



The INCOSE Certification Program Office has committed to release sample test questions to help guide applicants and training providers in understanding the format of the INCOSE knowledge exam. The following questions and answers are not planned to be used by the INCOSE Certification Program because of how they performed when tested on candidates in the 2014 beta exams. They are representative of the format and content on the actual exam and can be used by knowledge exam candidates to assist in understanding how the INCOSE exam is structured.

1. How may a system operator use a system to sustain engineering?
  - A. by reviewing verification analysis
  - B. by reviewing operator procedures
  - C. through monitoring system performance data
  - D. through monitoring the number of trained operators
  
2. Which two are commonly evaluated as part of the Project Assessment Process? (Choose two.)
  - A. the network security policy
  - B. the standards applied to the project
  - C. the availability of necessary resources
  - D. the availability of management to the project
  - E. the compliance with project performance measures
  
3. What is an example of the wasteful practice of over-processing?
  - A. Members of a team are split between three physical facilities.
  - B. The vendor ships four rocket motors to a launch site two years before they are needed.
  - C. An engineer takes a released interface document and reformats it to match a program she previously worked.
  - D. A valve is selected by an engineer to meet a deadline and is later determined insufficient, requiring a subsystem redesign.
  
4. What are two practices an organization can implement when tailoring processes for a specific project? (Choose two.)
  - A. Assess the effectiveness of the processes
  - B. Reuse a tailored baseline from another system
  - C. Start with a standard set of processes and practices
  - D. Identify separate processes for small and large projects



5. A product baseline has been established for a system under development.

What is the correct means for initiating a permanent change to this baseline?

- A. Engineering Notice
- B. Deviation and Waiver
- C. Request For Proposal
- D. Engineering Change Proposal

6. Which step should be conducted in the stakeholder needs and requirements definition process?

- A. Document the business case.
- B. Perform analysis to develop the operational concept.
- C. Use the Markov method to identify the key stakeholders.
- D. Document only the needs from the highest equity stakeholders.

7. Which three source documents can be used to provide the basis for the total set of stakeholder requirements? (Choose three.)

- A. the parts lists
- B. the marketing surveys
- C. the vendor data sheets
- D. the statements of user objectives
- E. the customer needs statements

8. What is the purpose of the Operation Process?

- A. Plan for system disposal.
- B. Optimize the maintenance process.
- C. Ensure the quality of user training.
- D. Use the system to deliver its services.

9. What is the purpose of the Transition Process?

- A. to transition from the requirements analysis process to the design process
- B. to transfer responsibility for the system from one organizational entity to the other
- C. as a conversion from the critical engineering design process to the production process
- D. as a confirmation that all elements of the system-of-interest perform in accordance with the performance requirements allocated to them



10. What are two examples of waste that lean SE could reduce? (Choose two.)
- A. The team members are using outdated software.
  - B. The connectors are delivered three months after their harness wires.
  - C. The customer lives in a different part of the country than their suppliers.
  - D. The manufacturing facility has a box of 100 bolts for a build that requires 25.
11. What are two major types of analyses performed during the Concept stage for defining a System Architecture? (Choose two.)
- A. Trade Studies
  - B. Cost Estimation
  - C. Risk Mitigations
  - D. Modeling & Simulation
12. Which Systems Engineering process ends with a formal, written acknowledgement that a system has been properly installed?
- A. Transfer process
  - B. Transition process
  - C. Verification process
  - D. Manufacturing process
13. Which two can be used to optimize the number of interfaces for a physical system? (Choose two.)
- A. N2 diagram
  - B. Coupling matrix
  - C. Verification of aggregates
  - D. Separation of system elements
14. Measures of effectiveness have been defined for an engineering project.

What is the recommended approach to ensure that the development of the system will satisfy these measures?

- A. TPM monitoring
- B. Requirement verification
- C. Technical risk monitoring
- D. Cost and schedule monitoring



15. Which statement is true about Agile Systems Engineering?

- A. Agile SE relies on real-time decision-making.
- B. The value proposition of Agile SE is risk management.
- C. Agile SE and agile-systems engineering are equivalent concepts.
- D. Agile systems engineering can be introduced at no extra cost to a program.

16. A customer has provided a stakeholder requirements specification.

What will ensure that developed system requirements align with stakeholder expectations?

- A. Early validation
- B. Early verification
- C. System certification
- D. System requirements review

17. In what way are Quality Assurance (QA) and Quality Control (QC) similar?

- A. Both occur at the same point in the product life-cycle.
- B. Both require audits to establish the independence of the results.
- C. Both activities are conducted concurrently for every product test.
- D. Both are part of the larger Quality Management activities of an enterprise.

18. Which type of analysis would be used to assess a vehicle's ability to operate in the desert?

- A. Cost Analysis
- B. Effectiveness Analysis
- C. Technical Risk Analysis
- D. Mass Properties Analysis

19. What is a final product of the verification process?

- A. Requirements allocated to the system elements
- B. Verification Plan which defines all verification process results
- C. Analysis, test, simulation or observation data for the conclusion reached
- D. Interface Control Documents (ICDs) for the interfaces of elements comprising the system

20. Which Technical Management Process ensures that information is properly accessible to those who need it, thereby establishing integrity of relevant system life cycle artifacts?

- A. Quality Assurance Process
- B. Decision Management Process
- C. Information Management Process
- D. Configuration Management Process



## ANSWERS

Order of Presentation	Correct Answer
1	C
2	CE
3	C
4	AC
5	D
6	B
7	BDE
8	D
9	B
10	BD
11	AD
12	B
13	AB
14	A
15	B
16	A
17	D
18	B
19	C
20	C