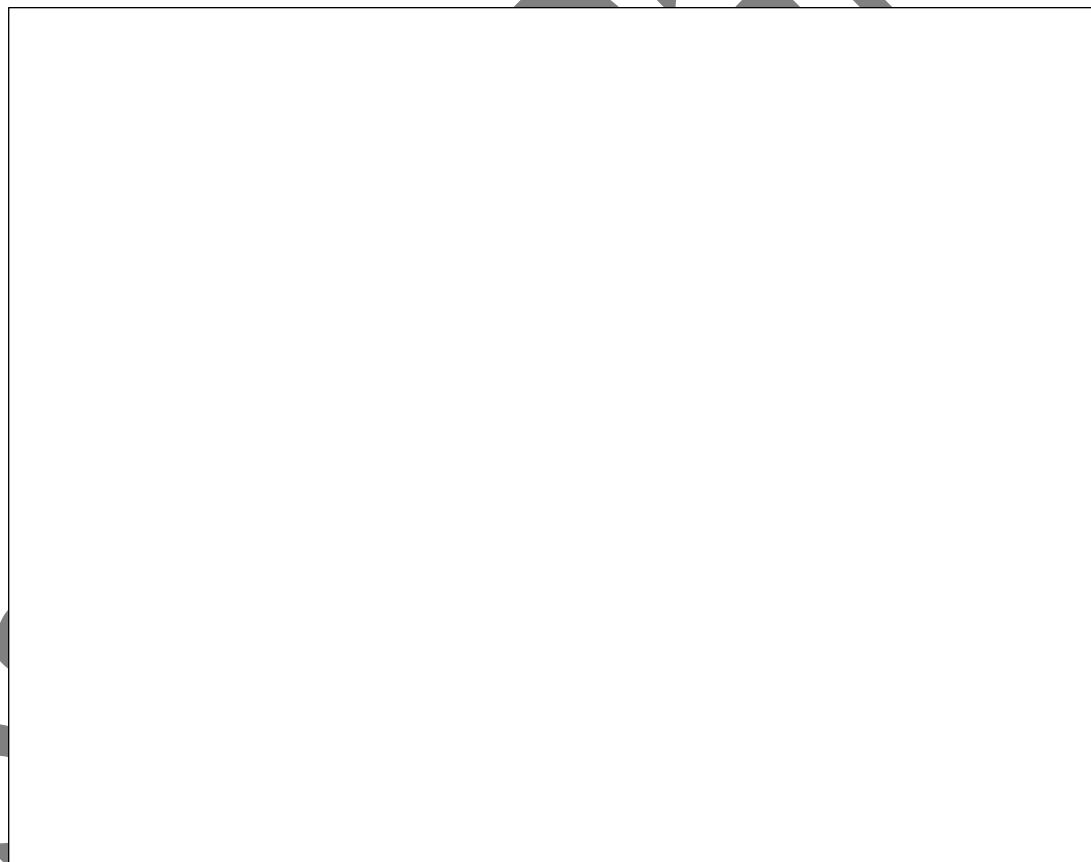




5. Imagine you are a project manager and you have been assigned to estimate the effort and resources required for a new project. You are considering to look at the previously completed similar projects to get an idea.

Given the scenario, which estimation model would be more appropriate and discuss the advantages and disadvantages of that model.

[3 marks]

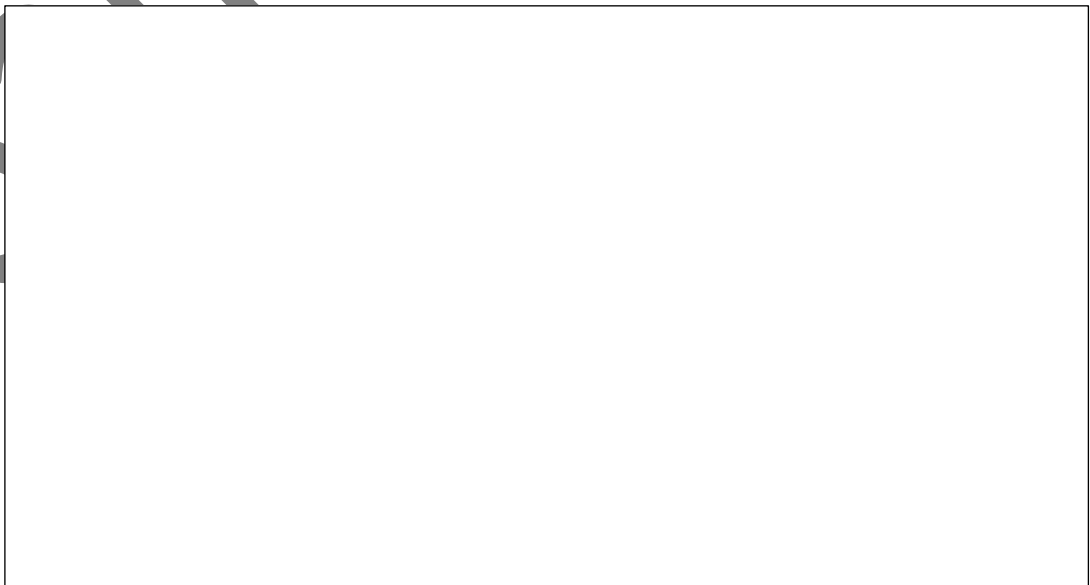


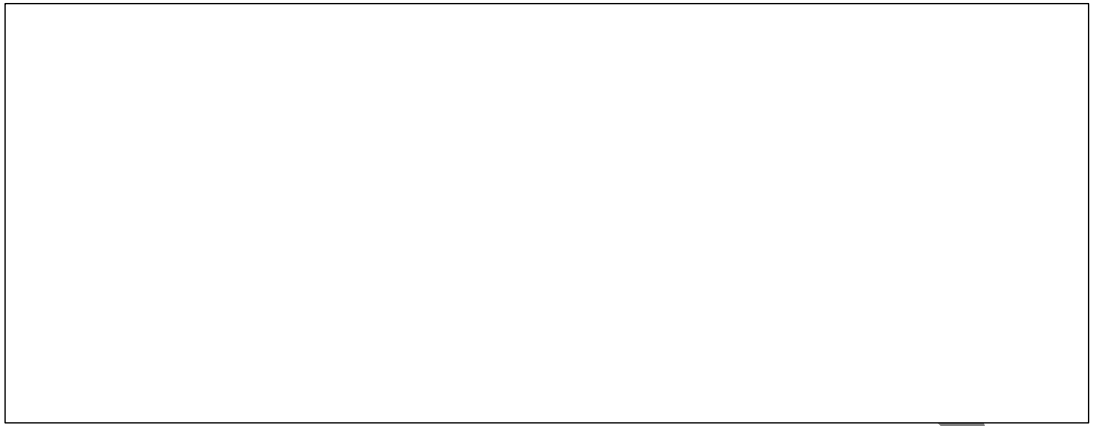
6. Do you think QC is a part of QA? Justify your answer with examples. **[3 marks]**



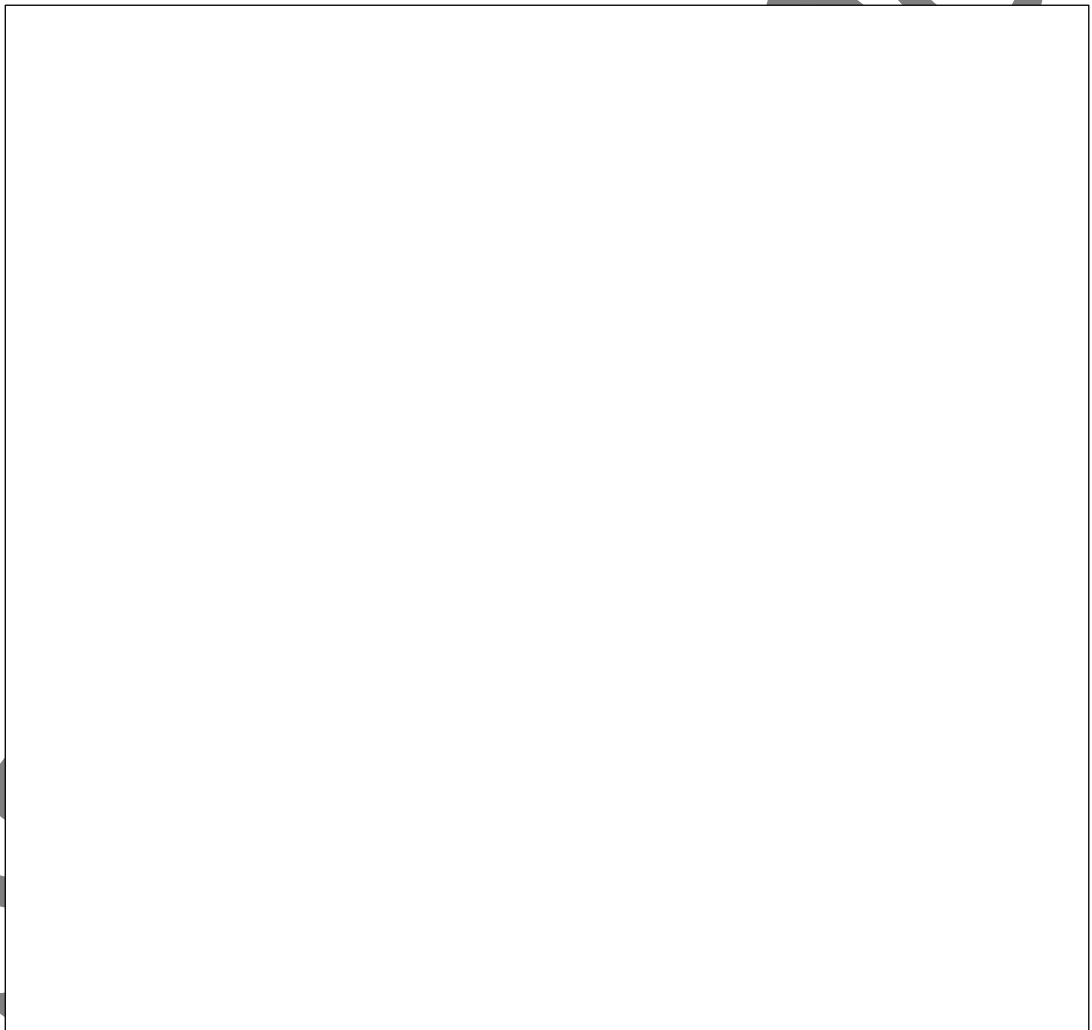
7. A gaming company is preparing to launch a highly anticipated multiplayer online game. They anticipate a sudden surge in traffic far beyond their usual capacity and want to subject their servers to extreme conditions by intentionally denying them necessary resources to evaluate how the system handles potential breakdowns.

Based on the scenario described, which type of testing should the gaming company perform? Explain the testing method as well. **[3 marks]**





8. Explain two important GDPR key aspects according to you. Justify your answer **[3 marks]**



9. Imagine you as a security engineer working with the developer team who are working on developing a financial application system which will handle transactions and other financial services. You are responsible to review their code structure as well as figuring out the threats/vulnerabilities that may arise while they are developing the application. Which modelling technique you are going to adopt to discover threats/vulnerabilities and explain the model as well.

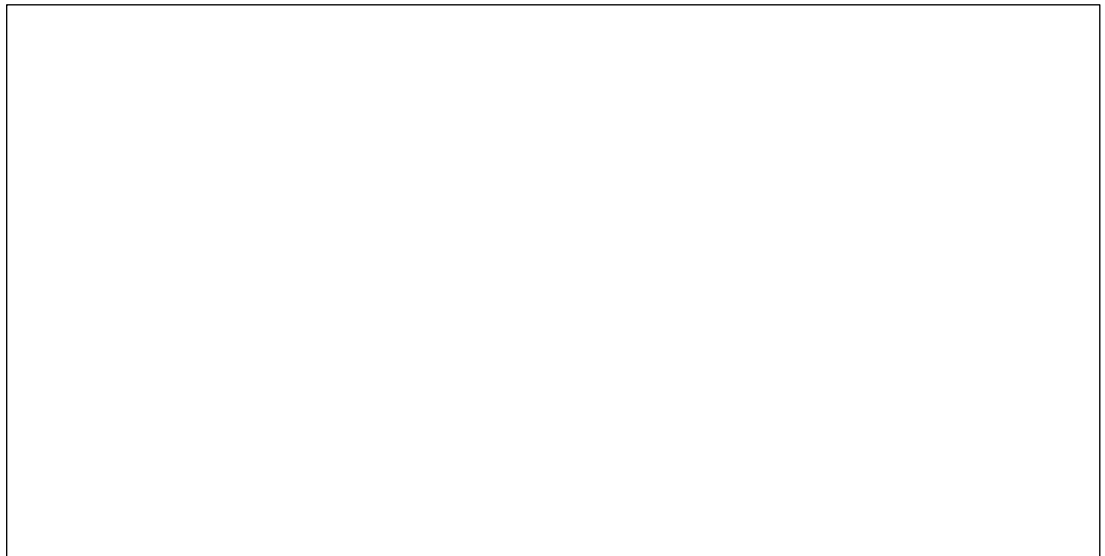
[3 marks]



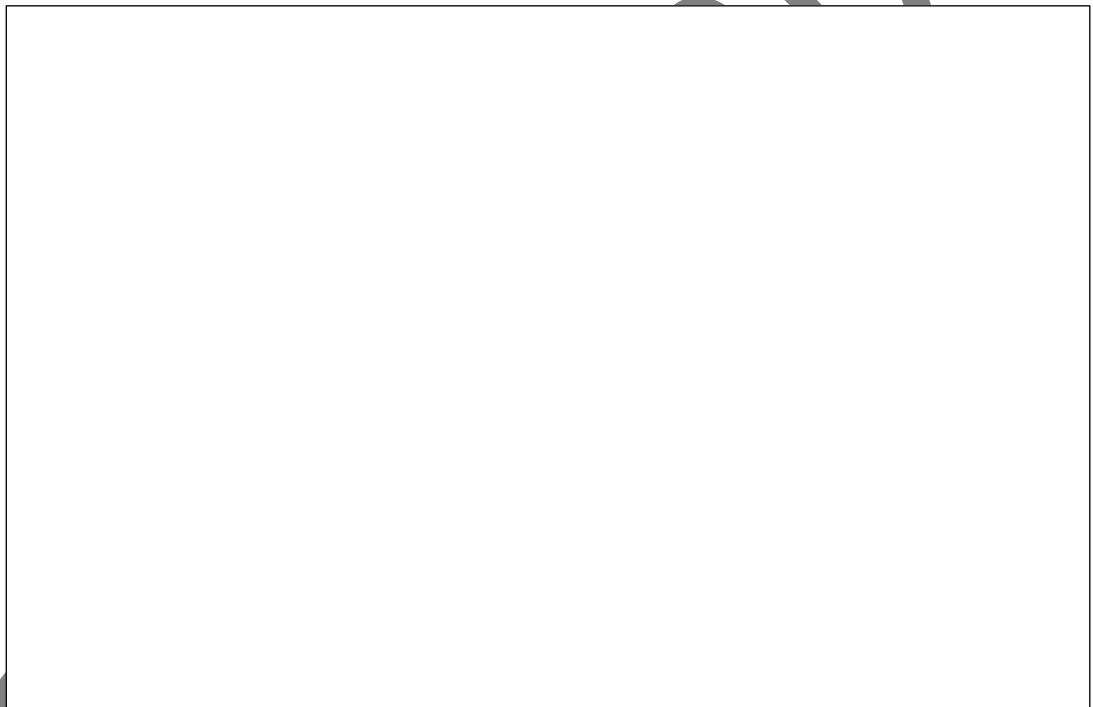
10. Imagine you work as a business analyst. You are working as a middle man between the stakeholder and the technical team for a business process digitalization project. You need to prepare a documentation where you need to explain technical things to the stakeholder in a non-technical way. List and justify three important characteristics of communication you need to consider while preparing the documentation so that stakeholders can understand easily as not all the stakeholders came from the same background.

[3 marks]



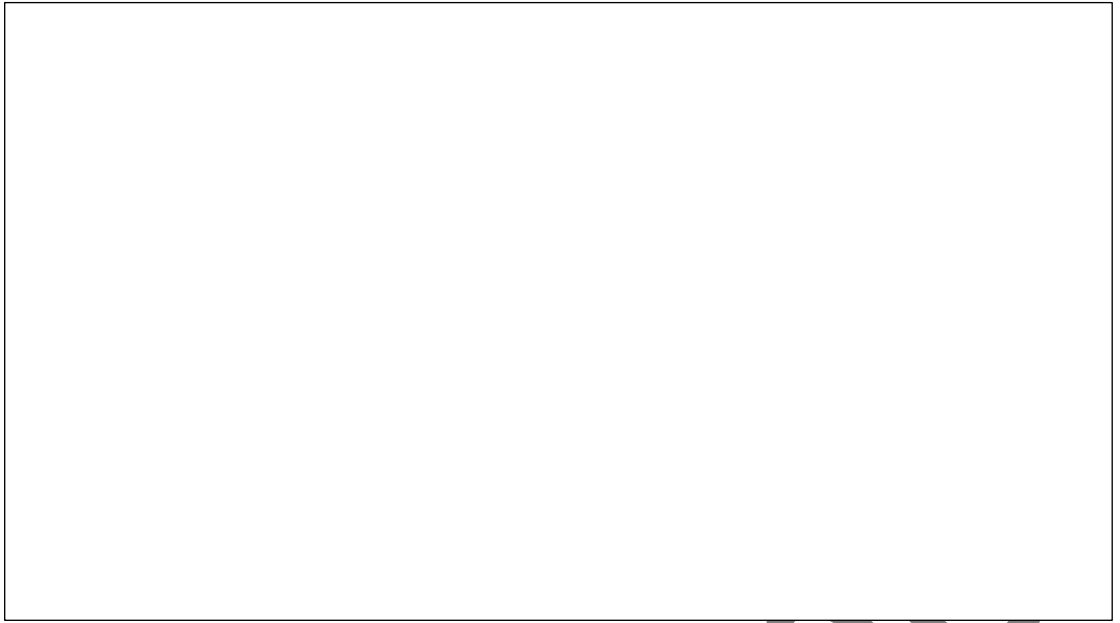


11. Explain the difference between egoism and utilitarianism with example **[3 marks]**



12. How business intelligence tool assists in making fact-based decisions? Justify your answer with examples. **[3 marks]**





Sample Paper

Use this paper for the workspace. Any writing in this space will not be assessed

Sample Paper

Use this paper for the workspace. Any writing in this space will not be assessed

Sample Paper

END OF EXAMINATION

Sample Paper