BILL DE BLASIO
Mayor

LISETTE CAMILO
Commissioner

DEPARTMENT OF CITYWIDE ADMINISTRATIVE SERVICES
BUREAU OF EXAMINATIONS

NOTICE OF EXAMINATION

COMPUTER ASSOCIATE (OPERATIONS)
Exam No. 8043

WHEN TO APPLY: From: June 6, 2018 To: June 26, 2018	**APPLICATION FEE: $68.00** **If you choose to pay the application fee with a credit/debit/gift card, you will be charged a fee of 2.49% of the payment amount. This fee is nonrefundable.**

**YOU ARE RESPONSIBLE FOR READING THIS ENTIRE NOTICE
BEFORE YOU SUBMIT YOUR APPLICATION.**

WHAT THE JOB INVOLVES:

Computer Associates (Operations) under general supervision, with very considerable latitude for independent initiative and judgment: supervise the activities of subordinates in one or more computer operations units of considerable size; or serve as technical resource persons in the performance of networked, multi-tiered, or mainframe computer operations; or perform as technical resource persons in the diagnosis and, when feasible, the correction of telecommunications hardware problems in order to maintain efficient functioning of telecommunication operations and to minimize downtime in the case of system failure. All Computer Associates (Operations) perform related work.

Special Working Conditions:

Computer Associates (Operations) may be required to work various shifts including nights, Saturdays, Sundays, and holidays.

(This is a brief description of what you might do in this position and does not include all the duties of this position.)

THE SALARY:

The current minimum salary is $47,692 per annum. This rate is subject to change.

HOW TO QUALIFY:

You are responsible for determining whether or not you meet the education and experience requirements for this examination prior to submitting your application. If you are found "Not Qualified," your application fee will not be refunded and you may not receive a score.

You will **not** receive credit for education which you obtain after June 30, 2018 or experience which you obtain after the end of the Application Period (June 26, 2018).

EDUCATION AND EXPERIENCE REQUIREMENTS:

1. A certificate from an accredited technical school (approximately 675 hours) with a specialization in computer operations, and two years of satisfactory full-time computer operations experience, in a large-scale networked, multi-tiered, or mainframe computer environment; or two years of satisfactory data communications network experience working in a mainframe or multi-tiered computer environment; or
2. A baccalaureate degree from an accredited college or university and three years of satisfactory full-time experience as described in "1" above; or
3. A four-year high school diploma or its educational equivalent and four years of satisfactory full-time experience as described in "1" above; or
4. A satisfactory combination of education and/or experience equivalent to "1", "2" or "3" above. However, all candidates must have at least two years of full-time experience as described in "1" above.

The education requirement must be met by June 30, 2018. The experience requirement must be met by the last day of the Application Period (June 26, 2018).

The trade school, technical school or vocational high school must be approved by a State's Department of Education or a recognized accrediting organization. The high school diploma or its educational equivalent must be approved by a State's Department of Education or a recognized accrediting organization. The college or university must be accredited by regional, national, professional, or specialized agencies recognized as accrediting bodies by the U.S. Secretary of Education and by the Council for Higher Education Accreditation (CHEA).

If you were educated outside the United States, you must have your foreign education evaluated to determine its equivalence to education obtained in the United States. This is required <u>only</u> if you need credit for your foreign education in this examination. For more information see the Foreign Education Evaluation Guide in the Required Information section.

READ CAREFULLY AND SAVE FOR FUTURE REFERENCE

You must clearly specify in detail all of your relevant education and experience on your Education and Experience Test and submit it by the end of the Application Period. You will not receive credit for education which you obtain after June 30, 2018 or experience which you obtain after the end of the Application Period.

Residency Requirement Advisory: City Residency is not required for this position.

English Requirement:

You must be able to understand and be understood in English.

Proof of Identity:

Under the Immigration Reform and Control Act of 1986, you must be able to prove your identity and your right to obtain employment in the United States prior to employment with an agency under the jurisdiction of the Commissioner, Department of Citywide Administrative Services.

HOW TO APPLY:

If you believe you meet the requirements in the "How to Qualify" section, submit an application on the Online Application System (OASys) at *www.nyc.gov/examsforjobs*. Follow the onscreen application instructions for electronically submitting your application and payment, and completing any required information. A unique and valid email address is required to file online. Several internet service providers, including but not limited to Google, Yahoo!, AOL, Outlook.com, and Mail.com offer free email addresses. **All new OASys accounts require verification before a candidate can submit an application to ensure the accuracy of candidate information. Verification is instantaneous for most accounts, but some accounts may require up to two (2) business days to be reviewed by a staff member and resolved. Email notification will be sent to those creating accounts that require additional documentation before they can be resolved. Please keep this information and the application period deadline in mind when creating your account.** The following methods of payment are acceptable: major credit card, bank card associated with a bank account, or a prepaid debit card with a credit card logo which you may purchase online or at various retail outlets.

If you are receiving or participating in certain forms of public assistance/benefits/programs, or are a veteran, you may qualify to have the application fee waived. For more information on eligibility for a fee waiver and documentation requirements, visit the Fee Waiver FAQ on the Online Application System at *https://a856-eeexams.nyc.gov/OLEE/oasys/FAQFeeWaiver.aspx*.

You may come to the DCAS Computer-based Testing & Applications Centers to file for this examination online and submit a money order payable to DCAS (Exams) or to submit documentation for a fee waiver. The centers will be open Monday through Saturday from 9:00 AM to 5:00 PM:

Manhattan	**Brooklyn**	**Queens**	**Staten Island**
2 Lafayette Street	210 Joralemon Street	118-35 Queens Boulevard	135 Canal Street
17th Floor	4th Floor	5th Floor	3rd Floor
New York, NY 10007	Brooklyn, NY 11201	Forest Hills, NY 11375	Staten Island, NY 10304

Special Circumstances Guide: This guide is located on the DCAS website at *www.nyc.gov/html/dcas/downloads/pdf/misc/pdf_c_special_circumstances_guide.pdf* and available at the DCAS Computer-based Testing & Applications Centers. This guide gives important information about claiming Veterans' or Legacy credit, and notifying DCAS of a change in your mailing address. Follow all instructions on the Special Circumstances Guide that pertain to you when you complete your "Application for Examination."

REQUIRED INFORMATION:

1. **Application for Examination:** Follow the online instructions, including those relating to the payment of fee and, if applicable, those found in the Special Circumstances Guide.
2. **Affirmation Form:** The Affirmation Form, which is found online, must be printed, signed, dated and sent by mail to the address on the form. If DCAS does not receive your completed Affirmation Form, your application will not be considered complete, and your name will not appear on the eligible list for this examination.
3. **Education and Experience Test:** Fill out **Sections A.1 (if applicable), A.2 (if applicable), A.3 (if applicable), A.4 (if applicable), A.5 (if applicable), A.6 (if applicable), B, C (if applicable), and D (if applicable).** This test must be filled out completely and in detail for you to receive your proper rating. Follow the online instructions.
4. **Foreign Education Evaluation Guide: (Required <u>only</u> if you need credit for your foreign education to meet the education and experience requirements)**: If you were educated outside the United States, you must have your foreign education evaluated to determine its equivalence to education obtained in the United States. The services that are approved to make this evaluation are listed on the Foreign Education Evaluation Guide located on the Department of Citywide Administrative Services (DCAS) website at *www.nyc.gov/html/dcas/downloads/pdf/misc/foreigneducation.pdf*. When you contact the evaluation service, ask for a **"document-by-document" (general)** evaluation of your foreign education. You must have one of these services submit its evaluation of your foreign education directly to DCAS no later than eight weeks from the last day of the application period.

THE TEST:

Your score will be determined by an education and experience test. You will receive a score of 70 points for meeting the education and experience requirements listed above. After these requirements are met, you will receive additional credit up to a maximum of 100 points on the following basis:

For satisfactory, full-time experience in networked, multi-tiered, or mainframe computer operations or data communications network experience in a mainframe or multi-tiered computer environment, you will receive:

15 points for at least one year but less than three years of experience; or

30 points for at least three years experience.

For satisfactory, full-time experience performing mainframe computer operations related functions not included in "1" above (e.g. printing room, tape library or data entry), you will receive:

5 points for at least one year but less than three years of experience; or

10 points for at least three years of experience.

For at least two years of satisfactory, full-time experience teaching networked, multi-tiered, or mainframe computer operations in an academic setting or technical school, you will receive 5 points.

You will receive a maximum of one year of experience credit for each year worked. If you have any of the above experience on a part-time basis, it will be credited according to the equivalent percent of full-time experience. Each year of experience will be credited under only one category which will be the highest appropriate category. **Experience used to meet the minimum requirements cannot be used to gain additional credit.**

CHANGE OF MAILING AND/OR EMAIL ADDRESS:

It is critical that you promptly notify DCAS of any change to your mailing address and/or email address. If we do not have your correct mailing and/or email address, you will not receive information about your exam(s), consideration for appointment and/or important information that may require a response by a specified deadline. Change of mailing and/or email address requests submitted to any agency other than DCAS, such as to the United States Postal Service, will NOT update your records with DCAS.

To update your mailing and/or email address with DCAS, you must submit the change request by mail or in person. Your request must include your full name, social security number, exam title(s), exam number(s), previous mailing and/or email address, and your new mailing and/or email address. Your request can be mailed to DCAS Records Room, 1 Centre Street, 14th Floor, New York, NY 10007 or brought in person to the same address Monday through Friday from 9AM to 5PM. The following link will provide you with the DCAS Data Correction Form: *http://www.nyc.gov/html/dcas/downloads/pdf/misc/dp148a.pdf.*

THE TEST RESULTS:

If you pass the education and experience test, your name will be placed in final score order on an eligible list, you will be given a list number and you will be notified by mail of your test results. The eligible list determines the order by which candidates will be considered for appointment. If you meet all requirements and conditions, you will be considered for appointment if your name is reached on the eligible list. Once a list has been established, it will typically remain active for four years. To learn more about the civil service system go to: *http://www.nyc.gov/html/dcas/html/work/civilservice_1.shtml.*

ADDITIONAL INFORMATION:

Selective Certification For Special Experience and/or Certificate:

If you have certification and/or experience listed in one of more of the areas listed below, you may be considered for appointment to positions requiring this certification and/or experience through a process called Selective Certification. If you qualify for Selective Certification, you may be given preferred consideration for positions requiring this certification or experience. If you wish to apply for this Selective Certification, state the **3 digit Selective Certification ("SC") code** in Section D of the Education and Experience Test. Your certification and experience will be checked by the appointing agency at the time of appointment. This requirement may be met at any time during the duration of the list. If you meet the Selective Certification requirement at some future date, please submit a request by mail to: DCAS Bureau of Examinations - Exam Development Group, 1 Centre Street, 14th Floor, New York, NY 10007. Please include the examination title and number, your social security number, and the **3 digit SC code"** on your correspondence.

1. **Advanced Enterprise Web Analytics Administration:** At least one (1) year of satisfactory, full-time experience in installation, configuration, implementation, maintenance and enhancement of Enterprise Web Analytics Systems. Examples include, but are not limited to: WebTrends Analytics, Google Analytics, Microsoft SQL Server. **To add Selective Certification for Advanced Enterprise Web Analytics Administration, enter "116" in Section D of the Education and Experience Test.**

2. **Advanced Web Infrastructure System Administration:** At least two (2) years of satisfactory, full-time experience in installation, configuration, implementation, maintenance and enhancement of Enterprise Integration Bus and its related platforms. Examples include, but are not limited to IBM WebSphere Broker, IBM MQ, IBM DataPower, WebLogic, iWay, Oracle BPM. **To add Selective Certification for Advanced Web Infrastructure System Administration, enter "117" in Section D of the Education and Experience Test.**

3. **AIX Server Administration:** At least two (2) years of satisfactory, full-time experience in AIX System administration. The experience must include, but is not limited to: configuration and administration of enterprise-class servers including IBM AIX 4.x, AIX 5.1, AIX 5.2, AIX 5.3, or AIX 6.1.4 or higher versions in large-scale data center operations support functions. **To add Selective Certification for AIX Server Administration, enter "363" in Section D of the Education and Experience Test.**

4. **Apple Operations Technical Support:** At least two (2) years of satisfactory, full-time experience in Apple systems support, including print, graphics and post-editorial support. **To add Selective Certification for Apple Operations Technical Support, enter "AOT" in Section D of the Education and Experience Test.**

5. **Asset Management:** At least one (1) year of satisfactory, full-time IT Asset and Configuration Management experience in a large Microsoft Windows enterprise environment. Must have at least one of the following certifications: IAITAM Certification (CITAM, CSAM, CHAMP, CMAM, CITAD, CAMP), ITAM foundations or ITIL v3 foundations. Experience must include tracking and managing the lifecycle of an IT Asset from procurement, receiving and inventory management to deployment and retirement. The experience must include using Asset Management and Discovery tools like BMC Remedy, AssetGen, ServiceNow, RedBeam, BMC SDE SupportMagic, Bladelogic, ADDM, Sciencelogic, ITOM Discovery. **To add Selective Certification for Asset Management, enter "108" in Section D of the Education and Experience Test.**

6. **Avaya Certified Implementation Specialist (ACIS):** Must have the Avaya Certified Implementation Specialist certification. **To add Selective Certification for ACIS, enter "11B" in Section D of the Education and Experience Test.**

7. **Backup Administration:** At least two (2) years of satisfactory, full-time experience as an administrator of a large-scale backup software product such as NetBackup, Networker, TSM, Simpana, Data Protector or Avamar, or five (5) years as a part time backup administrator administering either SAN storage or a virtualization hypervisor platform, or both. **To add Selective Certification for Backup Administration, enter "119" in Section D of the Education and Experience Test.**

8. **Backup Engineering:** At least two (2) years of satisfactory, full-time experience in design, deployment, administration, and operations of Enterprise level SAN and NAS solutions. This experience must include all levels of the project lifecycle from architecting to deployment, to managing day-to-day operations, including

troubleshooting Enterprise class data storage systems in multiple OS environments. **To add Selective Certification for Backup Engineering, enter "118" in Section D of the Education and Experience Test.**

9. **Brocade Certified Fabric Administration:** Must have the Brocade Certified Fabric Administrator Certification from Network Appliance. **To add Selective Certification for Brocade Certified Fabric Administration, enter "129" in Section D of the Education and Experience Test.**

10. **Change Management:** At least one (1) year of satisfactory, full-time experience in a large-scale IT enterprise, coordinating infrastructure and application changes via a Change Advisory Board (CAB), deep understanding of various change management methodologies and tools (BMC SDE SupportMagic, Remedy & ServiceNow), experience in looking across the enterprise and integrating key information from various major change initiatives, ability to manage the lifecycle of a Change Request from inception to closure, ability to ask technical questions and ensure that there are no change conflicts and that back out plans are included, and experience in facilitating meetings and asking probing questions to identify risk. **To add Selective Certification for Change Management, enter "168" in Section D of the Education and Experience Test.**

11. **Certified Telecommunications Analyst:** Must have the Certified Telecommunications Analyst Certification. **To add Selective Certification for Certified Telecommunications Analyst, enter "16A" in Section D of the Education and Experience Test.**

12. **Certified IP Telecommunications Network Specialist:** Must have the Certified IP Telecommunications Network Specialist Certification. **To add Selective Certification for Certified IP Telecommunications Network Specialist, enter "16B" in Section D of the Education and Experience Test.**

13. **Certified Telecommunications Network Specialist:** Must have the Certified Telecommunications Network Specialist Certification. **To add Selective Certification for Certified Telecommunications Network Specialist, enter "16C" in Section D of the Education and Experience Test.**

14. **Certified Wireless Analyst:** Must have the Certified Wireless Analyst Certification. **To add Selective Certification for Certified Wireless Analyst, enter "16D" in Section D of the Education and Experience Test.**

15. **Cisco Certified Network Professional (CCNP):** Must have the Cisco Certified Network Professional (CCNP) Certification. **To add Selective Certification for CCNP, enter "155" in Section D of the Education and Experience Test.**

16. **Cloud Management:** At least two (2) years of satisfactory, full-time experience in Cloud Management. Must have certifications for any of the following: AWS Operations, Google Cloud or MS Cloud Platform. **To add Selective Certification for Cloud Management, enter "189" in Section D of the Education and Experience Test.**

17. **Computer Telephony Integration Systems Administration:** At least one (1) year of satisfactory, full-time experience in administering, supporting, designing, developing, installing, configuring, implementing, maintaining and/or enhancing Computer Telephony Integration systems. Examples include, but are not limited to: Genesys, PBX, Nortel and/or Avaya Telephony system IIS, Siebel, MS Dynamics, Oracle CRM and Salesforce, Unix, Linux and SQL. **To add Selective Certification for Computer Telephony Integration Systems Administration, enter "CTI" in Section D of the Education and Experience Test.**

18. **Continuous Process Improvement Management:** At least one (1) year of satisfactory, full-time experience developing and implementing enterprise wide IT processes for a large public organization. Experience must include working with business owners and subject matter experts to define process controls, develop system requirements for integration, and identify the inputs and outputs of other processes. Must have experience in building a process from the ground up and/or developing best practice assessments for the implementation of a continual process improvement. **To add Selective Certification for Continuous Process Improvement Management, enter "216" in Section D of the Education and Experience Test.**

19. **CRM Systems Administration:** At least one (1) year of satisfactory, full-time experience in administering, supporting, designing, developing, installing, configuring, implementing, maintaining and/or enhancing industry leading Customer Relationship Management (CRM) Systems. Examples include, but are not limited to: Siebel, MS Dynamics, Oracle CRM and Salesforce, Actuate and/or BI Publisher reports, Visual Studio, IIS, SQL Server, SSRS, XML/XSL/Web Services, Unix, Linux, and/or SQL. **To add Selective Certification for CRM Systems Administration, enter "233" in Section D of the Education and Experience Test.**

20. **EMC Certified Storage Administration (Isilon Specialist):** Must have the Storage Administrator Specialist (Isilon Solutions) Certification from Network Appliance. **To add Selective Certification for EMC Certified Storage Administration (Isilon Specialist), enter "24E" in Section D of the Education and Experience Test.**

21. **EMC Certified Storage Administration (SAN Specialist):** Must have the Storage Administrator Specialist (SAN Solutions) Certification from Network Appliance. **To add Selective Certification for EMC Certified Storage Administration (SAN Specialist), enter "24B" in Section D of the Education and Experience Test.**

22. **EMC Certified Storage Administration (VMAX Solutions Specialist):** Must have the Storage Administrator Specialist (VMAX solutions) Certification from Network Appliance. **To add Selective Certification for EMC Certified Storage Administration (VMAX Solutions Specialist), enter "24C" in Section D of the Education and Experience Test.**

23. **EMC Certified Storage Administration (VNX Solutions Specialist):** Must have the Storage Administrator Specialist (VNX solutions) Certification from Network Appliance. **To add Selective Certification for EMC Certified Storage Administration (VNX Solutions Specialist), enter "24D" in Section D of the Education and Experience Test.**

24. **Enterprise Web Analytics Administration:** At least one (1) year of satisfactory, full-time experience in the installation, configuration, implementation, maintenance and enhancement of Enterprise Web Analytics Systems. Examples include, but are not limited to: WebTrends Analytics, Google Analytics, Microsoft SQL Server. **To add Selective Certification for Enterprise Web Analytics Administration, enter "25C" in Section D of the Education and Experience Test.**

25. **Firewall System Operations:** At least four (4) years of satisfactory, full-time experience maintaining responsibility for firewall operational security infrastructure through the identification and evaluation of security protection measures and controls around the technical operations infrastructure. In addition, must have been responsible for operations and maintenance of enterprise information security

firewall controls and for ensuring that the appropriate operational security procedures are maintained for information systems programs and data. **To add Selective Certification for Firewall System Operations, enter "279" in Section D of the Education and Experience Test.**

26. **Incident Command Structure (ICS) Certification:** Must have an Incident Command Structure (ICS) certification such as FEMA's Professional Development Series certificate or an IS-100.b, IS-200.b, IS-700, or IS-800.b certificate. **To add Selective Certification for Incident Command Structure (ICS) Certification, enter "382" in Section D of the Education and Experience Test.**

27. **Incident Management:** At least one (1) year of satisfactory, full-time experience in a large-scale IT enterprise, coordinating infrastructure and application support teams to restore normal service operation as quickly as possible, managing entire incident lifecycle and processes in order to stabilize IT service delivery, driving incident management process, including root cause identification, outage and incident solution, change recommendation and coordination, risk determination, and ongoing communications. Must be able to facilitate calls and ask technical questions to clearly understand issues and articulate possible solutions. Must have a high-level technical background in LAN/WAN concepts, Virtual Machines, Oracle databases, Active Directory, LDAP directories, Windows/Unix Operating systems, Office 365 messaging systems, and procedures for service delivery in ITSM and ITIL. **To add Selective Certification for Incident Management, enter "42R" in Section D of the Education and Experience Test.**

28. **Information Technology Systems Experience in a Public Health or Health Services Setting:** At least one (1) year of full-time satisfactory experience operating, monitoring, troubleshooting and/or developing information technology and/or electronic records systems for a laboratory, hospital, community health center, private medical practice, patient care facility, or in a public health, environmental health, or mental hygiene program. **To add Selective Certification for Information Technology Systems Experience in a Public Health or Health Services Setting, enter "PIT" in Section D of the Education and Experience Test.**

29. **Information Technology Process Management:** At least two (2) years of satisfactory, full-time experience developing and implementing enterprise wide IT processes for a large public organization. This involves working with business owners and subject matter experts to define process controls, developing system requirements for integration, and identifying the inputs and outputs of other processes. Must have proven ability to build processes from the ground up and/or administer best practice assessments for the implementation of continual process improvement. Must be able to write highly technical and detailed content with exposure to all aspects of enterprise IT and telecommunications, as well as manage planning and development, review, communication, training, and continual improvement of the process. **To add Selective Certification for Information Technology Process Management, enter "383" in Section D of the Education and Experience Test.**

30. **Intrusion Prevention System Operations:** At least four (4) years of satisfactory, full-time experience monitoring an enterprise network, using an Intrusion Prevention System (IPS) Technology for malicious activities such as security threats and policy violations. In addition, using IPS technology to identify suspicious activity, log the information, attempt to block the activity, and then apply mitigation. **To add Selective Certification for Intrusion Prevention System Operations, enter "416" in Section D of the Education and Experience Test.**

31. **IP Telephony Design:** At least two (2) years of satisfactory, full-time hands-on experience working with Cisco Call Manager or Cisco Contact Center. **To add Selective Certification for IP Telephony Design, enter "387" in Section D of the Education and Experience Test.**

32. **IP Telephony Design Engineering:** At least two (2) years of satisfactory, full-time design experience working with Cisco Call Manager or Cisco Contact Center. **To add Selective Certification for IP Telephony Design Engineering, enter "386" in Section D of the Education and Experience Test.**

33. **ITSM Implementation, Release & Deployment Support:** At least one (1) year of satisfactory, fulltime experience in IT release management, implementing technical infrastructure projects, including planning, scheduling and controlling the migration lifecycle of all new and changed assets from Test to Live environments. Must have experience in coordinating the Release Management process, working with multiple cross-functional service delivery teams to complete technical implementations, and managing the implementation, deployment and notification swiftly and accurately. **To add Selective Certification for ITSM Implementation, Release & Deployment Support, enter "418" in Section D of the Education and Experience Test.**

34. **LAN/WAN Network Engineering:** At least three (3) years of satisfactory, full-time experience with IP switched/routed based network; working knowledge of routing and switching (LAN/WAN), HSRP, GLBP, QOS multicasting, VLANs, VTP, NTP and load balancing; knowledge of IP addressing and subnetting (1Pv4/6), routing protocols, including BGP, EIGRP, OSPF and MPLS; basic troubleshooting experience of Cisco hardware/IOS or NX-OS software, including 72xx, 39xx, and 29xx series routers, 65xx, 37xx, and Nexus platform layer 2/3 switches. **To add Selective Certification for LAN/WAN Network Engineering, enter "422" in Section D of the Education and Experience Test.**

35. **Linux Engineering:** At least three (3) years of satisfactory, full-time experience with UNIX & Linux System administration/engineering, including but not limited to experience administering, structuring, architecting, and supporting multi-tier web-based systems that are highly available and capable of handling large throughput and concurrency; and experience with Veritas products including Cluster Server, Volume Manager, File System, and/or other clustering and replication technologies. **To add Selective Certification for Linux Engineering, enter "DUL" in Section D of the Education and Experience Test.**

36. **Mainframe Operations:** At least two (2) years of satisfactory, full-time experience in Mainframe operations including a knowledge base in Jes2, Tso, Aoc, and/or production control batch experience working with IBM Workload Scheduler, Omegamon, Netview and/or mainframe console operations. **To add Selective Certification for Mainframe Operations, enter "46b" in Section D of the Education and Experience Test.**

37. **Mainframe Operations Management:** At least three (3) years of satisfactory, full-time experience in Mainframe Operations working with Jes2, Tso & Aoc, including a minimum of three (3) years of satisfactory, full-time experience as a Manager leading staff through testing and upgrading both software and hardware. **To add Selective Certification for Mainframe Operations Management, enter "46c" in Section D of the Education and Experience Test.**

38. **Messaging & Collaboration Engineering:** At least two (2) years of satisfactory, full-time experience working with MS Exchange, MS SharePoint, MS Lync, Storage Devices (including NetApp and EMC), BES, Windows Server, Archiving Solutions (including Enterprise Vault), eDiscovery, Scripting languages such as vbscript, and PowerShell. **To add Selective Certification for Messaging & Collaboration Engineering, enter "467" in Section D of the Education and Experience Test.**

39. **Multi-Large-Scale System Support Management:** At least two (2) years of satisfactory, full-time experience in design, deployment, administration, and operations of Enterprise level SAN and NAS solutions. This experience must include all levels of the project lifecycle from architecting to deployment to day to day operations including troubleshooting Enterprise class data storage systems in multiple OS environments. **To add Selective Certification for Multi-Large-Scale System Support Management, enter "477" in Section D of the Education and Experience Test.**

40. **Municipal Call Center Experience:** At least one (1) year of satisfactory, full-time Call Center experience working within a municipal government in a similar position, which provides services for a city with over 1 million in population. **To add Selective Certification for Municipal Call Center Experience, enter "MCC" in Section D of the Education and Experience Test.**

41. **Municipal Experience:** At least one (1) year of satisfactory, full-time Municipal experience working within a municipal government in a similar position, which provides services for a city with over 1 million in population. **To add Selective Certification for Municipal Experience, enter "MGE" in Section D of the Education and Experience Test.**

42. **NetApp Certified Data Administration:** Must have the NetApp Certified Data Administrator Certification from Network Appliance. **To add Selective Certification for NetApp Certified Data Administration, enter "490" in Section D of the Education and Experience Test.**

43. **Network Design:** At least two (2) years of satisfactory, full-time experience working with TCP/IP subnetting including one (1) year of satisfactory, full-time experience working with the basic configuration of Cisco routers and switches. **To add Selective Certification for Network Design, enter "51A" in Section D of the Education and Experience Test.**

44. **Network Design Engineering:** At least two (2) years of satisfactory, full-time design experience working with a range of Cisco Catalyst and Nexus switches, routers, and F5 load balancers, with a minimum of two (2) years hands-on experience with BGP, and a minimum of three (3) years with OSPF routing protocols. **To add Selective Certification for Network Design Engineering, enter "51C" in Section D of the Education and Experience Test.**

45. **Network Operations Management:** At least three (3) years of satisfactory, full-time experience managing an IP switched/routed wide area network consisting of 100 plus nodes. Must have working knowledge of switching/routing protocols, good understanding of load balancing and optical networking technologies, experience with Network Data Center Environments and Remedy and Clarity systems, proficiency with industry standard documentation application software (e.g. Microsoft Visio, Excel, Project etc.), and experience managing a group of six or more WAN network engineers. **To add Selective Certification for Network Operations Management, enter "515" in Section D of the Education and Experience Test.**

46. **Oracle DBA:** At least three (3) years of satisfactory, full-time experience as an Oracle DBA implementing and managing Oracle RAC environments, implementing Grid Infrastructure release 11.2 or higher on a Unix/Linux environment, and/or ASM cluster Filesystem implementation/maintenance. **To add Selective Certification for Oracle DBA, enter "580" in Section D of the Education and Experience Test.**

47. **Problem Management:** At least one (1) year of satisfactory, full-time experience in a large scale IT enterprise managing the lifecycle and process of a critical outage, which impacted IT's critical systems; and coordinating efforts with Service Delivery leads across multiple divisions to stabilize IT service delivery and prevent reoccurrence. **To add Selective Certification for Problem Management, enter "42D" in Section D of the Education and Experience Test.**

48. **Service Desk Quality Assurance:** At least one (1) year of satisfactory, full-time experience as a Quality Assurance auditor/analyst reviewing phone and email contacts in a technical support and Helpdesk environment. Experience must include several of the following: creation and maintenance of Quality Assurance forms, reports, and checkpoints; creation of a monthly report on department and individual performance; data collection and analysis of Quality Assurance performance; analysis and reduction of perennial issues and errors; data management; advance use of MS Excel, Word, and PowerPoint; providing performance feedback and conducting corrective action process. **To add Selective Certification for Service Desk Quality Assurance, enter "SDQ" in Section D of the Education and Experience Test.**

49. **Service Desk Supervisory Support:** At least two (2) years of satisfactory, full-time experience supervising staff in Help Desk technical support and in quality assurance review. Must have experience with Windows 10 Enterprise. **To add Selective Certification for Service Desk Supervisory Support, enter "61E" in Section D of the Education and Experience Test.**

50. **Service Desk Support:** At least two (2) years of satisfactory, full-time experience in customer service conducting technical or Helpdesk support. **To add Selective Certification for Service Desk Support, enter "CSD" in Section D of the Education and Experience Test.**

51. **ServiceNow Development:** At least one (1) year of satisfactory, full-time experience in analysis, design, development, implementation and maintenance of applications with ServiceNow ITSM platform. **To add Selective Certification for ServiceNow Development, enter "61m" in Section D of the Education and Experience Test.**

52. **Solution Architecture:** At least three (3) years of satisfactory, full-time hands-on architectural experience in complex information technology assessments and implementations, such as experience in architecting complex large-scale systems incorporating packaged and custom applications. The experience must include knowledge of application architectures, enterprise architecture, release methodologies, project management, infrastructure support, production support, client/server applications, internet and intranet applications, operating systems (Solaris, Windows,etc.), database platforms (Oracle, Microsoft, IBM, etc.), desktop platforms, mobile platforms, web platforms, application frameworks (Java, .NET, etc.), content managers, portal products, application integration, and/or SOA development methodologies and environments. **To add Selective Certification for Solution Architecture, enter "626" in Section D of the Education and Experience Test.**

53. **SQL DBA:** At least three (3) years of satisfactory, full-time experience in Microsoft SQL Server Administration and Development, including SQL Server Database performance management and tuning, database fault analysis and resolution, and effective Database Backup/Recovery strategy deployment. **To add Selective Certification for SQL DBA, enter "718" in Section D of the Education and Experience Test.**

54. **Storage Engineering:** At least three (3) years of satisfactory, full-time experience in Storage Area Network design, configuration and administration. **To add Selective Certification for Storage Engineering, enter "SAN" in Section D of the Education and Experience Test.**

55. **Technical Content Analyst:** At least two (2) years of satisfactory experience designing, managing and maintaining self-service websites for helpdesk technical support, web design, photo and graphics editing, user experience design, user interaction design, and information architecture design. **To add Selective Certification for Technical Content Analyst, enter "724" in Section D of the Education and Experience Test.**

56. **UNIX/LINUX Server Administration:** At least two (2) years of satisfactory, full-time experience in UNIX/LINUX System administration, including, but not limited to in-depth installation, configuration, administration and tuning of enterprise class servers. **To add Selective Certification for UNIX/LINUX Server Administration, enter "DAX" in Section D of the Education and Experience Test.**

57. **VM Ware Support Engineering:** At least three (3) years of satisfactory, full-time experience in virtualization technologies, including but not limited to vRA, vROPS, VCO, and NSX. **To add Selective Certification for VM Ware Support Engineering, enter "774" in Section D of the Education and Experience Test.**

58. **VM Ware Systems Engineering:** At least three (3) years of satisfactory, full-time experience in Converged Network Architectures, 10 GB, NFS and Cisco Nexus (1k, 2k,5k, 7k). **To add Selective Certification for VM Ware Systems Engineering, enter "773" in Section D of the Education and Experience Test.**

59. **Web Content Management Systems Administration:** At least one (1) year of satisfactory, full-time experience in the installation, configuration, implementation, maintenance and enhancement of Web-Content Management Systems. Examples include, but are not limited to: Apache Web Server, Microsoft IIS, Tomcat, JBOSS, WebLogic, WebSphere, IBM MQ, iWay, FileNet, Documentum, TeamSite, Portal, and Siebel. **To add Selective Certification for Web Content Management Systems Administration, enter "WCS" in Section D of the Education and Experience Test.**

60. **Web Infrastructure System Administration:** At least one (1) year of satisfactory, full-time experience in the installation, configuration, implementation, maintenance and enhancement of Enterprise Integration Bus and its related platforms. Examples include, but are not limited to IBM WebSphere Broker, IBM MQ, IBM DataPower, WebLogic, iWay, and/or Oracle BPM. **To add Selective Certification for Web Infrastructure System Administration, enter "784" in Section D of the Education and Experience Test.**

61. **Windows Desktop Support Engineering:** At least two (2) years of satisfactory, full-time experience in design, development, implementation, maintenance and enhancement of hardware, applications, operating systems and computer imaging in a Microsoft Windows environment. Examples include, but are not limited to: Microsoft Office Suite, Microsoft Operating Systems, Browser based applications (Siebel, .NET Framework, Java) Adobe Suite, McAfee, Active Directory, Microsoft Deployment Tool Kit, SCCM and/or Bladelogic Client Management. **To add Selective Certification for Windows Desktop Support Engineering, enter "790" in Section D of the Education and Experience Test.**

62. **Windows Systems Administration:** At least two (2) years of satisfactory, full-time experience administering Windows servers in a large-scale environment with Windows 2003/2008/2012/2016 Enterprise Server Platform or more recent version, Active Directory, Microsoft Clustering, and/or Remote Installation Services. **To add Selective Certification for Windows Systems Administration, enter "792" in Section D of the Education and Experience Test.**

Application Receipt:

You will be emailed a receipt immediately after you have applied for the examination. If you do not receive this receipt, contact DCAS at OASys@dcas.nyc.gov. Include the last four digits of your social security number or the OASys confirmation number and the examination number and title in your email.

Promotion Test: A promotion examination for this title is being held for eligible employees. The names appearing on the promotion list will be considered first in filling vacancies.

PENALTY FOR MISREPRESENTATION:

Any intentional misrepresentation on the application or examination may result in disqualification, even after appointment, and may result in criminal prosecution.