

Department: In all Civil Divisions

Classification: Competitive

Grade: 10

SPEC DISK C7

DOCUMENT 67

COMPUTER PROGRAMMER/SPECIALIST

DISTINGUISHING FEATURES OF THE CLASS: The work involves responsibility for preparing detailed instructions to adapt various operations to electronic data processing. The computer programmer develops individual programs, documents program logic, codes programs using program languages and tests and debugs programs. The position may also involve operating, monitoring and controlling a computer and related peripheral equipment. The work is performed under the general direction of the Director of Data Processing. The programmer is allowed to exercise a considerable degree of independence in carrying out assigned duties.

Supervision may be exercised over the work of subordinate data processing employees. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative only)

Analyzes the flow of information between the data center and the various units participating in the data processing system;

Designs detailed programs, forms, flow charts and diagrams to adapt financial or statistical operations to electronic data processing;

Prepares sample test data, performs actual testing and makes modifications, revisions and corrections to programs;

Debugs new programs to assure completion according to predetermined requirements;

Operates an electronic computer and related peripheral equipment in compiling and processing data for a variety of statistical and financial reports;

Performs detailed systems analysis and surveys of problems related to financial and statistical records and reports;

Prepares input and output memory layouts and block diagrams to show sequence of computations for problem solution on computer and related peripheral equipment;

May train and supervise Data Entry Machine Operators and other subordinate employees;

Manipulates an alphanumeric keyboard to transcribe data from source documents;

Consults with superiors and reports problems and deviations affecting work load and scheduling;

Analyzes problems in terms of factors such as type and extent of information to be transferred to and from storage units, variety of items to be processed and format of final output;

Prepares reports on results of surveys and systems analysis and suggests application to data processing equipment;

Performs basic repair work on personal computers, including hard disk drive and floppy drive replacements, memory upgrades, and power supply replacement;

Installs PC computer boards, such as for monitors, terminal emulations, and tape backups;

Installs laser printer toner cartridges and/or drums;

Cleans PC's and PC printers, as required;

Assists PC users in the operation of their microcomputers and related peripherals;

Trains users with basic instruction in MS-DOS commands, Word Perfect, and Lotus software with assistance offered for other software as required.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of electronic computer programming principles, techniques and concepts, good knowledge of the application of major types of electronic data processing equipment to accounting and statistical problems; good knowledge of office terminology and procedures; working knowledge of electronic computer and related peripheral data processing equipment operation, care and adjustment including a data recorder; working

knowledge of systems analysis applicable to computer programming; ability to translate and adapt administrative, statistical, and financial data to programs for use in a data processing operation; ability to evaluate new hardware and software; experience on E-Mail and Internet; ability to follow moderately complex oral and written instructions; good oral communication skills; physical condition commensurate with the demands of the position.

COMPUTER PROGRAMMER/SPECIALIST - Continued

MINIMUM QUALIFICATIONS: Either:

- [a] Graduation from a regionally accredited or New York State registered college or university with a Bachelors of Science Degree in computer science or related field including a minimum of sixteen (16) credit hours in data processing and one (1) year of paid experience in computer programming or technology; or
- [b] Graduation from a regionally accredited or New York State registered college or university with an Associate Degree in applied science in electronic data processing and three (3) years of paid experience in data processing with a minimum of one (1) year of experience in computer programming or technology; or
- [c] Graduation from high school or possession of a high school equivalency diploma and four (4) years of paid experience in data processing including a minimum of six (6) credit hours in computer science (including computer programming) and one year of paid experience in computer programming or technology; or
- [d] An equivalent combination of training and experience as defined by the limits of [a], [b] and [c].

NOTE: Equipment in operation as of 1997, IBM RS-6000 with AIX, HP LM2/66 with Novell operating system. Cobol and ACCESS microcomputer programming experience preferred. Extensive MS-DOS, Windows, Word Perfect, and Lotus knowledge is required.

ADOPTED 12/08/97