

“This is only a **preview** of the exam questions. To take the actual exam, please refer back to the bulletin and click on the ‘**Click here to go to the Internet Exam**’ link at the bottom of the bulletin.”

Systems Software Specialist

You will be asked to rate each task using the scales provided below.

Recency

- a. Performed the task within the last 2 years
- b. Performed the task within the last 4 years
- c. Performed the tasks more than 5 years ago
- d. Not performed

Years of experience

- a. More than three years experience performing this task
- b. More than one year to three years experience performing this task
- c. Less than one year performing this task
- d. Not performed

Level at which the task was performed

- a. Supervised or served as an expert on task
- b. Performed task as a lead
- c. Worked independently on task
- d. Worked under close direction/supervision on task
- e. Assisted another person on task
- f. Not performed

Verification References

You will also be asked to indicate where you have performed the tasks for verification purposes.

-
1. Advise peers, manager and/or users regarding hardware/software systems (e.g., new releases, features, products, or existing problems, etc.) to inform them about the impact of these systems on their applications/projects.
 2. Control access to systems (e.g., network, systems, or database) in order to maintain system security in accordance with information security best practices and standard IT operating procedures.
 3. Monitor network, application, and system logs in order to maintain system security to ensure data integrity and confidentiality.
 4. Monitor and analyze systems/network utilization to evaluate system health, capacity capability, and performance.
 5. Create processes (e.g., install, configure, maintain, secure, backup/recover, etc.) to ensure that technical staff are consistent with vendor documentation, application requirements, and departmental standards.
 6. Review application/system architecture and make recommendations regarding technical and operational feasibility.

7. Maintain hardware/software configuration documentation to assist with disaster and operational recovery.
8. Track changes to systems hardware/software to maintain current configuration documentation.
9. Consult with internal/external business and technical staff to define systems specifications considering business/user requirements and analysis of the systems software, hardware, databases, security, and/or networks involved.
10. Develop formal or informal recommendations to peers, managers, and/or users on hardware/software systems (e.g., problem resolution, patches/fixes, firewalls, routers, switches, security devices, messaging systems, etc.) to suggest alternatives that satisfy the business requirements.
11. Install/upgrade and test hardware/software systems (e.g., patches/fixes, firewalls, routers, switches, security devices, messaging systems, etc.).
12. Configure and/or customize hardware/software systems to meet business requirements.
13. Evaluate products to determine if they will support and enhance the department's business/technical functions and ensure they meet requirements in alignment with the IT strategic plan.
14. Report the status of systems, projects, maintenance tasks, change control items, or problem resolutions to supervisors and users to ensure that they are informed.
15. Consult with internal/external entities regarding services provided by systems software teams and answer questions/inquiries in technical areas such as connectivity with departmental systems, data exchange, security, etc.
16. Design secure n-tier architectures (e.g., web, application, database, COTS) to support departmental business functions.
17. Implement secure n-tier architectural changes (e.g., web, application, database, COTS) to support departmental business functions.
18. Perform backup and recovery tasks to ensure system security, disaster recovery, and operational recovery in accordance with industry best practices.
19. Participate in disaster recovery and operational recovery planning in order to ensure system security and business resumption.
20. Serve as liaison with vendors to report, troubleshoot, and resolve software/hardware problems.
21. Conduct disaster recovery and operational recovery planning in order to ensure system security and business resumption.
22. Review technical recommendations in systems design to ensure correctness.
23. Plan security architecture for systems (e.g., network, systems, or database) in order to maintain system security based on information security best practices.

24. Develop plans to determine and meet future capacity needs considering business requirements, trend analysis, history of similar projects, statistical and other reports, etc.
 25. Ensure that peers maintain current configuration of systems/network hardware, software, and documentation to meet standard operating requirements, ensure that disaster recovery and operational recovery plans are current, and facilitate future upgrades or enhancements as required.
 26. Provide technical assistance in a multi-vendor environment to resolve data processing technical issues and network/systems software problems.
 27. Oversee systems installation (e.g. operating systems, hardware, n-tier architecture, web, databases, security products, network products, etc.) in order to facilitate a seamless and smooth integration into the computing environment.
 28. Define procedures for incident and problem escalation, including escalation to vendors.
 29. Communicate orally in an effective manner with customers.
 30. Communicate effectively in writing with customers, technical staff, management and vendors.
-

Only Systems Software Specialist III (Technical) and Systems Software Specialist III (Supervisor) candidates must answer the following questions.

31. Create reports on system utilization to inform the business units of impending capacity issues to support short and long term planning.
32. Review the work of peers to ensure accuracy and quality of work.
33. Maintain scripts to perform required tasks for system support.
34. Develop and deliver technical presentations to stakeholders including presentation of industry trends and business requirements.
35. Mentor staff in the use of software/hardware products, tools, and procedures to ensure that they understand the departmental standards using group and/or one-on-one instruction.
36. Create technical project plans for stakeholders using automated project management tools incorporating vendor requirements, history of similar projects, etc..
37. Test new database structures and database structural changes, using test case scenarios to ensure they meet business requirements, system requirements, and system specifications.
38. Review management documents, budget change proposals, security plans, feasibility study reports, and disaster recovery plans, etc., to ensure accuracy and feasibility, and to determine impacts to information systems.

39. Act as a technical lead to assign tasks to other staff in order to balance workload and/or appropriately match employees' skills to assignments.
40. Train staff and users on changes to new and existing systems to properly use the software tools and understand the impact of changes to their computer environment.
41. Meet with project leaders regarding workload schedules, priorities, and resources in order to meet project schedules and requirements at intervals determined by the project lifecycle.
42. Create scripts to ensure that the system can perform according to the requirements considering system requirements, vendor documentation, etc.
43. Act as project manager to coordinate diverse job functions in order to deliver an integrated IT solution.
44. Oversee peers' work projects to ensure that the work is timely, complete, and meets business requirements on an on-going basis.
45. Develop systems configuration plans to facilitate a seamless and smooth integration into the computing environment.
46. Plan, organize and oversee a variety of complex, critical and highly sensitive development projects and activities.
47. Direct, plan, schedule, and prioritize projects/workload; monitor and control projects in accordance with established plans/schedules.
48. Advise unit manager regarding the progress and direction of projects.
49. Determine the impact of current and emerging technologies on customer business needs and impart this information to the management team.
50. Assist in the development, establishment, and implementation of policies, standards and procedures.
51. Perform analysis and prepare "white papers", project proposals, and procurement justifications (consultant services, hardware/software, etc.).
52. Define and review new and existing customer service offerings and associated charges.
53. Assist in the preparation and presentation of technical solution proposals to prospective customers to meet complex business requirements.

Only Systems Software Specialist III (Supervisor) candidates must answer the following questions.

54. Provide supervision and direction to technical staff.
55. Encourage team building, facilitate cross training and promote continuous improvement.

56. Prepare and coordinate personnel related justification and notification documentation for hiring and reclassifications of positions and correspondence/documentation relating to personnel issues, disciplinary actions, labor relations issues, etc.

End of Exam