

Part I - Multiple choice: Choose the best answer and write the answer of your choice on the answer sheet provided below (1pt each)

1. Identify the odd one about requirement.
  - A. SRS
  - B. Functional Specification
  - C. Requirement Validation
  - D. Requirement Definition
  - E. B & C
2. A well-structured process model with deliverables from each phase is:
  - A. Spiral
  - B. Waterfall
  - C. Structured evolutionary prototyping
  - D. Prototyping
  - E. None
3. Which of the following is an element of review checklists:
  - A. Traceability
  - B. Consistency
  - C. Completeness
  - D. Understandability
  - E. All
4. Which one of the following stakeholder has the largest role in requirement elicitation and management?
  - A. System developers
  - B. System Analyst
  - C. Business Analyst
  - D. Client Manager
  - E. B & C
5. Conducting an intergroup coordination is started at CMM level of
  - A. Initial
  - B. Repeatable
  - C. Defined
  - D. Optimizing
  - E. Managed
6. Large and complex projects are best managed by one of the following models
  - A. Structured evolutionary prototyping
  - B. Waterfall
  - C. Spiral
  - D. Prototyping
  - E. All
7. Percentage of target dependent statements are the features of a non-functional requirement:
  - A. Reliability
  - B. Robustness
  - C. Portability
  - D. Security
  - E. Ease of use
8. A requirement can't be changed due to the following point:
  - A. Cost
  - B. Schedule
  - C. customer priorities
  - D. Policy
  - E. None
9. One of the following can't be a factor for change request rejection:
  - A. Organizational Change
  - B. Long time to accommodate change
  - C. Invalidity
  - D. Cost
  - E. All
10. Identify the one which is not a problem if used in writing a requirement document:
  - A. Conditional clauses
  - B. Equations



- C. Using specific idea
- D. All

E. None

11. Which one of the following statement is not true?

- A. Requirements-design traceability links requirements with specific hardware software components in the system which is used to implement the requirements.
- B. Requirements-sources traceability links the requirement and the people or documents which specified the requirement.
- C. Requirements-requirements traceability links requirements with the sub-systems where these requirements are implemented.
- D. Requirements-interface traceability links requirements with the interfaces of external systems which are used in the provision of the requirements.
- E. All

12. Change management policies may cover

- A. The change request process and the information required to process each change request.
- B. The process used to analyze the impact and costs of change and the associated traceability information.
- C. A & B
- D. The membership of the body which formally considers change requests.
- E. All

13. Which one is correct about requirements Validation?

- A. Validation works with raw requirements as elicited from the system stakeholders.
- B. "Have we got the right requirements" is the key question to be answered at validation stage.
- C. Validation works with a final draft of the requirements document.
- D. All
- E. None of the above

14. Requirement change request is rejected

- A. If the change request is valid.
- B. If the change request results in consequential changes which are unacceptable to the user.
- C. If the cost of implementing the change is too low.
- D. All
- E. None of the above

15. Choose the correct Requirements review process.

- A. Plan review - Distribute documents - Prepare for review - Hold review meeting - Follow-up actions - Revise document
- B. Plan review - Prepare for review - Distribute documents - Hold review meeting - Follow-up actions - Revise document
- C. Plan review - Distribute documents - Prepare for review - Hold review meeting - Revise document - Follow-up actions
- D. Plan review - Prepare for review - Distribute documents - Hold review meeting - Revise document - Follow-up actions
- E. None of the above

16. The requirements document describes

- A. The services and functions
- B. The constraints under which
- C. Information about the
- D. All
- E. None of the above

17. In Elicitation process

- A. about the ap
- B. what servi
- C. the requi
- D. A&C
- E. All

18. Which

- A.
- B.



16. The requirements document describes:
- The services and functions which the system should provide.
  - The constraints under which the system must operate.
  - Information about the application domain of the system
  - All
  - None of the above
17. In Elicitation process, software engineers work with customers and system end-users to find out
- about the application domain
  - what services the system should provide
  - the required performance of the system
  - A&C
  - All
18. Which one is common Interviewing mistake?
- Interviewing stakeholders in small groups
  - Assuming that stated needs can be incorrect
  - Trying to convince stakeholders that you are smart
  - A & B
  - All
19. Which one of the following specific questions helps us to elicit functional requirements?
- What will the system do?
  - Are there several modes of operations?
  - What kinds of computations or data transformations must be performed?
  - B&C
  - All
20. If the requirement "Students will be able to enroll to undergraduate and post graduate courses" is analyzed and separated into two requirements :
- Students will be able to enroll to undergraduate courses.
  - Students will be able to enroll to post graduate courses.
- The new requirements are?
- Atomic
  - Uniquely identified.
  - Prioritized
  - All
  - None of the above
21. Which of the following is not the source of requirement?
- End users
  - Documents
  - Customers
  - Existing system
  - None
22. Non-functional requirements are concerned with \_\_\_\_\_ while functional requirements are concerned with \_\_\_\_\_.
- Product properties and product features
  - User's expectation and user requirement
  - Product features and product properties
  - A and B
  - B and C



23. \_\_\_\_\_ is a development lifecycle designed to give a faster development and higher quality results.
- Spiral quadrant model
  - Waterfall model
  - RAD
  - Structured evolutionary prototyping
  - None
24. \_\_\_\_\_ is the process of deriving the system requirements through observation of existing systems, discussions with potential users and customers, and task analysis.
- Requirement elicitation
  - Requirement specification
  - Requirement gathering
  - A and C
  - All
25. Which of the following is not an elicitation stage?
- Understand background
  - Collect requirements
  - Objective setting
  - Business modeling
  - Organize knowledge
  - All
26. \_\_\_\_\_ use the requirement document to understand the system being developed.
- System engineers
  - Project managers
  - System customers
  - System test engineers
  - System maintenance engineers
  - End users
27. Which of the following cannot be considered as a review checklist?
- Organization
  - Consistency
  - Traceability
  - Redundancy
  - Conformance to standards
  - None
28. Which of the following is a change analysis and costing process in change management?
- Change request validity
  - Assess cost of change
  - Propose requirement changes
  - Implement changes
  - All except A
  - All except D
29. A requirement is traceable if you can trace
- Why the requirement exists
  - Who suggested it
  - The requirements related to it
  - How the requirement relates to the design and implementation
  - All
  - None
30. \_\_\_\_\_ spends some time observing people at work and building up a picture of how work is done.
- System developer
  - System test engineer
  - Ethnographer
  - System maintenance engineer
  - All

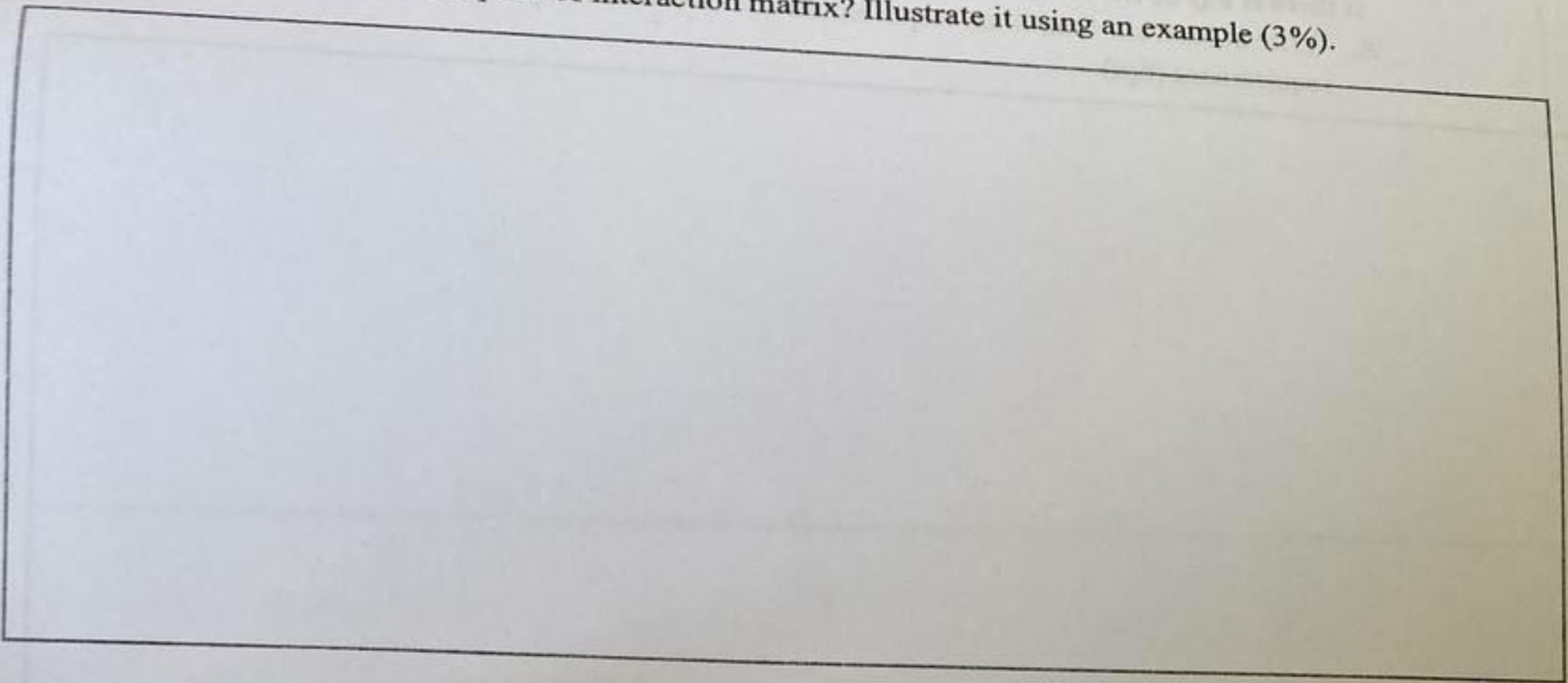
### Answer Sheet for the multiple choice questions

1. _____	2. _____	3. _____	4. _____	5. _____	6. _____	7. _____	8. _____	9. _____	10. _____
11. _____	12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____	20. _____
21. _____	22. _____	23. _____	24. _____	25. _____	26. _____	27. _____	28. _____	29. _____	30. _____



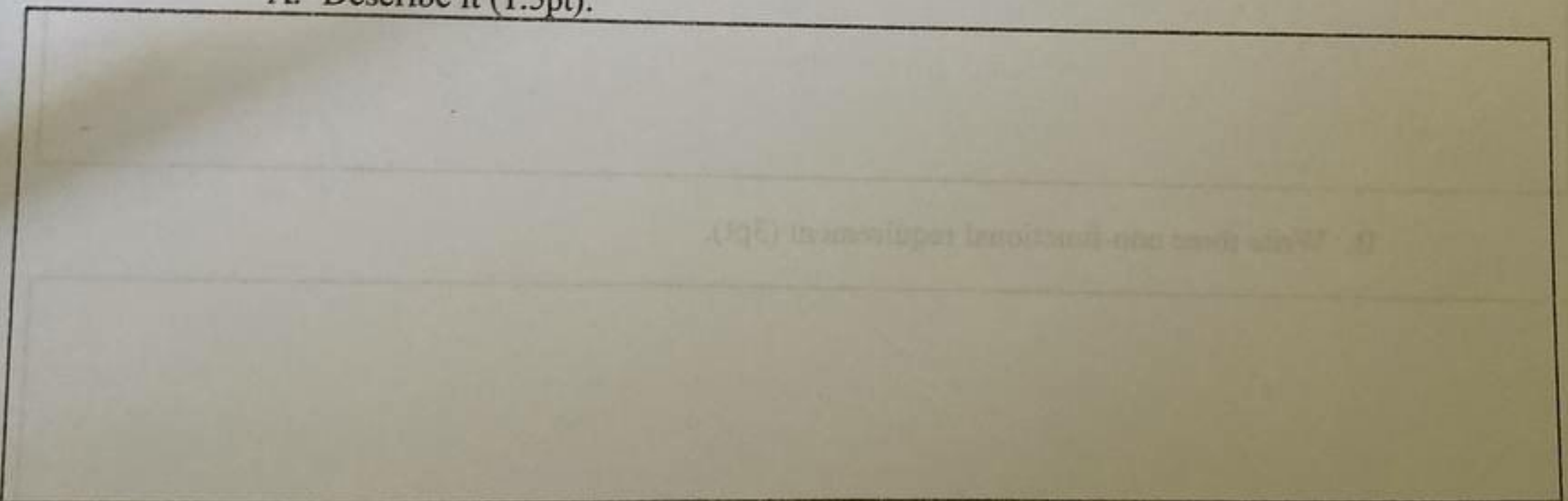
**Part II – Write and Explain (20%):** Write your answer briefly and neatly.

1. What is the purpose of interaction matrix? Illustrate it using an example (3%).

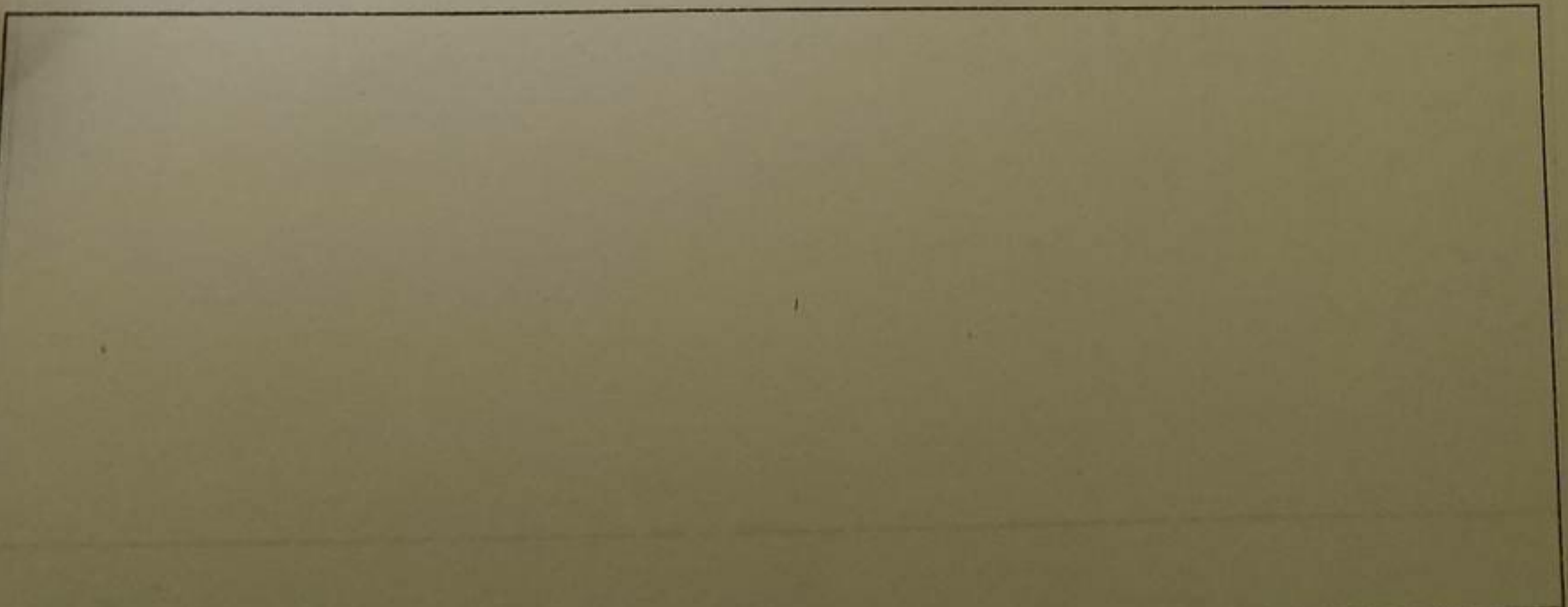


2. Consider requirement review (4pt).

A. Describe it (1.5pt).



B. Discuss the process involved (2.5pt).



3. Consider an airline reservation system that allows you to book a flight, see your trips, check-in, check flight status and flight schedule, track and trace your baggage and check if there is any covid-19 update. (13pts)

A. Write at least six functional requirement and describe the process of each requirement (6pt).

25. Which of the following are an elicitation step?

- A. Information requirements
- B. Collect requirements
- C. Object modeling

- D. Feasibility study
- E. Organize knowledge
- F. All

26. \_\_\_\_\_ use the requirement document to understand the system being developed.

- A. System engineers
- B. Project managers
- C. System customer

- D. System test engineer
- E. System maintenance engineer
- F. End user

27. Which of the following cannot be considered

- A. Objective
- B. Feasible
- C. Measurable

B. Write three non-functional requirement (3pt).



C. Figure out the actors in the process and describe their task (4pt).

---

---

I Post Software Engineering Files For My 'Buchiach'es, Sorry! I Meant  
Brilliants.

Tik Tok: <https://www.tiktok.com/@dagmawiabate?lang=en>

Instagram📷: <https://www.instagram.com/dagmawiabateyalew/>

Telegram: <https://t.me/SEdagmawiabate>

YouTube▶: [www.youtube.com/c/DagmawiAbate](http://www.youtube.com/c/DagmawiAbate)

Twitter🐦: <https://twitter.com/DagmawiAbate>

Snapchat: <https://www.snapchat.com/add/abatedagmawi>