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**EVALUATION
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PREPARATION FOR THE CLASS

This covers the Education and Experience factors contained in the class specifications as to minimum qualifications necessary to insure minimum proficiency and preparation to perform the duties of a class at the time of appointment.

- 1.1 **EDUCATION FACTOR:** evaluates the knowledge, information and mental development required in a class which is normally obtained through formal education. This will include such matters as a particular degree requirement (Business Administration, Engineering, Social Work, Medical); specific educational subjects or courses (geometry, physics, accounting, geology, economics); or level of formal education which would signify certain mental development or potential for performance, training or mental ability to learn and apply (high school, college, special graduate training).

But, this would not include responsibilities that would be part of the class duties, mental skill of application, initiative, ingenuity or knowledge or skill requirements of typing, stenographic, key punch, welding, mechanical ability which can be obtained through formal educational methods, but which are normally or can be learned through self-help, job training or apprenticeship.

DETERMINATION OF DEGREES: Select the degree definition which expresses the number of years and type of education appropriate to the class.

DEGREE

1	2	3	4	5	6	7	8	9	10	11	12
15 points	25 points	40 points	60 points	90 points	130 points	150 points	170 points	195 points	220 points	255 points	290 points
Base points- no educational requirement to 8th grade	Elementary School-8th grade com- pletion or equivalent	2 years of high school	High School graduation or equivalent or trade school graduation	2 or 3 yrs. of college, but not 4 yrs. of col- lege or specialized training beyond High School or associate de- gree program (Licensed X-Ray Techni- cian)	College grad- uation or 4 yr. equivalent or formal training and board certification (Nursing, Med- ical Technol- ogist)	College plus 1 yr. of grad- uate work or a 5 yr. college program re- quirement for graduation or 1 yr. of resi- dency or intern- ship beyond college (Dieti- cian, Occupa- tional Ther- apist, etc.)	2 yrs. of Grad- uate study. Master's de- gree or 6 yr. College pro- gram for grad- uation (Veter- inarian) or board certifi- cation of ad- vanced pro- fessional stand- ing (C.P.A., Registered Pro- fessional En- gineer)	Three or more years of grad- uate study, law degree or ad- mission to Bar	PhD Degree	Dentist Degree	Medical Doc- tor's degree plus internship

1.2 EXPERIENCE FACTOR: Evaluates the knowledge, skill and mental development required by a class in addition to that normally obtained through formal education. This additional knowledge, skill and mental development is usually acquired by previous work experience and represents the minimum time required to adapt or the application of the knowledge, skill and mental development obtained by job performance, self training or apprenticeship.

Prerequisite skill, involving physical or manual dexterity or proficiency such as typing, stenographic, key punch, in lieu of experience of a specific duration would be considered as would licenses, certificates or other documents which denote the possession of abilities or proficiencies as attested to through the issuances of the same by a governmental body, association or other group employing acceptable and impartial standards such as a driver's license, barber's license, x-ray training certification; or, the completion of an approved term of apprenticeship as generally recognized, such as carpentry, masonry, would be included as substitution is allowed.

DETERMINATION OF DEGREES: Select the most applicable sub-factors and degree which represents the total number of years or substitution appropriate to the class.

DEGREE

SUB-FACTORS	1	2	3	4	5	6	7	8	9	10	11	12
	5 Points	10 Points	20 Points	35 Points	55 Points	80 Points	110 Points	150 Points	200 Points	260 Points	340 Points	440 Points
Manual & Semi-Skilled	6 months experience	1 year to 2 years	2 years to 3 years	3 years to 5 years								
Clerical & Office Machines Classes	6 months experience or course or skill perf.	1 year to 2 years	2 years to 3 years	3 years to 5 years	5 years to 7 years	Over 7 years						
Trades and Crafts Classes and Skilled	6 months experience or license	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 6 years	6 years to 8 years	Over 8 years					
Sub-Professional and Technical Classes			1 year to 2 years	2 years to 3 years	3 years to 5 years	5 years to 7 years	7 years to 9 years	Over 9 years				
College Graduation or Training Board Certification (Nursing)				1 year to 2 years	2 years to 4 years	4 years to 6 years	6 years to 8 years	8 years to 10 years	Over 10 years			
Master's Degree or College plus 1 or 2 years of Graduate Study or 6 year program					1 year to 3 years	3 years to 5 years	5 years to 7 years	7 years to 9 years	9 years to 10 years	Over 10 years		
PhD Degree or College plus 3 or more years of graduate or graduate level study						1 year to 3 years	3 years to 5 years	5 years to 7 years	7 years to 9 years	9 years to 10 years	Over 10 years	
Dental Degree						1 year to 2 years	2 years to 4 years	4 years to 6 years	6 years to 8 years	8 years to 9 years	Over 9 years	
Medical Doctor's Degree							1 year to 3 years	3 years to 5 years	5 years to 7 years	7 years to 8 years	8 years to 10 years	Over 10 years

RESPONSIBILITIES OF THE CLASS

By definition, the term responsibility imposes accountability or answerability - it is an obligation which is imposed on an incumbent, in a class, to see that certain duties and tasks, functions or objectives, assigned to the class, are accomplished; the importance of such obligations, as to degree, is the determinant. The various sub-factors of specific responsibility, to be defined later, under the over-all factor of responsibility, measures the relationship for judgment exercised, latitude of decision making, activity performance, effect and consequences of loss, damage, saving, improvements, etc., to the importance of the specific and the whole. The difficulty involved in any responsibility, as to job complexity, is not considered, but is measured under PERSONAL DEMANDS. No credit for specific responsibility is given unless such is a regular, direct and usual function of the class - functional, temporary or occasional responsibility is measured only by this definition. Credit is given to a class under different specific responsibility wherever it applies directly and is a primary duty of the class. However, it will be found that few, if any classes, will have credit for all specific responsibility factors; where found, the degrees will vary widely.

2.1 RESPONSIBILITY FOR SUPERVISION EXERCISED: This factor evaluates the responsibility vested in the class for supervising the work of other employees. It does not refer to "functional" guidance on a temporary basis, control for purposes of safety, training programs, referral, counseling, indoctrination, selection (initial), general welfare or similar activities which are evaluated under POLICIES, METHODS AND PROCEDURES. It refers to, and is limited by, the responsibility which the class imposes upon incumbents to direct and control the activities of subordinates in a direct or recognized line of authority in such matters as the assignment of work, approval of work, job training or work instruction, handling of subordinates' grievances or complaints, morale, and the recommendation of, or conductance of, activities affecting the tenure, promotion, salary, etc., of other employees. Degrees would depend on losses, savings, or accomplishment affected by the elements of:

1. What instructions or guidance does the person receive as to what work is to be done and how to do it.
2. What decisions are permitted to the person without reference to higher authority.
3. What part of the person's work is checked by others.
4. Number of persons supervised.
5. Scope and caliber of work performed.

DETERMINATION OF DEGREE: The degrees are expressed in terms of total number of employees supervised, supervision exercised or the type of organizational unit administered. Select the most applicable sub-factors and degree in terms of importance.

DEGREE

SUB-FACTORS	1 15 Points	2 35 Points	3 60 Points	4 90 Points	5 130 Points	6 180 Points	7 240 Points	8 310 Points
Preponderant number of employees engaged in clerical, office machines, manual or draft work	Limited to making work assignments to small groups performing routine work; may check or review work performance; normally performs same operations as those supervised 50% or more of the time; 2-7 employees supervised average	Immediate supervision over a work unit in which operations are routine or performed in accordance with established procedures for work planning, review and personnel. More than 50% of time spent on supervisory duties. 2-15 employees supervised average or degree #1, 7-20 employees supervised	Degree #2 in supervision of 16-50 employees or (a) immediate supervision over a work unit in which operations are varied or diversified involving 2-15 employees supervised average	General supervision of 50-150 employees or Degree 3 (a) General supervision over 16-50 employees or Supervision in which some employees being supervised assume responsibility and may make work assignments to others	Supervision of over 150 employees or degree 3 (a) supervision of 50-150 employees (b) Degree #4 Subordinate supervisors <u>will</u> make work assignments to others.			
Preponderant number of employees engaged in scientific technical, professional and craft	Leadman	Limited to making work assignments to small groups performing routine work; may check or review work performance; normally performs same operations as those supervised 50% or more of the time 2-7 employees supervised average	Immediate supervision over a work unit in which operations are routine or performed in accordance with established procedure for work planning, review and personnel. More than 50% of time spent on supervisory duties. 2-15 employees supervised average.	Degree 3 in supervision of 16-50 employees or (a) supervision over a work unit in which operations are varied or complex involving 2-15 employees supervised average	Supervision of 50-150 employees or Degree 4 (a) supervision of 16-50 employees (b) Supervision in which some employees being supervised assume responsibility and may make work assignments to others.	Supervision of over 150 employees or Degree 4 (a) supervision of 50-150 employees; or Degree 5 (b) Subordinate supervisors will make work assignments to others or (c) A specialized professional unit of moderate size and intra related action.		

<p>Administrative control of both professional and/or non-professional employees</p>			<p>Supervision of one small functional unit within an agency or institution in which operations are performed in accordance with established procedures and methods. or Administrative Control over a small agency of limited scope or calibre.</p>	<p>Degree 3 medium sized units; or administrative control over a small agency where operations are varied or diversified.</p>	<p>General Supervision of a major function of an agency or institution of medium or large size in which operations are performed in accordance with established procedures and methods; or, degree 4 where operations are varied and diversified and allow general responsibility for decisions; or, degree 4 for more than one medium sized unit.</p>	<p>Administrative Control and direction of a major function of a large or medium sized agency typical of degree 5 or more than one medium to small sized units of a large agency</p>	<p>Administrative direction and coordination of several small or one large functional unit; or one medium size agency or institution</p>	<p>Administrative direction and control of a complete program with several large functional units; or control of a large institution or agency</p>
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2.2 **RESPONSIBILITY FOR POLICY, METHODS AND PROCEDURES:** This factor evaluates the responsibility vested in a class for the execution or organization of policies, methods and procedures. It would include "functional" guidance of others or any form of guidance, advice or control exercised over employees not under the supervision of the class in a direct or recognized line of authority. The factor would measure the incumbent's function to make recommendations, give or render interpretations or express conclusions of personal opinion, knowledge and independent thinking rather than just to supply factual information or data, as such. There is present the developing or improving methods of work in the positions of other classes and there may be substantial influence or effect upon the methods, procedures or courses of action selected and approved by others not subordinate to the incumbent in a recognized line of authority or put into effect by other than the incumbent or his subordinates.

DETERMINATION OF DEGREE: Each sub-factor is expressed in terms of the importance of recommendation and responsibility for the origination or execution, or both, and the jurisdiction and type of guide line. Select the sub-factor and degree most applicable to the class being evaluated.

DEGREE

SUB-FACTORS	1 10 Points	2 25 Points	3 50 Points	4 85 Points	5 130 Points	6 185 Points
Responsibility for execution of policies, methods and procedures	Performs operations in which responsibility is limited to following or carrying out existing methods and procedures related to duties of own position, requiring either formal education, prior experience or short on-the-job training period.	Responsibility for carrying out, interpreting and enforcing existing methods and procedures related to duties of (a) sub-professional, sub-technical, craft or clerical staff positions; (b) small group of non-professional positions; (c) an individual professional position.	Responsibility for carrying out, interpreting and enforcing existing policies, methods and procedures related or applicable to (a) staff position or small operating unit of non-professional positions; (b) an individual professional, technical or managerial position	Responsibility for same functions as Degree 3 (execution variable) but as applied to a large operating unit of non-professional positions or, a small unit of professional, technical or managerial positions		
Responsibility for origination of policies, methods and procedures	Methods developed by others	Methods developed by others, responsibility for improvement of routine operations	Responsibility for assisting in originating and developing intra-unit procedures related or applicable to (a) small operating unit of non-professional positions; (b) an individual professional, technical or managerial position; (c) employees on complex jobs	Responsibility for assisting in originating intra-unit policies, methods and procedures related to (a) a highly specialized professional, technical or managerial position; (b) small unit of professional, technical and management positions (c) large unit of non-professional positions	Major responsibility for assisting in the formulation of administrative policy within a medium sized agency or institution	Major responsibility for assisting in the formulation of policies, methods and procedures in an applicable specialized unit throughout the state or for a large agency or institution.
Responsibility for origination and execution combined			Major responsibility for developing, coordinating and executing policy for a small agency of limited scope and complexity	Policies and methods affecting (a) small agencies or institutions; (b) major unit of a medium size agency or institution	Major responsibility for developing, coordinating and executing intra-unit policy and methods affecting either (a) specialized units within medium sized agency or institution (b) all operating, administrative and maintenance units within a medium sized agency or institution; (c) a large highly specialized unit within an agency or institution.	Major responsibility for approving, coordinating and executing policy, methods and procedures affecting large units, divisions within a large agency or institution

2.3 RESPONSIBILITY FOR PERSONAL CONTACTS: This factor evaluates the responsibility vested in the class for representing the organization in personal contacts with others outside the immediate organizational unit. Contact with co-workers, direct subordinates and direct supervisors are not included. Consider the importance which the class imposes on incumbents to represent the agency or institution in dealing with individuals, companies, agencies, departments, etc., outside the agency or institution employing the incumbent, and with employees of other departments or units within the jurisdiction of the employing agency or institution. Do not consider contacts made by a class which are considered under the factor RESPONSIBILITY FOR POLICY, METHODS AND PROCEDURES. Under PERSONAL CONTACTS you are concerned with the direct personal contacts of incumbents, the importance of the immediate or ultimate consequences to the agency or institution resulting from the manner in which the personal contact is handled. You do not consider responsibility transmittable through incumbents to others; e.g. the instructions of a supervisor to his subordinate regarding a personal contact to be made is to be measured under RESPONSIBILITY FOR SUPERVISION EXERCISED and not under this factor. Also be careful and do not duplicate credit given under other Responsibility factors under PERSONAL CONTACTS; e.g. incumbents responsibility for money, equipment, facilities, accuracy, confidential information, etc., which may come into play during or as the result of a personal contact, would be measured under the appropriate Responsibility or other factor, rather than RESPONSIBILITY FOR PERSONAL CONTACT.

DETERMINATION OF DEGREE: The degree definitions are expressed in terms of (a) with whom contacts are maintained, the frequency and (b) the purpose of contact. In addition, certain degree definitions include the responsibility for handling difficult contact problems referred by others. Select the most appropriate degree definition.

DEGREE

SUB-FACTORS	1 10 Points	2 30 Points	3 60 Points	4 100 Points	5 150 Points	6 210 Points
With whom contacts are made or maintained, frequency; responsibility, importance	Government Employees, general public. Limited official responsibility -- little contact with the public on a regular basis; irregular contact with others. Contacts are on a specific assignment or order -- usual contacts are with immediate associates.	Governmental employees, general public and outside firms and representatives, normally at lower or middle levels of organization. <u>Some responsibility</u> ; irregular or highly routine public contact; regular, frequent contact with others	Governmental employees general public and outside firms and representatives. General public contact; responsible persons in governmental or outside firms. Contacts requiring some contact in securing information or resolving difficulties. <u>General responsibility</u>	Persons of substantial high rank. Regular inter-departmental or agency contacts involving coordination of work; occasional major contacts with officers, supervisors, public contacts involving maintenance of good will, counseling or advice on agency operation. <u>Considerable responsibility</u>	Representatives of organizations and groups, governmental officials of high rank. Regular outside and inside contacts requiring a high degree of judgment and <u>diplomacy-continuous level of high responsibility</u>	Administrative officials and representative groups, <u>Regular major responsibility</u> for continuing contacts and difficult negotiations and problems
Purpose of the contact	Asks or answers specific questions of limited variety such as simple identifying information, verification or specific information, referring caller, answering specific correspondence inquiry	Furnishes or obtains readily available specific information on routine matters, as well as those outlined in Degree 1. Contacts routine and factual in nature; dealing primarily with a specific position activity	<u>Explains</u> routine matters or procedures, furnishes information relating to own position or related activity; occasionally contacts persons in higher levels for further information, clarification, etc. <u>Explains</u> services and activities of unit of agency or institution or of a small agency. Contacts requiring knowledge of official departmental information. And, giving same is part of job duties.	Explains and interprets specialized matters and obtains desired actions with overall policy of unit or department of a large agency or institution or of a small agency of technical nature or medium sized agency. Contacts primarily factual but cover a wide variety of information and/or activities	Discusses, explains and interprets policies, legal authorities, methods, procedures, rules and regulations, involve judgements, initiative and a high degree of tact in addition to a very wide range of information	Establishes and maintains public relations involving difficult presentations. Regularly represents agency and interprets its policies and practices to all types of contacts
Handling contact situations referred by others				Handles difficult situations referred by employees whose work is typical of Degree 3	Handles difficult situations referred by employees whose work is typical of Degree 4	Handles difficult situations referred by employees whose work is typical of Degree 5

2.4 RESPONSIBILITY FOR RECORDS, REPORTS, INFORMATION AND MONEY: This factor evaluates the responsibility vested in the class for the collection, organization, preservation and presentation of information, records, and reports. Consider the complexity and accuracy of the process and the importance of the records, reports and information. And, the responsibility for exercising care and judgment in financial loss through (a) handling, (b) safe-guarding money and negotiable papers or (c) making or authorizing the expenditure of public funds. Measurement is made of the importance which the class imposes on incumbent to account for his control of money, records, reports and confidential information. Money would include currency, checks, negotiable securities, credit notes. A record or report is any information arising from, relating to or affecting the business of the agency or institution which is written, printed, transcribed or drawn. Information refers to any knowledge or understanding pertaining to the agency or institution's business which is not reduced to writing insofar as the incumbent is concerned and which it is his responsibility to safe-guard whether such is told to the incumbent or which he obtains, discovers or learns in the course of his work.

DETERMINATION OF DEGREE: Each degree is expressed in terms of the type of record, report, information or responsibility connected therewith or in terms of the average amount of funds per month handled, safe-guarded or expenditure authorized. "Limited" responsibility refers to a situation where higher authority is readily available for review or check of the operation. "Full" responsibility refers to a situation where no review or check is readily available or customarily made. Select the most applicable sub-factors and degrees in terms of importance.

DEGREE

SUB-FACTOR	1 5 Points	2 20 Points	3 40 Points	4 65 Points	5 100 Points	
Type of Records	Routing records of temporary or minor value	Ordinary operational, personnel, financial or technical records	Complex, detailed and summary operational, financial, personnel or technical records	Important operational, financial, personnel or technical records for specific activities in either a large operating or maintenance unit or a small specialized unit.	Records affecting either all operational, maintenance and administrative units or specialized units within a large agency or institution	
Record keeping responsibilities	Simple posting and maintenance-limited-under immediate supervision where errors could be detected quickly	Prepares and maintains routine work, errors would be of limited consequence-work is checked on routine basis	Gathers necessary data; prepares checks and reviews or supervises the preparation and maintenance of either a small volume of complex records or a large volume of ordinary records and reports. Errors would likely be detected in succeeding operations loss would be primarily time consumed in corrections	Exercises overall supervisory responsibility. Errors would involve serious loss of time or embarrassment within the agency or its units. Most work is neither checked or verified immediately		
Type of reports	Routine, such as simple reports of time, work done and in progress, receipt of materials	Ordinary operational, personnel, financial, technical and related reports	Complex, detailed and summary operational, financial, personnel, technical or related	Reports of specialized and technical activities	Reports of highly specialized and technical activities	
Report preparation and review responsibilities	Simple preparation-standard format. No confidential information	Assembles and compiles data. Occasional contact with information which is confidential-divulgence not result in embarrassment	Searches out, assembles and finalizes data. Frequent contact with confidential information-divulgence would cause serious embarrassment to agency	Reviews to insure completeness and validity. Regular contact with agency confidential information	Review and draws conclusions upon which administrative decisions are based	

Funds handled (average receipts, disbursements, etc. per month) full responsibility	\$10 - \$100 limited - little potential of loss	\$100 - \$1,000 possible minor loss	\$1,000 - \$10,000 possible moderate loss responsibility for prevention of same	\$10,000 - \$100,000 potential major loss from errors in transcription or computation.	\$1,000,000	
Funds safeguarded (average monthly balance on hand) full responsibility	\$50 - \$500	\$500 - \$3,000	\$3,000 - \$30,000	\$30,000 - \$300,000	\$300,000 - \$3,000,000	
Expenditure authorizations (average monthly)	Limited: \$500-\$3,000 Full \$50 - \$500	Limited: \$3,000 - \$30,000 Full: \$500-\$3,000	Limited: \$30,000 - \$300,000 Full: \$3,000 - \$30,000	Limited: \$300,000 - \$3,000,000 Full: \$30,000-\$300,000	Limited: over \$3,000,000 Full: \$300,000 - over \$3,000,000	
Budgetary Control (monthly average of total budget)	Limited: \$1,000-\$10,000 Full: \$100-\$1,000	Limited: \$10,000 - \$100,000 Full: \$1,000-\$10,000	Limited: \$100,000 - \$1,000,000 Full: \$10,000-\$100,000	Limited: \$1,000,000 - \$10,000,000 Full: \$100,000-\$1,000,000	Limited: Over \$10,000,000 Full: \$1,000,000 - over \$10,000,000	

2.5 RESPONSIBILITY FOR MATERIAL ITEMS: This factor evaluates the responsibility vested in the class for the effective and efficient use of materials and supplies and the maintenance, repair and upkeep of tools, machinery, equipment and facilities. It measures the importance of the responsibility imposed upon an incumbent in the class to make decisions or to perform activities which directly or specifically have to do with the control or use of tangible things of value belonging to the agency or institution such as land, buildings, materials, supplies, equipment, machinery, tools and facilities. You would exclude responsibility for RECORDS, REPORTS, INFORMATION AND MONEY which is evaluated under that factor. RESPONSIBILITY FOR MATERIAL ITEMS is limited to control which is direct and primary by the incumbent of the class. This involves the physical operation or use of equipment, machinery or supplies by the incumbent, or the issuance or approval of specific directions or authority for the acquisition, transfer, disposition or manner of use of material items by others.

DETERMINATION OF DEGREE: Each degree is expressed in terms of the scope of the responsibility for the effective use of items and possibility of economy or in terms of the function (use, maintenance and repair) and the nature of the item involved (office machine, complex equipment). If the class being evaluated has a score typical of one degree and possibilities or some characteristic of another degree, evaluate at the average degree (small organizational unit with negligible possibilities, etc.). Or, if the class being evaluated has the functions typical of one degree (maintenance) and machinery typical of another degree (office machines), select the Sub-factor and degree setting forth the most important function. Select the most appropriate degree definition.

DEGREE

SUB-FACTORS	1 10 Points	2 30 Points	3 60 Points	4 100 Points	5 150 Points	6 210 Points
Scope for acquisition use, operation, application, testing and minor adjustments	Individual position; office machines, hand tools or hand power tools used in own position; operation of state automobile	A few units of complex machinery and equipment used in own position or directs the use of a small number of positions typical of Degree 1	Directs proper use, etc. of a few units of complex machinery and equipment or a large number of machines typical of Degree 1. Small organizational unit	General responsibility for use, etc. of a large number of complex machines, equipment or facilities. Either (a) a number of organizational units (b) one large organizational unit or (c) highly specialized and technical organizational unit	Administrative responsibility for proper use, operation, testing, inspection, construction, maintenance and major repair of all machinery, equipment and facilities in a small to medium size agency or institution or number of small organizational units in a large agency or institution	Administrative responsibility for proper use, construction, maintenance, major repairs and adjustments of all machinery, equipment and facilities of a large agency or institution.
Scope for economy, returns and costs; effective use of supplies and materials	Occasional to regular operation and care of machines and equipment where carelessness would result in only minor damage or loss of time; ordinary care required; damage of small value; supplies loss or damage would result in only minor financial loss or loss of time	Steady care required, regular opportunity for, but not frequent occurrence of damage could be fairly large. Regularly responsible for Degree 1	Degree 2 - specific operations including material purchase and planning-individual position	Responsibility for the operation and/or care of machines or equipment where carelessness or error would result in serious damage or in serious loss of time, special care required; frequent opportunity for serious damage or responsibility for supplies or damage would result in serious financial loss	Degree 4 - special care required; constant opportunity for damage or supply loss of high degree	Where utilization and/or design of such items is considerable and possible economics are extensive
Responsibility for maintenance and major repairs; safeguarding of supplies and inventories.		Maintains and repairs office equipment or other simple machines or equipment	Directs the maintenance of office machines or related equipment or maintains and repairs complex machinery, equipment or facilities	Directs the maintenance and repair of complex machinery, equipment or facilities		
Responsibility for construction		Simple assemblies	Complex machinery, equipment or facilities	Directs construction of complex machinery, equipment or facilities.		

Responsibility for design specifications, basic design and research		Assists in design and/or preparation of preliminary specifications for machinery, equipment facilities, materials and supplies	Designs and prepares specifications for machinery, equipment or facilities	Reviews and integrates designs and specifications for machinery, equipment and facilities. Plans and develops basic designs and performs related research on new units of complex machinery, equipment and facilities	Administrative responsibility for recommending, determining, integrating, directing and reviewing engineering, research, design applications and specifications for machinery, equipment and facilities	
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2.6 RESPONSIBILITY FOR THE SAFETY AND/OR WELFARE OF OTHERS: This factor evaluates the responsibility vested in, and the importance of, the incumbents in the class for protecting, safe-guarding or working carefully to prevent injury to others. Injury to the incumbents of the class would be measured under the factor of WORKING CONDITIONS and not under this factor. RESPONSIBILITY FOR THE SAFETY AND/OR WELFARE OF OTHERS is limited to control which is direct and primary by the incumbent and involves his physical presence or the issuance or approval of specific direction or authority for some specific action affecting the safety of others within the charge or contact of the incumbents. RESPONSIBILITY FOR CONTACTS, OR SUPERVISION EXERCISED OR FOR POLICY, METHOD OR PROCEDURES is not included under this factor.

DETERMINATION OF DEGREE: Each degree is expressed in terms of the actual or potential harm that could occur to others as the result of improper action by an incumbent in the class. Select the most applicable degree.

DEGREE

SUB-FACTORS	1 10 Points	2 20 Points	3 40 Points	4 70 Points	5 110 Points	
Seriousness or gravity	Generally works on or in operations where any injury to others would be slight	Handles materials or tools on operation or in work units or position where there is some possibility of causing cuts, bruises, burns, etc.	Performs work where improper action may cause or give rise to severe cuts, strains, bruises, burns, resulting in lost time of limited duration	Performs work where improper action may cause or give rise to broken bones, health hazards, or other bodily injury of moderate duration	Performs work where improper action may cause or give rise to loss of limb, vision, etc., resulting in permanent disability or death.	
Likelihood of occurrence	Ordinary, or, Degree 2 Infrequent or, Degree 3 Rare	Ordinary, or, Degree 3 Infrequent or, Degree 4 Rare	Ordinary, or, Degree 4 Infrequent or, Degree 5 Rare	Ordinary, or Degree 5 Infrequent		

PERSONAL DEMANDS OF THE CLASS

This covers the PHYSICAL DEMANDS, MENTAL DEMANDS, AND MENTAL SKILLS factors which are encountered and required on a regular basis for the normal successful performance of all the tasks, duties and responsibilities of the class of position.

3.1 PHYSICAL DEMANDS: This factor evaluates the actual expenditure of energy and abilities demanded by the class in the doing of the various activities required for either (a) physical exertion in relation to frequency, type and fatigue reasonably to be expected from lifting, climbing, hauling, walking, standing, stooping, bending, etc.; kinds of work, light medium, heavy, very heavy, or (b) physical coordination and dexterity considering such aspects as finger dexterity (speed of finger movements or the handling of objects with the fingers), rate of manipulation (speed of hand and arm movements), eye-hand coordination (control movement of hand accurately by what the eye sees); eye-hand-foot coordination (to control simultaneously movement of hands and feet by what the eye sees), bi-manual coordination (coordination of independent movements of both hands), visual acuity, color perception, speed perception, pitch perception, auditory acuity, etc.

But -- remember in such consideration to evaluate only where it is a regular part of the class duties and not incidental -- mental fatigue is not to be considered. Consideration should also be given to the method of handling and the periods of rest or unoccupied time.

DETERMINATION OF DEGREE: Each degree definition is expressed in terms of both the physical exertion element (weight, activity, frequency, duration) and the physical coordination and dexterity elements (manual skills, accuracy). Select the Sub-factors and degree in terms of the importance to the class.

DEGREES

SUB-FACTOR	1 15 Points	2 40 Points	3 75 Points	4 120 Points		
Physical exertion required duration of activity, weight or strain (Weights shown are for example only)	Some activity; infrequent exertion. Normally lifts materials not exceeding 25 pounds requires little physical effort and of a nature that only slight physical fatigue results from the days work.	Intermittent or ordinary to moderate exertion or activity, such as frequent standing and walking while performing work or involving some weights for sustained periods. Frequently lifts materials not exceeding 50 pounds. More or less continuous or repetitive work but seldom requiring heavy lifting or physical exertion on a continuing basis	Average to steady, sustained exertion or activity in various body positions (occasionally awkward positions) while performing work involving light or average weights. Frequently lifts materials not exceeding 100 pounds. Work that requires considerable physical effort, but usually intermittency. Days work may consist of a wide variety of activity from light physical effort to exhaustive demands.	Constantly sustained exertion or unusually rapid and continuing physical effort and intermittent severe strain. Continuing exertion while working with heavy materials resulting in a high degree of physical fatigue at the end of the day		
Physical coordination and dexterity required	Normal dexterity.	Some skill, adeptness and speed in finger-hand-arm coordination, such as repetitive operation of office devices or repetitive operations on mechanical devices, or using tools or equipment involving moderate limits of accuracy; requiring no fine body movements or unusual coordination. General body coordination sufficient to carry out duties.	Considerable skill, adeptness and speed in finger-hand-arm coordination involving above average accuracy or on complex mechanical devices or in using tools, or equipment to close but no unusual limits of accuracy. Handling of number of small or delicate items or rapid skillful manipulation of work materials or equipment make it necessary that incumbent be possessed of above average specific dexterity	High degree of skill, adeptness and speed in finger-hand-arm coordination involving high degree of accuracy and some physical strain and/or on complex mechanical devices or using tools or equipment to very close and unusual narrow limits of accuracy. Jobs which require very frequent or continuous manipulation of materials in repetitive or very close operation where an unusually high degree of manual skill is absolutely necessary to successful performance of the job.		

3.2 **MENTAL DEMANDS:** This factor evaluates the amount of mental attention and concentration required in the class. Consider the concentration and alertness, both mental and visual required by the class on a continuing basis, not intermittent. Also consider the frequency of occurrence of problems and degree of alertness and concentration necessary for solution or processing; variety of work handled, amount, complexity of planning or inspecting and the coordination of visual with manual dexterity. Distinguish this factor (mental demands) which evaluates the amount of mental attention and concentration required for the class from MENTAL ABILITY which evaluates the application of mental ability, such as judgment, originality, quantitative reasoning, organizational ability, etc., and, PHYSICAL DEMANDS which evaluates the physical expenditure of physical energy per se. Mental fatigue would be considered under MENTAL DEMANDS.

DETERMINATION OF DEGREE: Each degree is expressed in terms of two elements of mental stress - attention (which deals with the element of mental alertness) and concentration (which deals with the element of focusing attention). Select the most applicable Sub-factor and degree in terms of importance to the class.

DEGREE

SUB-FACTORS	1 5 Points	2 15 Points	3 30 Points	4 60 Points	5 100 Points	
Attention	<p>Little Mental; intermittent visual attention. Variety of simple tasks to perform. Requires no specialized training or education. Performance standards may be attained in very short period of time.</p> <p>BASE POINTS</p>	<p>Normal: Ordinary mental or visual attention. Some distractions and interruptions. Performance standards may be attained in a few weeks on job.</p>	<p>Frequent mental or close visual attention. Has to be at work place for considerable periods of time with little or no opportunity to vary the tasks performed or checking to exact standards. Usually requires specialized training, experience and a month or more on job to attain production standards. Occasional periods of sustained effort. Occasional interruptions or distractions.</p>	<p>Continuous mental visual attention and accuracy of work - confining tasks, work under some pressure; involving interruptions; maintain efficiency for long periods under distracting conditions. Requires specialized training and experience; Several months to attain performance standards.</p>	<p>Concentrated, constant mental and visual attention. Work under high pressure; specialized training and experience; extended periods to attain performance standards.</p>	
Concentration	<p>Work of the simple sort requiring no close or sustained attention. Highly routine tasks, easily learned, are a major part of the job. Few interruptions; pressures, if present, not constant or usual.</p> <p>BASE POINTS</p>	<p>Work where irregularities or difficulties are fairly infrequent or minor in detail. Short periods of light concentration. Variety of repetitive tasks to perform; some opportunities to alter work routine.</p>	<p>Work involves some likelihood of irregularity or difficulty. Repetitive and varied tasks to perform; various methods and policies to apply; continuous general attention.</p>	<p>Operation requires constant alertness. Occasional periods of intense concentration. Difficult and highly varied tasks; irregularity is usual.</p>	<p>Work involves planning and laying out of all phases of complex work. Prolonged periods of intense concentration. Highly varied and technical tasks; irregularity to a high degree.</p>	

3.3 **MENTAL SKILLS:** This factor evaluates the requirements of a class for the use of the mental processes in applying knowledge and reasoning power to work problems; this application of knowledge and reason manifests itself in problem definition, solution and decision making. It covers the application of education and experience in performing the tasks and duties of the class and the successful assumption of the necessary responsibilities in relation to the difficulty and complexity of satisfactory completion. Consider general intelligence (mental brightness), quantitative reasoning (ability to solve complex number problems); difficulties and complexities involved in making decisions; and other specific problems connected with the work such as frequency, degree of analysis required and complexity of data to be considered, and utilization of all knowledge and information possessed or obtainable; number and word ability (to make mathematical computations accurately and quickly; remember word or number details, recognizing quickly small differences in word, name or number details); artistic ability; organizational ability (ability to plan and organize on limited or broad basis); initiative (ability to assume responsibilities without or with specific instructions or direction).

DETERMINATION OF DEGREE: The degrees are expressed in terms of three Sub-factors: (a) type of knowledge applied (this differs from Education and Experience factors which express the knowledge, skills and mental development required, but not the complexity of applying it to work problems), (b) judgment and analysis (which deals with the weighing of information and consequent decision making), and (c) creative mental skills (which deals with innovation and ingenuity). Select the degree most applicable.

DEGREE

SUB-FACTORS	1 10 Points	2 30 Points	3 65 Points	4 115 Points	5 180 Points	6 260 Points
Type of knowledge applied	Applies simple repetitive clerical, manual, semi-skilled or sub-technical skills to work involving the use of a few definite procedures or methods. Short assigned tasks in accord with detailed instructions.	Applies intermediate clerical beginning trades or crafts, technical or sub-professional skills to a variety of work prescribed by standard practices and methods, but which may involve the use of several procedures.	Applies: (a) Advanced knowledge of clerical field, journeyman knowledge of trades or crafts technical or sub-professional field; (b) basic professional field; (c) general knowledge of the functions of a major unit of an agency having a wide range of clerical, manual, or sub-technical or sub-professional field (d) general knowledge of a minor unit of an agency having craft, technical, beginning professional, sub-professional: Employee is presumed to know the work details and performance standards of his job and to perform assigned tasks with general instructions.	Applies: (a) intensive knowledge of the function of a major unit of an agency or institution the use of scientific or technical methods standard to the profession in the solution of problems which are not routine or which have not been previously considered Employee helps set up work procedures and performance standards.	Applies highly professional or technical knowledge and skill in the use of a wide range of scientific or managerial or administrative methods to solve difficult, varied and complex problems.	Applies the highest degree of professional, technical or administrative knowledge in the analysis, coordination, interpretation and management of professional, technical, administrative or scientific work

Judgment and analysis	Applies little independent judgment; work involves little or no choice of action. All work is usually done under direct observation and on specific instructions from immediate supervisor; work and progress are checked frequently by immediate supervisor. All questions are referred to supervisor.	Applies some independent judgment with obvious choices of action. Most work done under general supervision; routine duties performed without close supervision; proceeds alone on routine tasks; refers all out of the ordinary phases of the work to the immediate supervisor for advice and direction. Little responsibility for planning of methods or layout of work. May be required to use tools or equipment involving the use of some judgment.	Applies independent judgment and analyzes facts, problems and data to determine what action within limits of standard practice and methods should be taken. Work done under general supervision with occasional checks, but in which frequent instructions are given as to what to do and how to do. Work from standard methods but may be required to plan and perform a sequence of operations. May use tools or equipment requiring the exercise of a reasonable amount of judgment. Decisions in keeping with past practices, may make decision on situations not specifically covered affecting primarily his own work, where not practical to refer each problem to supervisor.	Exercises independent judgment and analyzes facts in resolving non-routine problems and those not previously considered requiring application of knowledge indicated in (a) or (b) above or exercises professional judgment in resolving types of problems. Work done under direction with periodic instruction as to what is to be done and how to do it. Requires a high degree of judgment and independent thinking. May use complicated tools or equipment requiring the exercise of considerable judgment.	Exercises discriminating judgment in the analysis and solution of major or complex administrative, scientific or professional problems, makes important decisions in a highly specialized area as a consequence of the application of the type of knowledge indicated above. Work done under general direction independently with only occasional directions as to what is to be done and how to do it. Makes difficult decisions which affect the work of others; much leeway for interpretation of general policies.	Exercises independent analysis and judgment on unusual professional and/or administrative problems requiring difficult choices of action covering a broad area and based on facts, data, conditions and situations which are not obvious or easily resolved. Work done under administrative or limited general direction with no supervision of work except in regard to general methods.
Creative Mental Skills	Little mental effort.	May occasionally be permitted to decide slight variations in work procedure, in method of performing the task or may be permitted the opportunity to exercise some initiative in the interpretation of oral or written instructions.	Decides permitted variations in method of performance. Initiative in the interpretation and augmenting oral or written instructions. Own judgment is usually guide, if not practical to refer to supervisor.	Requires resourcefulness in adapting previous practices, methods and procedures or professional knowledge to meet new or non-routine problems. May be required to devise new methods, plan and layout complex work.	Requires a very high degree of initiative and ingenuity; creative ability in developing and carrying out new solutions to new and complex problems.	Requires exceptional creative ability in developing and adapting unusual and basic methods to the solution of problems with no obvious methods or procedures.

WORKING CONDITIONS OF THE CLASS

This covers the hazards and the surrounding working conditions involved in the concept and the actual performance of the tasks, duties, and responsibilities of the class of position. Working conditions which are temporary, infrequent or cyclic in nature, and not a regular working condition of the class, are not to be considered. Nor would the factors of mental demands or physical effort be considered under the factor of working conditions. Although such actions as climbing, bending, lifting, hauling, etc., might result in injury, they are considered under those particular factors. Make the distinction, under the factor of WORKING CONDITIONS, for the evaluation of unavoidable health and accident hazards and the disagreeable surroundings inherent in the class.

Hazards refer to the actual, the real or the potential accident and health dangers connected with, or inherent in, the class because of the nature of the work, its location or for the potential exposure which might reasonably be expected. Consider the materials handled, the machines or tools used, persons dealt with, current or existing possibility of injury as to extent and degree of disability and likelihood of such injury.

Surroundings means those features inherent in the place or conditions which might be disagreeable and which are commonly found in the performance of the duties of the class in almost all instances. These would include fumes, gases, odors, poor ventilation, lighting conditions, dirt, atmosphere, excessive traveling (how often and how long), subject to call for emergency work, holiday and week-end work, irregular working hours or schedules, hours in excess of normal or other conditions where there is no provision for extra compensation and could be expected to give rise to unfavorable attitudes towards the work of the class in the minds of the incumbents within the class.

4.1 WORKING CONDITIONS

DETERMINATION OF DEGREES: Each degree is expressed in terms of (a) hazards (likelihood of accidents or illness despite provisions for health and safety measures -- degree and extent of injury or disability) and (b) surroundings (disagreeable environmental or working conditions and frequency of exposure). Select the applicable Sub-factors and degree in terms of importance.

DEGREE

SUB-FACTOR	1 5 Points	2 10 Points	3 25 Points	4 50 Points	5 85 Points	
Hazards	Accident or Health hazards, absent or negligible Base Points General Clerical	Accidents improbable, outside of minor injuries such as abrasions, cuts, bruises, or burns -- Health Hazards Negligible Hazard low & unusual (Kitchen)	Occasional or moderate exposure to injury which can cause loss of time, such as crushed fingers, severe cuts, bruises or sprains-some exposure to occupational diseases-not incapacitating in nature-accident hazard moderate (Butcher).	Frequent exposure to incapacitating accidents or health hazards, broken bones, loss of limbs, impairment of vision, frequent exposure to a hazard where failure to exercise extreme care and judgment might cause accident.	Continuous intensive exposure to accident or occupational disease which would result in incapacitating injuries for long periods of time, total disability or death. Constant exposure to a hazard where failure to exercise extreme care and judgment would cause serious accident.	
Surrounding working conditions	Pleasant surroundings with no continued objectionable features. Base Points General Clerical	Fair conditions or infrequent exposure to disagreeable elements. Minor or occasional exposure to dirt, fumes, smells, poor lighting-ventilation, noise, temperature changes, call to emergency work, excessive travel, irregular work schedules, etc. (Kitchen-Institutional-Correctional)	Occasional or moderate exposure to disagreeable elements identified in Degree 2.	Frequent exposure to one particularly disagreeable element or continuous exposure to several of the elements identified in Degree 2.	Continuous and intensive exposure to several extremely disagreeable elements.	

JOB ANALYSIS WORK SHEET

NATURE AND SCOPE:

1. Job Summary or Description:

2. Work Performed:

3. Periodical Duties:

4. Occasional Duties:

(Class Title)	(Code No.)	Working Title	Employee's Name (if single review)
(Agency)	Department	Section	Work Unit
			No. of Employees in Class

MENTAL AND SKILL:

1. Education:

(a) Minimum formal or informal: _____

(b) Specialized education essential to successful performance: _____

2. Experience and Training:

(a) Kind of previous experience necessary:

(b) How to acquire:

Minimum time required: _____
(c) Kind of essential training necessary:

Minimum time required: _____

(d) List type of equipment used; % of time Learning time _____ % of time

3. Dexterity:

Repetitive 1 2 3

(a) Work Activity:

Varied 4 5

Remarks:

3.1 Facility and Speed:

____ Facility ____

(b) Mental: Manual:

____ Speed ____

Remarks:

4. Accuracy: (Care-Throughness)

Required Care: _____ Ordinary
 _____ Considerable
 _____ Extreme

Remarks:

5. Mental Effort:

Attention: _____ Ordinary R I O
 _____ Close R I O
 _____ Extreme R I O

Remarks:

6. Personal Qualities:

Tact _____ Patience _____ Attitude _____ Emergencies _____ Appearance _____ Expression _____
Other _____

Remarks:

7. Sensatory Training:

Sight _____ Taste _____ Touch _____ Hearing _____ Smell _____ Balance _____
Other _____

Remarks:

RESPONSIBILITY:

1. Things and Acts: (Other than Supervisory)

		Error in Meeting Obligation			
		Possibility	Consequence		
	Close Check	Auto-matic Check	No Check	Partial Loss	Complete Loss
(a) For Materials and Supplies:	_____	_____	_____	_____	_____
(b) For Equipment and Tools:	_____	_____	_____	_____	_____
(c) For Money; Securities:	_____	_____	_____	_____	_____
(d) For Methods and/or Procedures:	_____	_____	_____	_____	_____
(e) For Records; Files, Accounts:	_____	_____	_____	_____	_____
(f) For Outside Contacts:	_____	_____	_____	_____	_____
(g) For Professional or Technical Services:	_____	_____	_____	_____	_____

Comments:

SUPERVISION:

1. Responsibility for People:

(a) Supervision Given:

Direct None
 General Little
 Functional Much

Remarks:

No. Supervised _____

Title & C.N. _____

(b) Supervision Received:

Limited General Close Remarks:
 From:

Decisions Permitted:

(c) Supervision-Management:

	General	Inter-mediate	Direct
For Planning	_____	_____	_____
For Organizing	_____	_____	_____
For Directing	_____	_____	_____
For Checking Results	_____	_____	_____
Comments:			

WORKING CONDITIONS:

1. Physical Effort:

(a) Type of Physical Activity:

_____ % Sitting _____ % Walking _____ % Lifting _____ % Stooping _____ % Traveling
 % Standing _____ % Climbing _____ % Bending Other _____ % _____

(b) Kind of Work:

_____ Light _____ Medium Heavy _____ Heavy _____ Very Heavy _____

Resulting in fatigue to:

_____ Body _____ Legs _____ Arms _____ Fingers _____ Feet _____ Other _____

Comments:

2. Hazards: (Likelihood of Exposure)

_____ Negligible R I O Kind:
 _____ Moderate R I O
 _____ Considerable R I O

Comments:

3. Surroundings:

(a) Work Conditions:

_____ Humid _____ Noisy _____ Dirty _____ Wet _____ Pleasant _____ Congested _____

Malodorous _____ Other _____

Comments:

(b) Workplace:

_____ In _____ Out _____ Desk _____ Machine _____ Out, under all conditions _____

Other _____

Comments:

4. Work Schedule:

Hours: _____ per day
 _____ per week

Subject To:

_____ Emergency Calls _____ Relief Shift _____ Split Shift _____ Night Shift _____ Shift

Extra Hours

Comments:

Based on this analysis how would you rank the following factors of this class or position?

Job Requirements:

Mental Skill

Responsibility

Supervision

Working Conditions

GENERAL NOTES—FACTS AND OPINIONS: LINES OF PROMOTION, ETC.: MOST DIFFICULT OR IMPORTANT PARTS OF JOB, ETC.

Survey Made by _____ Date _____
 Information Obtained From: _____