

cisions, then assembled the final test, and thus completed a five-month test construction effort.

f. After the test had been administered, but *before* final ratings were given, the standard statistical procedure of item analysis was conducted. In this procedure, the responses of all competitors to every question were examined to see whether any question might have been ambiguous to the candidates or otherwise subject to possible modification of the answer key. The CSC staff referred to the Advisory Board all questions with questionable statistics and the Advisory Board made changes in the answer key for 3 questions out of the total 140 questions in the test.

g. Again, *before* final rating, every competitor was advised by the Police Department of his opportunity to review a test copy and an answer key and to file an appeal with the CSC on any question. Thirty-one competitors filed appeals on 1 or more questions. These appeals were reviewed by the MPD Advisory Board and 4 were granted. The changes in the answer key reflecting these decisions were carried into the final ratings for all competitors.

The procedure for preparing the 1965 and the 1967 tests was generally the same.

18. It is my opinion that the questions may involve verbal ability, and especially reading ability, because these are critical factors in mastering the job knowledge being tested.

It is my further opinion that the MPD has over the years assigned to this important task senior officers who know police work, who know practical situations, and who know what is acceptable behavior in the Police Department. It seems quite clear that a test constructed so carefully and based on thorough job studies is adequately justified on the basis of content validity. Fur-

thermore, since the basis for the promotion test is fully and minutely described in the Department's Special Order, all candidates for promotion, regardless of race or other factors, are properly expected to master the material required for satisfactory performance as a sergeant.

/s/ Albert P. Maslow

Subscribed and sworn to before me this 19th day of January 1971, at the City of Washington, District of Columbia

/s/ Violet Z. Dee

My Commission expires Feb. 29, 1972

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Title omitted in printing]

[Filed July 18, 1972]

AFFIDAVIT

Dr. David M. Nolan, first being duly sworn, deposes and says:

1. I am the Director of the Washington, D.C. Office of Educational Testing Service (ETS). ETS is a not for profit educational institution with main offices in Princeton, New Jersey. It is most noted for the conduct of major testing programs such as the Law School Admission Tests, the College Entrance Examination Board Examinations, the Graduate Record Examinations, the Admissions Test for Graduate Study in Business and many others. Prior to my present position I served as Assistant to the Executive Vice President of ETS, the Director of College Board Guidance Services and taught in the Department of Educational Psychology at Michigan State University.

2. I am a member of the American Psychological Association and am a former director of the National Council on Measurement in Education. I have recently been involved in the conduct of a major study of test performance and job performance in several federal agencies. The study is supported by the Ford Foundation.

3. I have reviewed forms of Test No. 21 of the United States Civil Service Commission, an Affidavit written by Dr. Albert P. Maslow on the subject, a copy of a 1967 study entitled Relation of D.C. Police Entrance Test Scores to Recruit School Performance and Job Performance of White and Negro Policemen by David L.

Futransky, copies of Examination For Promotion in the Metropolitan Police Department of the District of Columbia series 30, 31 and 32.

4. Test No. 21 is a straightforward test of verbal ability. It consists of vocabulary, reading comprehension, interpretation of reading passages and general information items. It should be useful as are other similar tests in predicting achievement in an academic endeavor. Dr. Maslow's affidavit and the Futransky study show this to be the case. Correlations with Recruit School Achievement as reported by Maslow of .39 and .46 respectively for Blacks and Whites are quite acceptable as indications that the test is valid for its intended purpose. This is particularly true in the given situation of restricted ranges in both the predictor variable and the criterion variable. In other words, the correlation would be higher if the recruit school grades weren't all 70% or higher and if the entering training group hadn't been restricted on the basis of academic achievement and academic skills. It should be noted of course that without such a restriction the number of failures in training would increase. The reliability coefficient of approximately .77 is sufficiently high to establish the test as reliable.

5. Maslow reports that he conducted a test of significance of the difference in the correlation between Blacks and Whites and that the difference was not found to be significant. In other words, there is nothing in the data to show that the test is any less valid a predictor for Blacks than it is for Whites.

6. Thus, using a conclusion (which I support) of Kirkpatrick et al. in the 1968 study *Testing and Fair Employment* supported by the Ford Foundation: "Thus, regardless of the validity of a test, unfair discrimination will occur only if the predicted criterion scores of one

ethnic group are lower than their actual criterion scores." It is my opinion that Test No. 21 does not discriminate against applicants because they are Black or White. Further support of this opinion is found in the data showing the increasing numbers and percentages of Blacks in the Police Department while the test requirement has remained the same. The substantial increases seem to show that the test requirement is not unfairly restrictive for Blacks wishing to enter the Police Force. In fact, its use may actually provide a greater opportunity for Blacks than purely subjective criteria for entrance as has been the case for entrance to higher education institutions employing similar objective entrance examinations.

7. To use as an entrance requirement to police training a device that predicts how well candidates will perform in that training is a perfectly reasonable and justifiable procedure with many precedents. Practically all professional training (Law, Medicine, Architecture, Psychology, Business, Science, etc.) follow just such a procedure. Many scholarships (Merit Scholarships) and Fellowships (National Science Foundation) are granted using as part of the criteria a test that predicts performance in training. The armed forces have long used tests validated by training performance to select and place men in many of the training programs and military occupations. As long as the tests are not discriminatory and the evidence is that Test No. 21 is not, their use to predict performance in training is a useful and valuable technique in the selection of trainees.

8. The promotional examinations, Series 30, 31 and 32 are based on laws governing Police procedures, internal Police Department Regulations, and common practice of Police Officers. The questions are taken from available materials all of which are announced to interested candidates in *Special Order No. 7-A*, series 1969.

These materials are the laws, regulations, rules and written procedures that govern the activities of police officers. In addition some questions are included that cover "typical police problems and emergencies on which instructional books cannot be provided." The question in the tests are written and reviewed by senior police officers of the Metropolitan Police Department. These officers use their judgement based on experience to decide what the emphasis will be in the test, what questions will be included and what the correct answers are. This procedure provides content validity to the test and is in accord with the *Standards For Educational and Psychological Tests and Manuals* published by the American Psychological Association. It is my opinion that this procedure is a completely justifiable one for assuring that the candidates for promotion understand the rules and regulations of their work and that the promotion test does not discriminate against candidates for promotion because they are either Blacks or Whites. The reliability coefficients ranging from .76 to .90 are sufficiently high as to present no problems regarding consistency of measurement. There can be no argument that these rules and regulations are not part of the job and thus are irrelevant to the decision to promote. On the contrary the tests involved have such a high face and content validity that not to test candidates for promotion on them or something very like them would be cause for concern.

/s/ David M. Nolan

Subscribed and sworn to before me this 1st day of February, 1971, at the City of Washington, District of Columbia

/s/ Jerry F. Fryer

My Commission expires April 23, 1972

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Title omitted in printing]

[Filed July 18, 1972]

AFFIDAVIT

Dr. William A. Owens first being duly sworn, deposes and says:

1. I am the Director of the Institute for Behavioral Research, University of Georgia, Athens, Georgia. In this capacity I am concerned with the planning and conduct of socially relevant, interdisciplinary research, much of which involves testing. The views herein expressed are my own and do not necessarily coincide with those of The Institute or the University of Georgia.

2. I am the author of three published tests, and for nearly 30 years have both taught and done research in areas of psychology relevant to measurement. I have served as a consultant on matters pertaining to testing for such firms as Xerox, Picklands Mather, Standard Oil of Indiana, Standard Oil (New Jersey), Abbott Laboratories, Clark Equipment, Dow Chemical, et al. I have served on the Council of Representatives of the American Psychological Association, am the immediate Past-President of the Division on Industrial and Organizational Psychology, and am listed in the usual national and international directories of scientists.

3. I have examined *Test 21* of the United States Civil Service Commission, Series No. 15 (b), June 1962, Series No. 173, February 1970, and Series No. 121, February 1970. I have reviewed *Examination for Promotion in the Metropolitan Police Department of the District of Columbia: Uniform Sergeant*, Series 30, October 1965,

and for Sergeant and Detective Sergeant, Series 31, October 1967, and Series 32, June 1969. I have also reviewed *Relation of D. C. Police Entrance Test Scores to Recruit School Performance of White and Negro Policemen* by David L. Futransky, November 1967, and the affidavit of Dr. Albert P. Maslow.

4. In my opinion, if it is regarded as a measure of *trainability*, Test 21 does not discriminate against candidates for employment because they are Negro or white. Similarly, the Examination(s) for Promotion appear to involve job content and to have clear job relevance; they are, thus, not likely to discriminate against candidates for promotion because they are Negro or white. My opinions, in both instances, are based upon the documents listed. Further or more conclusive evidence might alter my views.

5. In an outstanding monograph on "The Validity of Occupational Aptitude Tests," Dr. E. E. Ghisilli has indicated that criteria of test validity are of two sorts: (1) those which indicate "trainability" *for* the job, and (2) those which indicate ultimate proficiency *on* it. There is no reason to believe that a test designed to predict the former will also, or necessarily, predict the latter. For both Negro and white applicants, Test 21 bears a clear and apparent relationship to Recruit School Average. Dr. Maslow's affidavit (p. 3) indicates that it is, within error limits, as good a predictor of this average for blacks as for whites. In addition, the test scores and the academic grades of blacks are below those of whites by equivalent amounts. These are the chief requirements for establishing an absence of bias.

6. The Futransky paper could not answer the question of how people who scored below 40 would perform in the Recruit School. Although a statistical problem of "restriction in range" exists, if the lowest scorers on Test

21 *were* present to obtain a Recruit School average, it is my opinion that they would tend to score at the bottom of the distribution and to obtain, hypothetically, failing grades.

7. As a measure of ultimate job performance or proficiency, Test 21 appears to predict positively for whites, but near zero for blacks. The meaning of such a result should, however, be evaluated with caution since the criterion is the average rating of one judge on 9 traits, is of unknown reliability and is probably based upon little direct observation of typical job behavior. In short, the criterion of Recruit School Average is very likely substantially superior, as a criterion, to the criterion of job performance.

8. Both Dr. Ghiselli's work and commonly accepted practice argue that the test-wise prediction of trainability is a highly acceptable measurement objective. An ultimate criterion is often unknown, unobtainable, or so deficient in job relevance as to lack real utility. For example, professional aptitude tests for law, medicine, et al., are validated against success in training. Indeed, enlightened opinion would argue that, *within* a given profession, the highest scorers should not necessarily be expected to make the most money, obtain the greatest satisfactions, or become the most visible.

9. All-in-all, on the one hand, Test 21 does seem to be a fair and unbiased predictor of "trainability" as evidenced by its relationship to Recruit School Average. Insofar as "trainability" is concerned, it is my opinion that the documents presented do indicate the "criterion validity" of Test 21, in the usual sense and as enunciated by the American Psychological Association in their "Standards for Educational and Psychological Tests and Manuals." On the other hand, this study also seems to indicate that there is no correlation between Test 21 and

rated job performance for the Negro officer. This, of course, is not a concern if Test 21 is not used as a predictor of job performance or proficiency.

10. Since the Futransky paper did not cover the examinations for promotion to Uniform Sergeant, Sergeant or Detective Sergeant, my impressions are based solely upon an examination of the test content, and the affidavit of Dr. Maslow. According to customary professional standards a test may be said to have "content validity" if the tasks required constitute a reasonably representative sampling of job content. Dr. Maslow's affidavit (pp. 8, 9, 10 and 11) clearly indicates that the promotions examinations were constructed by a procedure which strongly argues that they *do* possess such content validity. It is my definite impression that the job done in this instance would conform fully with standards enunciated by the American Psychological Association in their "Standards for Educational and Psychological Tests and Manuals." It is, of course, true that knowledge of the sort measured is a necessary but not a sufficient condition for satisfactory performance. One cannot do what he does not know enough to do; on the other hand, he may sometimes know and not do. The danger that use of the promotions examinations might result in an over-stress on sheer knowledge is rather well offset in the present instance by the fact that ratings of fitness and experience are used in conjunction with test scores.

/s/ William A. Owens
WILLIAM A. OWENS

Signed and sworn to before me, this 18 day of Jan. 1971.

/s/ Joan Bond
Notary Public, Madison County, Georgia

My Commission Expires Sept. 27, 1971

Series No. 15(b)
June 1962

Test No. 21

Write your
Identification
Number here

UNITED STATES
CIVIL SERVICE COMMISSION

The time allowance will be announced by the examiner.

Write your identification number in the appropriate space at the top of this page and on the answer sheet. Fill in the other identifying blanks on the answer sheet. Place no other identifying marks on your answer sheet or on the test booklet.

The questions in this test need not be taken up in order. Answer first those that you can answer without any delay. Then use the remainder of the time on the questions you have passed over.

For each question, select the BEST ANSWER, and blacken the space on the answer sheet that bears the same letter as the answer.

1. INCOMPLETE means most nearly
 - A) intact
 - B) significant
 - C) unfinished
 - D) altered
 - E) trivial

2. APPLE is related to SEED as PEACH is related to
 - A) plum
 - B) core
 - C) pit
 - D) tree
 - E) skin

3. In all States, an automobile driver is required to pass both a driving test and a written test before he is issued a driver's license. Of the following, the *chief* purpose of this requirement is to
 - A) reduce the number of licenses being issued
 - B) teach people who apply for drivers' licenses to drive more carefully
 - C) encourage careful buying of new and used cars
 - D) permit drivers to travel from one State to another
 - E) make sure that licenses are issued only to qualified drivers
4. The saying "All is not gold that glitters" means most nearly
 - A) Capable people are often modest.
 - B) The best things are often cheapest.
 - C) That which is easily obtained is not appreciated.
 - D) Many men are deceitful.
 - E) Appearances can be deceiving.
5. To EXTEND means most nearly to
 - A) involve
 - B) bind
 - C) stretch
 - D) include
 - E) ignore
6. (*Reading*) "The ability of men on sailing ships to forecast weather changes from local observation was well known. This was not because the signs were so much more pronounced over the ocean than over the land, but was primarily because these mariners had no other source of information and had to learn to interpret the significance of available signs."
The quotation best supports the statement that
 - A) local weather observations are more reliable than other sources
 - B) interpreting the significance of weather changes is easy for men at sea

- C) weather signs are more accurately interpreted on land than on the ocean
 - D) old-time sailors forecast weather from their own observations
 - E) weather signs over the ocean were formerly more pronounced than they are now
7. PAINTER is related to PICTURE as COMPOSER is related to
- A) musician
 - B) orchestra
 - C) piano
 - D) radio
 - E) symphony
8. The *chief* reason that many file cabinets are made of metal rather than of wood is that metal cabinets
- A) can be locked
 - B) are more attractive
 - C) do not catch fire
 - D) weigh less
 - E) make filing easier
9. To say that the shipment was REJECTED means most nearly that it was
- A) damaged
 - B) returned
 - C) acknowledged
 - D) unclaimed
 - E) refused
10. Which of the following is the *chief* reason for using refrigerated cars when shipping fresh fruit? By the use of such cars
- A) more fruit can be shipped in less space and at less cost
 - B) fruit can be kept in good condition for a long time
 - C) fruit can be shipped in locked compartments

- D) fruit can be kept separate from other shipments
E) the flavor of the fruit can be improved
11. PRINTER is related to PRINTING PRESS as
WEAVER is related to
- A) loom
 - B) basket
 - C) fabric
 - D) carpet
 - E) pattern
12. The saying "Strike while the iron is hot" means most nearly
- A) Take time to do a job well.
 - B) Be determined to succeed.
 - C) Act boldly and the job is half done.
 - D) Do not wait for another to act.
 - E) Act quickly when conditions are right.
13. White clothing is recommended for tropical countries *chiefly* because
- A) it is a good reflector of the sun's rays
 - B) it is easy to keep clean
 - C) white is very restful to the eyes
 - D) it is made from cotton which is grown in warm climates
 - E) colored clothing fades quickly in the tropics
14. APPARENT means most nearly
- A) impressive
 - B) similar
 - C) observant
 - D) evident
 - E) unforeseen
15. (*Reading*) "The happiest people are those who touch life at the greatest number of points. People who suffer are those who have only one interest, of which fate robs them."

The quotation best supports the statement that

- A) people should not lose interest in what they are doing
 - B) the greatest misfortunes come to those who have the fewest interests
 - C) people with many interests get the most enjoyment out of life
 - D) the possession of conflicting interests may cause suffering
 - E) people should learn many trades or professions
16. SAW is related to WOOD as KNIFE is related to
- A) fork
 - B) dagger
 - C) meat
 - D) sharpener
 - E) steel
17. The saying "He that's always shooting must sometimes hit" means most nearly
- A) A small failure can be as bad as a great one.
 - B) It takes courage to keep trying.
 - C) The highest goal is the most attractive.
 - D) A person who keeps trying is bound to succeed.
 - E) Every situation can be improved.
18. To say that a principle is FUNDAMENTAL means most nearly that it is
- A) secondary
 - B) basal
 - C) practical
 - D) logical
 - E) superficial
19. (*Reading*) "Some bacteria, like people, develop a tolerance of certain drugs. Repeated small doses of the drug sulfa tend to build up toughly resistant strains of bacteria. Then when a serious infection

comes along and sulfa is really needed, it does not work.”

The quotation best supports the statement that

- A) some bacteria may actually come to require sulfa for survival
 - B) sulfa tends to build up our resistance to bacteria
 - C) the effectiveness of sulfa may be lessened by frequent use
 - D) sulfa should be used only in small doses
 - E) sulfa is of more value in mild infections than in serious infections
20. SADDLE is related to LEATHER as BOOK is related to
- A) author
 - B) printing
 - C) chapter
 - D) page
 - E) paper
21. ALLEGIANCE means most nearly
- A) wilfulness
 - B) prudence
 - C) distinction
 - D) treachery
 - E) devotion
22. The saying “Idleness is the mother of all vices” means most nearly
- A) Those who refuse to work are likely to go hungry.
 - B) A person with nothing to do is likely to get into trouble.
 - C) A person who works hard will have a good character.
 - D) Those who keep busy will prosper.
 - E) Necessity increases a person’s ability.

23. SPOON is related to SUGAR as SHOVEL is related
- A) pick
 - B) coal
 - C) water
 - D) scoop
 - E) hole
24. (*Reading*) “Most of the colonies declined to follow New York in defying the British government. They preferred to accompany their grants of supplies to British troops with qualifications designed to preserve their constitutional principles and liberty of action.”
- The quotation best supports the statement that*
- A) some of the colonies granted supplies to the British troops
 - B) New York’s defiance of the British government was supported by the other colonies
 - C) only New York felt that granting supplies would have a bearing on its liberty
 - D) New York was primarily interested in preserving its constitutional principles
 - E) the British troops compelled the colonies to grant supplies to them
25. In national forests only certain designated places may be used for camping. Of the following, the *chief* reason for this restriction is that
- A) campers scatter rubbish and spoil the scenery
 - B) unrestricted camping increases the danger of forest fires
 - C) such sites are protected from animals
 - D) safe drinking water is provided at these places
 - E) such places are located where firewood is plentiful
26. The saying “The used key is always bright” means most nearly
- A) A key to which one is accustomed seems bright.

- B) Practice maintains skill.
 - C) A person should not be changing jobs constantly.
 - D) Unused training is of little value.
 - E) An object is not bright until it has been used.
27. TRAIN is related to STATION as SHIP is related to
- A) anchor
 - B) cargo
 - C) deck
 - D) port
 - E) voyage
28. The saying "The only argument available with an east wind is to put on your coat" means most nearly
- A) We should protect ourselves against what we cannot prevent.
 - B) The ruthless can be subdued only by kindness.
 - C) What brings hardships for some means good fortune for others.
 - D) A frank discussion often clears away difficulties.
 - E) If we do not look after ourselves, no one else will.
29. TIME is related to HOUR as DISTANCE is related to
- A) travel
 - B) speedometer
 - C) mile
 - D) space
 - E) automobile
30. (*Reading*) "Farming in the United States is being reduced to such a science that the likelihood of crop failure is gradually becoming less. Haphazard methods are replaced by scientific practices that produce better results."

The quotation best supports the statement that

- A) scientific farming was first practiced in the United States
 - B) the failure of haphazard farming methods can be predicted
 - C) crop yields can be predicted at planting time
 - D) scientific agricultural practices have decreased farm losses
 - E) crop failures made scientific farming necessary in the United States
31. To HAMPER means most nearly to
- A) hinder
 - B) weaken
 - C) mutilate
 - D) decrease
 - E) neglect
32. LIGHT is related to SHADOW as HEALTH is related to
- A) wealth
 - B) illness
 - C) happiness
 - D) death
 - E) life
33. The saying "As the twig is bent, so grows the tree" means most nearly
- A) Children often resemble their parents.
 - B) Some children need more guidance than others.
 - C) Everyone needs assistance in solving his problems.
 - D) A man is the result of his childhood training.
 - E) Results follow inaction as well as action.
34. (*Reading*) "By their composition and arrangement rock veins can be shown to be either deposits from the watery solutions of minerals that are found in underground water or the results of the condensation of vapors. In the latter case the vapors rise from

lower regions and are deposited on the walls of fissures where veins are eventually formed.”

The quotation best supports the statement that rock veins

- A) conduct vapors and watery solutions of minerals
 - B) usually contain many different minerals
 - C) are formed from the deposits made by vapors or watery solutions
 - D) consist of watery solutions of minerals
 - E) are fissures formed by underground water
35. Of the following, the *chief* purpose of appointing school boys to direct traffic near schools is to
- A) encourage leadership
 - B) teach school children to cooperate with each other
 - C) improve school discipline
 - D) help protect school children
 - E) develop their sense of responsibility
36. REMOTE means most nearly
- A) shrunken
 - B) absent
 - C) distant
 - D) misleading
 - E) familiar
37. MUSIC is related to EAR as FRAGRANCE is related to
- A) flower
 - B) nose
 - C) perfume
 - D) smell
 - E) nerve
38. The saying “The wind that blows out candles kindles the fire” means most nearly
- A) That which is useful to some, may be scorned by others.

- B) Evil thoughts overshadow good deeds.
 - C) Wind and fortune are not lasting.
 - D) A thing may be both a benefit and a detriment.
 - E) Fortune comes only after misfortune.
39. (*Reading*) "The use of the airplane has changed the transportation industry. Formerly, it required days to go from one coast to the other or to cross the oceans. It is now a matter of hours. The airlines are, consequently, getting an increasing share of passengers and freight previously carried by trains and ships."
- The quotation best supports the statement that airplanes are*
- A) not so safe as the older means of travel
 - B) more comfortable than other means of transportation
 - C) being used as much as trains and ships
 - D) not so cheap as other means of travel
 - E) being used more and more frequently
40. The saying "Cut your coat according to your cloth" means most nearly
- A) Consider your limitations in making your plans.
 - B) If one method fails, try another.
 - C) Ask for advise before beginning a new task.
 - D) Stick to your purpose in the face of difficulties.
 - E) Act so as to avoid criticism.
41. To say that a course of action has been **ADVOCATED** means most nearly that it has been
- A) opposed secretly
 - B) explained fully
 - C) supported publicly
 - D) questioned cautiously
 - E) judged fairly

42. LEASE is related to HOUSE as SUBSCRIPTION is related to
- A) contract
 - B) signature
 - C) petition
 - D) newspaper
 - E) testimonial
43. (*Reading*) "The weather map serves not only for the preparation of forecasts. It is also the basis for summaries and bulletins of weather in various parts of the country. These play a vital part in the daily plans of farmers, shippers, and persons in many other business and commercial activities."
- The quotation best supports the statement that*
- A) weather summaries and bulletins, based on the weather map, are important to farmers and businessmen
 - B) weather summaries and bulletins are useful in preparing weather forecasts for farmers and businessmen
 - C) the weather map is used by businessmen and farmers in various parts of the country
 - D) the preparation of weather forecasts is vital to farmers and to most businessmen
 - E) weather summaries and bulletins are more important to farmers than to businessmen
44. The saying "Any time means no time" means most nearly
- A) Who arranges his work well finds time for everything.
 - B) There is a proper time for everything.
 - C) A task for which no time is set may be left undone.
 - D) The unexpected cannot be prepared for.
 - E) Sufficient time should be allowed if good results are desired.

45. (*Reading*) "As a nation we are doing vastly less to prevent suffering and to conserve health and vitality than we know how to do through tried and tested methods. Although in recent years an effort has been made to increase preventive health work, systematic warfare against disease on a broad front is long overdue."

The quotation best supports the statement that

- A) it is more economical to prevent illness than to cure it
 - B) preventive medicine is still in an experimental stage
 - C) it takes a long time to organize a systematic campaign against disease
 - D) this country has not fully utilized its knowledge of disease prevention
 - E) disease and impairment of health can be abolished
46. To NARRATE means most nearly to
- A) entertain
 - B) tell
 - C) create
 - D) rant
 - E) begin
47. GOLD is related to ORE as GASOLINE is related to
- A) grease
 - B) refinery
 - C) limestone
 - D) stone
 - E) petroleum
48. (*Reading*) "The aim of education should be to teach us rather how to think—than what to think—rather to improve our minds, so as to enable us to think for ourselves, than to load our memories with thoughts of other men."

The quotation best supports the statement that education should bring about

- A) better understanding of the writings of other men
- B) fuller use of mental processes
- C) improved ability to memorize
- D) attainment of a higher standard of living
- E) appreciation of the thoughts and accomplishments of others

49. The saying "The worth of a thing is best known by the want of it" means most nearly
- A) What we want, we will strive to get.
 - B) The need of a thing brings appreciation of its value.
 - C) The more expensive an article, the greater its value.
 - D) Desire disregards cost.
 - E) When we do not possess an article, we have the greatest desire for it.
50. (*Reading*) "There is an art in reading a newspaper, just as there is an art in listening to music or looking at pictures or watching a football game. So obvious is this fact that it is astonishing that none of our schools seems to have given the slightest attention to this art's cultivation."

The quotation best supports the statement that

- A) a person should be taught how to read a newspaper.
- B) journalism is not taught in our schools
- C) few people know how to read a newspaper
- D) the teaching of newspaper reading in our schools is inadvisable
- E) newspaper reading is as difficult as listening to music

51. To CONTRIVE means most nearly to
- A) repent
 - B) remember
 - C) collect
 - D) invent
 - E) strive
52. The saying "Great gain makes work easy" means most nearly
- A) Man's desire for comfort inspires him to simplify his work.
 - B) The most diligent laborer is not always the greatest earner.
 - C) A man's labor is lightened when a liberal reward is anticipated.
 - D) Personal satisfaction is one of labor's greatest rewards.
 - E) The desire for personal gain is one of the major driving forces of human effort.
53. (*Reading*) "International exchange of scientific information is of growing importance. Increasing specialization of science will make it more important than ever that scientists in this country keep continually abreast of developments abroad."
- The quotation best supports the statement that*
- A) the increasing specialization of science is its most important aspect
 - B) scientific developments in other countries are important to us
 - C) scientific specialization has made more progress in this country than abroad
 - D) our scientists will have no trouble keeping up with those of other countries
 - E) scientific developments abroad will increase our need for specialization

54. The *chief* reason why the primary responsibility for flood control projects that affect a large number of States should rest with the Federal Government rather than with local authorities is that such projects
- A) may require years to complete
 - B) may not be desired by the States involved
 - C) should be undertaken only by experienced engineers
 - D) can be carried out most effectively by a central agency
 - E) are not always affected to the same extent by seasonal floods
55. (*Reading*) "During the millions of years when coal was forming, volcanoes thrust great mountains of melted rock over some of the buried layers of vegetation. These hot and massive weights packed down the buried forests beneath them. The result in this case was anthracite, or hard coal."
- The quotation best supports the statement that*
- A) heat is necessary for the formation of coal
 - B) anthracite coal was formed under great pressure
 - C) many ancient forests were destroyed by volcanic action
 - D) hard coal is a form of melted rock
 - E) most coal was formed by the action of volcanoes
56. ALOOF means most nearly
- A) deserted
 - B) timid
 - C) assured
 - D) reserved
 - E) wise

57. The saying "He cannot see the forest for the trees" means most nearly
- A) Careful attention to detail is important.
 - B) A successful action must be planned in advance.
 - C) It is important to look ahead.
 - D) Too much worry results in confusion.
 - E) A man loses perspective in observing details.
58. (*Reading*) "The factory in the modern sense was the response of industry to the new demands made by commerce. It was the organization of effort on a plan which applied the principle of the division of labor in such a way as to make the fullest use of the resources of science."
- The quotation best supports the statement that the modern factory*
- A) represents a coordination of the facilities of labor and science
 - B) often emphasizes division of labor at the expense of efficient production
 - C) employs commerce to dispose of its products
 - D) pays more attention to labor than to raw material
 - E) was developed for the purpose of testing scientific principles
59. TREND means most nearly
- A) influence
 - B) character
 - C) variation
 - D) improvement
 - E) direction
60. TRUCK is related to TRANSPORTATION as TELEGRAPH is related to
- A) communication
 - B) electrification
 - C) reception

- D) commemoration
 - E) distribution
61. AGITATED means most nearly
- A) indifferent
 - B) reckless
 - C) excited
 - D) exhausted
 - E) unhappy
62. PLATFORM is related to SPEAKER as STAGE is related to
- A) amusement
 - B) curtain
 - C) author
 - D) actor
 - E) dramatist
63. The saying "You may know the whole sack by a handful" means most nearly
- A) Accurate opinions may be formed from small indications
 - B) One should not be too ready to jump to conclusions.
 - C) A single action may not indicate a man's character.
 - D) Important results often come from events that seem trifling.
 - E) Hasty decisions usually have to be revised.
64. (*Reading*) "A republic may be defined as a government which derives all its powers directly or indirectly from the great body of the people, and is administered by persons holding their offices during the pleasure of the people electing them, for a limited period, or during good behavior."

The quotation best supports the statement that in a republic

- A) the government has little power
 - B) short terms of office are necessary
 - C) the legislature is the source of administrative authority
 - D) the terms of government officials are subject to restrictions
 - E) an individual is protected against the arbitrary exercise of governmental powers
65. The saying "High regions are never without storms" means most nearly
- A) Great men seldom disagree.
 - B) High positions carry many privileges.
 - C) Great men are constantly beset with troubles.
 - D) Success is attained through overcoming obstacles.
 - E) Fortune is emphasized by misfortune.
66. PALATABLE means most nearly
- A) vocal
 - B) admissible
 - C) acceptable
 - D) reliable
 - E) happy
67. BURN is related to KINDLE as POSSESS is related to
- A) protect
 - B) acquire
 - C) remove
 - D) enjoy
 - E) disturb
68. (*Reading*) "It has been customary in England from time immemorial, and in this country from its first colonization, to regulate ferries, common carriers, bakers, millers, innkeepers, etc., and in so doing to fix a maximum of charge to be made for services

rendered, accommodations furnished, and articles sold.”

The quotation best supports the statement that

- A) business groups set maximum charges for services rendered
 - B) the governments of many countries regulate ferries, common carriers, etc.
 - C) certain enterprises are regulated by government for their own good
 - D) the regulation of commerce is necessary to maintain prices at a high level
 - E) certain private enterprises have long been subject to government regulation
69. A company operating stores in different parts of the country would find it *most* advisable to use which one of the following plans in determining which holidays to observe? To
- A) disregard holidays that are peculiar to certain sections of the country
 - B) ask employees to vote on proposed plans
 - C) adjust to local practices its policy in granting holidays
 - D) observe those holidays on which little business can be expected
 - E) try out different practices to determine the most popular
70. To say that a person is WILY means most nearly that he is
- A) crafty
 - B) clumsy
 - C) afraid
 - D) talkative
 - E) innocent
71. BRIDGE is related to STREAM as TUNNEL is related to
- A) floor
 - B) traffic

- C) mountain
 - D) passage
 - E) mining
72. The saying "Trifles discover character" means most nearly
- A) No matter how small the detail, it should not be neglected.
 - B) It is easy to disregard small annoyances.
 - C) Few people have the opportunity to do great deeds.
 - D) The good are not led astray by minor temptations.
 - E) Small things reveal a person's true nature.
73. GRAPHIC means most nearly
- A) brief
 - B) vivid
 - C) measurable
 - D) numbered
 - E) official
74. (*Reading*) "Human life is an internally motivated process in which the essential events do not occur as directed from the outside upon the subject of experience, but evolve from within it, as fruits and flowers evolve from seeds."
- The quotation best supports the statement that a person's life is controlled mainly by*
- A) the influence of teachers
 - B) early experiences
 - C) home environment
 - D) chance events
 - E) his own nature
75. DECISIVE means most nearly
- A) final
 - B) valuable
 - C) attentive

- D) formal
 - E) cutting
76. STORM is related to WEATHER as RAGE is related to
- A) punishment
 - B) crime
 - C) anger
 - D) mood
 - E) pleasure
77. To ATTAIN means most nearly to
- A) attack
 - B) obstruct
 - C) allow
 - D) preserve
 - E) reach
78. The saying "No man who needs a monument ever ought to have one" means most nearly
- A) Only they deserve a monument who will be remembered without one.
 - B) People should be allowed to imagine the appearance of great men.
 - C) Public recognition of greatness is often fickle.
 - D) Monuments bind one generation to another.
 - E) The needy are seldom honored by monuments.
79. (*Reading*) "Such is the nature of novelty that where anything pleases it becomes doubly agreeable if new; but if it displeases it is doubly displeasing on that very account."
- The quotation best supports the statement that*
- A) old friends are often treasured
 - B) new friends are more interesting than old friends
 - C) unfamiliar things seem either very good or very bad
 - D) familiar things are either greatly liked or greatly disliked
 - E) a combination of the old and the new is most pleasing

80. The saying "Change is the law of life" means most nearly
- A) Nothing can be accomplished without constant effort.
 - B) Everything that happens teaches us something new.
 - C) Nothing is stationary in this world.
 - D) Slow but steady achievement is better than sudden success.
 - E) Everyone has a right to succeed in something.

Series No. 121
February 1970

Test No. 21

PRINT
NAME _____

Last name

First Name

Middle Initial

DATE OF
BIRTH _____

Month Day Year

IDENTIFICATION NO. _____

UNITED STATES
CIVIL SERVICE COMMISSION

Fill in the identifying blanks at the top of the answer sheet and test booklet. Place no other identifying marks on your answer sheet or test booklet.

The questions in this test need not be taken up in order. Answer first those that you can answer without any delay. Then use the remainder of the time on the questions you have passed over.

For each question, select the BEST ANSWER, and darken the space on the answer sheet that bears the same letter as the answer.

1. EXCELLENT means most nearly
 - A) practical
 - B) useless
 - C) worthy
 - D) expensive
 - E) orderly

2. BUTTER is related to DAIRY as BREAD is related to
 - A) loaf
 - B) mill
 - C) flour
 - D) stove
 - E) bakery
3. The price of men's clothing is likely to be more constant than that of women's clothing *chiefly* because the former is
 - A) ordinarily made from staple materials
 - B) more profitable to manufacture
 - C) lower in cost per unit
 - D) less influenced by changing fashion
 - E) tailored to order
4. The saying "Don't put all your eggs in one basket" means most nearly
 - A) Avoid risks unless you are sure of success.
 - B) Concentrate on what you are doing.
 - C) Don't risk everything in one undertaking.
 - D) Be careful not to lose what you have in seeking more.
 - E) Don't lose heart because of one failure.
5. REMOTE means most nearly
 - A) distant
 - B) mobile
 - C) special
 - D) missing
 - E) quaint
6. (*Reading*) "Along with the increasing urbanization of America has gone a great movement to open up country playgrounds. The National forests and state forests which have been set aside in recent years,

largely to protect the watersheds, have become at the same time summer playgrounds for millions of city dwellers.”

The quotation best supports the statement that the National and State forests

- A) have been instrumental in promoting the urbanization of America
 - B) do not attract many country residents
 - C) are maintained chiefly because of their value as playgrounds
 - D) have little value in water-supply control
 - E) are now popular as recreational areas
7. APPLE is related to CORE as WHEEL is related to
- A) rim
 - B) spoke
 - C) disk
 - D) hub
 - E) tire
8. In most States the signature of a will must be attested by several persons other than the maker of the will *chiefly* in order to
- A) establish the authenticity of the signature
 - B) make certain that it cannot be altered later
 - C) protect the estate against any contesting of the will
 - D) make the provisions of the will known to more than one person
 - E) designate the individuals who are to administer the will
9. VIVID means most nearly
- A) rare
 - B) intense
 - C) imaginary
 - D) absurd
 - E) attractive

10. Each State requires a physician to meet certain standards before a license to practice is issued to him *chiefly* in order to
 - A) protect the public from poorly trained doctors
 - B) control the number of new doctors entering practice
 - C) promote agreement among doctors on medical problems
 - D) prevent doctors from charging excessive fees
 - E) make sure that standards will be uniform in all the States
11. PAPER is related to GLUE as METAL is related to
 - A) ore
 - B) putty
 - C) solder
 - D) wire
 - E) tin
12. The saying "No gains without pains" means most nearly
 - A) Progress is made only at the expense of effort.
 - B) The lazy man rarely reaches his goal.
 - C) One cannot always be certain that results will justify his efforts.
 - D) Achievement without toil deserves little appreciation.
 - E) To plan one's work is to hasten its completion.
13. On public buildings the doors leading to the outside are generally required by city ordinances to swing from a closed position outward *chiefly* because
 - A) a saving in space is thereby made
 - B) the doors cannot then be blown open by the wind
 - C) most people entering a building try to pull rather than push the door open
 - D) this type of door construction is more sturdy
 - E) a crowd, pressing at the exit, can then leave more readily

14. To ACCUSTOM means most nearly to
- A) persuade
 - B) reconcile
 - C) overcome
 - D) familiarize
 - E) endeavor
15. (*Reading*) "No one can say when cattle were first tamed. It is known that early man found various types of oxen and bison roaming the wilds of Europe, Asia, and Africa, and that he killed these for food, but the taming of wild cattle to serve as draft animals and as a permanent food supply was effected by all the great peoples of antiquity before the beginning of recorded history."
- The quotation best supports the statement that*
- A) written records do not disclose when cattle were first domesticated
 - B) wild cattle were tamed simultaneously in various parts of the world
 - C) cattle were first domesticated when man ceased his nomadic existence
 - D) when wild cattle were first tamed, they were used only as draft animals
 - E) man had little incentive to domesticate wild oxen and bison as long as they were abundant
16. ISLAND is related to WATER as LAKE is related to
- A) spring
 - B) river
 - C) forest
 - D) land
 - E) brook

17. The saying "Little strokes fell great oaks" means most nearly
- A) A patient beginning leads to a swift ending.
 - B) The difficulty of a task is not determined by its size.
 - C) Perseverance in small things leads to great accomplishments.
 - D) Great things are not produced by chance.
 - E) The tools in use should be appropriate for the size of the job.
18. CONSERVATIVE means most nearly
- A) opposed to change
 - B) recent in origin
 - C) free of restraint
 - D) rare in occurrence
 - E) erratic in manner
19. (*Reading*) "Before the passage of the National Food and Drugs Act and the Federal Government's crusade against misbranding, more cane sugar and cane sirup were labeled as maple than the entire natural production of such maple products. A great deal of maple sirup is still blended with cane products but attempts are no longer being made to delude the public. Labels accurately state that the sirup is a blend of cane and maple sirups."
- The quotation best supports the statement that, as a result of Federal action against misbranding,*
- A) the demand for maple products has been considerably reduced
 - B) cane products which contain an artificial maple flavor have been developed
 - C) a much larger quantity of maple sirup has become available to the consuming public

- D) the greater portion of the maple sirup produced is blended with cane sirup
 - E) the labeling of maple sugar products has become more dependable
20. CITY is related to STREET as BUILDING is related to
- A) exit
 - B) corridor
 - C) floor
 - D) room
 - E) elevator
21. To say that a statement IS AMBIGUOUS means most nearly that it
- A) cannot be justified
 - B) can have more than one meaning
 - C) does not give all the facts
 - D) is intended to mislead
 - E) contradicts popular belief
22. The saying "By falling we learn to go safely" means most nearly
- A) The second effort is always better than the first.
 - B) We should profit by the experience of others.
 - C) We must expect to make some blunders.
 - D) A good beginning does no always mean a good ending.
 - E) Out of failure comes the wisdom necessary to success.
23. FORK is related to PRONG as SAW is related to
- A) handle
 - B) blade
 - C) tooth
 - D) edge
 - E) curve

24. (*Reading*) "The employment of fiber in the domestic economy must go back to the most primitive times, for among the uncivilized races of man the world over we find a dependence upon fiber plants for utensils, cordage, and clothing, and for the building and furnishing of huts, second only in importance to their dependence upon edible plants for food."
- The quotation best supports the statement that fiber plants*
- A) cannot all be employed for practical purposes
 - B) have been used domestically since the earliest ages
 - C) were of very limited value to primitive man
 - D) are very difficult to cultivate
 - E) were more abundant in ancient times than food plants
25. During recent years, an increasing quantity of a greater variety of foods has been canned, dehydrated, frozen, or preserved in other ways. The *chief* advantage of foods so processed over fresh foods is that processed foods
- A) simplify food budgeting
 - B) can be stored for long periods
 - C) can fill all dietary needs
 - D) improve in flavor during storage
 - E) possess a greater vitamin content
26. The saying "Between the hand and the lip, the morsel may slip" means most nearly
- A) Nothing is certain until it is an accomplished fact.
 - B) Nothing is stronger than its weakest part.
 - C) Accidents are prevented when proper precautions are taken.
 - D) Overconfidence is many times the cause of misfortune.
 - E) Failure is sure to follow when something is not properly planned.

27. BURN is related to FUEL as DIGEST is related to
- A) hunger
 - B) warmth
 - C) body
 - D) consumption
 - E) food
28. The saying "Do not make the bite larger than the mouth" means most nearly
- A) Do not attempt to do work which you do not enjoy.
 - B) Magnifying one's difficulties makes one less able to overcome them.
 - C) Those who want too much are never satisfied.
 - D) An individual should not attempt a task which is beyond his capacity.
 - E) It is unwise to indulge one's appetite.
29. APPLICATION is related to SEEK as RESIGNATION is related to
- A) dismiss
 - B) interview
 - C) hire
 - D) work
 - E) withdraw
30. (*Reading*) "Advertising tends to improve the quality of commodities without a corresponding increase in cost. Competition in advertising takes the form of price rivalry much more rarely than might be presumed. Manufacturers seeking to create national demand for commodities sold under their trade names compete rather in offering excellent staples, assuring purity in sanitary packages."

The quotation best supports the statement that, to increase the demand for their commodities, manufacturers generally

- A) call public attention to the merits of their products
 - B) discredit the goods of rival manufacturers
 - C) increase their sales forces
 - D) reduce their prices below those of competitors
 - E) furnish money-back guarantees to purchasers
31. To PERPLEX means most nearly to
- A) interest
 - B) emphasize
 - C) conspire
 - D) mask
 - E) confuse
32. APPETITE is related to SATISFY as THIRST is related to
- A) drink
 - B) restrain
 - C) intoxicate
 - D) parch
 - E) quench
33. The saying "Do well is better than say well" means most nearly
- A) Sincere advice is the best to follow.
 - B) Fine words are not so worthy as good deeds.
 - C) Good intentions do not always lead to worthy achievements.
 - D) Man can be better judged by his actions than by his speech.
 - E) It is easier to give good advice than to follow it.
34. (*Reading*) "Gold is found in nearly all parts of the world and small amounts occur in ocean water and in many rocks. It is mostly in such minute proportions, however, that it cannot be profitably extracted. Only the more concentrated deposits can be utilized and some of these only where natural conditions are favorable."

The quotation best supports the statement that the extraction of gold is not profitable unless

- A) the demand for it is world-wide
- B) relatively simple extraction processes are used
- C) the concentrations are relatively large
- D) the concentrations are in areas having good transportation
- E) mining operations are carried out on a large scale

35. Of the following, which would be of *least* assistance in identifying a stolen watch? The
- A) initials of the owner, inscribed in the case
 - B) kind of metal of which the case is made
 - C) length of time the watch has been used by the owner
 - D) number of jewels in the movement
 - E) serial numbers of the case and movement
36. To DILATE means most nearly to
- A) deviate
 - B) undermine
 - C) expand
 - D) retard
 - E) strengthen
37. AUTHOR is related to COPYRIGHT as INVENTOR is related to
- A) patent
 - B) protection
 - C) invention
 - D) privilege
 - E) machine
38. The saying "He is unable to see the forest for the trees" means most nearly
- A) His judgment is confused by flattery.
 - B) He leads a meaningless existence.
 - C) Lack of foresight restricts his progress.

- E) He works hard but accomplishes little.
 E) Details hide complete understanding from him.
39. (*Reading*) “Law is steadily growing more complex and the body of knowledge more extensive. Consequently the law now covers too large a field for anyone to be thoroughly familiar with the whole of it.”
The quotation best supports the statement that
- A) present-day lawyers are trained less carefully than lawyers used to be
 B) it is impossible for any lawyer to have a complete knowledge of the law
 C) only the best lawyers understand the whole body of legal knowledge that has accumulated
 D) more laws have been passed than are needed
 E) law is more complex than are other professions
40. The saying “A willing mind makes a light foot” means most nearly
- A) To be successful, one must work diligently.
 B) A contrary attitude leads to inefficiency.
 C) A fast worker has confidence in his own ability.
 D) People do not like everything they do.
 E) That which is done voluntarily seems easy to do.
41. INEVITABLE means most nearly
- A) unavoidable
 B) invincible
 C) immortal
 D) unstable
 E) unpredictable
42. PLUMBER is related to TRADE as PHYSICIAN is related to
- A) patient
 B) laboratory
 C) diagnosis
 D) profession
 E) prescription

43. (*Reading*) "In a telephone conversation, the voice is of utmost importance. An indication of a salesperson's impatience, irritation, or indifference is carried to the customer by his voice over the telephone just as surely as it is conveyed by the voice, actions, or facial gestures in a face-to-face meeting. In a like manner, indications of a desire to be of help can be transmitted with just as much ease."

The quotation best supports the statement that a telephone salesperson

- A) should attempt to prevent a customer from becoming impatient
 - B) must be more careful of his voice than of what he says
 - C) can make a good impression more easily over the telephone than in a face-to-face meeting
 - D) must rely upon his voice even more than must a person selling face-to-face
 - E) may cause his employers to suffer heavy losses because of his discourtesy
44. The saying "There is no such flatterer as a man's self" means most nearly
- A) No one can ever really appreciate the true character of another.
 - B) Words of commendation spoken insincerely may do a man more harm than good.
 - C) The noble deeds of many men go unrecognized by others.
 - D) A person's greatest compliments arise within his own mind.
 - E) He who praises himself too freely is not regarded highly by others.
45. (*Reading*) "In the most primitive form of soil tillage, the practice of which marks the beginning of civilization, the primary objective was to subdue or

destroy the native vegetation in order that the desired plants might develop free from competition. Tillage has reached a highly developed stage, yet its primary objective still involves elimination of competing vegetation."

The quotation best supports the statement that

- A) in agriculture the destruction of undesired plants has always been of basic importance
 - B) primitive forms of soil cultivation may still be observed in many portions of the world
 - C) present highly developed forms of farming have reduced the need for weed control
 - D) in the early days of agriculture weed control was the farmer's most difficult problem
 - E) a useful crop may now be readily grown merely by destroying undesired plants in a naturally seeded area
46. DOGMATIC means most nearly
- A) reluctant
 - B) subtle
 - C) positive
 - D) religious
 - E) theoretical
47. BIRD is related to AIRPLANE as FISH is related to
- A) flying fish
 - B) whale
 - C) eel
 - D) water
 - E) submarine
48. (*Reading*) "Though lightning causes a great many forest fires, much the larger proportion are started through the malice or carelessness of men and are therefore preventable. The most effective safeguard

against fire in the woods is an enlightened public sentiment in regard to it.”

The quotation best supports the statement that

- A) the causes of most forest fires are beyond the control of man
 - B) lightning causes the most serious forest fires
 - C) fewer forest fires would occur if people fully realized their seriousness
 - D) the damage caused by forest fires has been decreasing in recent years
 - E) an efficient fire-fighting system is the best protection against fire
49. The saying “Nothing ventured, nothing gained” means most nearly
- A) Persistent effort brings success.
 - B) Cooperation is vital to achievement.
 - C) A certain amount of risk is required to win anything.
 - D) Success attained without effort is not enduring.
 - E) Success encourages continued effort.
50. (*Reading*) “Credit is a promise to pay in the future in return for commodities, services, or money. Credit, therefore, is a substitute for money. We are living in a credit economy; that is, most of the business transactions in a country like the United States are made, not with money, but with promises to pay.”
- The quotation best supports the statement that the extensive use of credit*
- A) has enabled the United States to make great economic progress
 - B) results in a sounder economy than does the use of money

- C) has eliminated the financial advantages once held by the wealthy
 - D) is a basic principle on which our modern economy rests
 - E) has simplified nearly all business transactions
51. ABRUPT means most nearly
- A) gentle
 - B) sudden
 - C) vigorous
 - D) deliberate
 - E) crooked
52. The saying "Everyone puts his faults on the times" means most nearly
- A) Faults are often made worse by calling attention to them.
 - B) Great men are little influenced by the times in which they live.
 - C) Men blame their surroundings for their own deficiencies of character.
 - D) What one generation considers good, another generation usually considers bad.
 - E) Every man can rise above the limitations of his environment.
53. (*Reading*) "The principal purpose of a commercial harbor is to furnish a means for transferring freight from the interior to seagoing carriers. The harbor affording the cheapest and most expeditious shipping facilities attracts the greatest patronage, as it is the facility for readily discharging cargoes and re-loading, rather than the size of the harbor, that attracts ship owners."
- The quotation best supports the statement that the harbor most heavily utilized is that which*

- A) is outfitted with the most expensive equipment
 - B) provides the fastest and least expensive service
 - C) can accommodate the greatest number of ships
 - D) is nearest to the interior production centers
 - E) is best served by land transportation
54. To merchants, the *chief* advantage of television advertising over magazine advertising is that television advertisements
- A) require no effort on the part of the listener
 - B) reach all prospective customers simultaneously
 - C) usually reach a greater number of persons
 - D) may be designed to reach only a desired consumer group
 - E) can be understood by persons who are unable to read
55. (*Reading*) "The introduction of the roller process of milling flour has made it possible to use varieties of wheat from which high-grade flour could not be made by the old stone process. By the roller process of reduction some of the hard particles which were formerly excluded from the flour and sold with the byproduct used for animal feeding are now reduced and added to the highest grade of flour."
- The quotation best supports the statement that, with the introduction of the roller process of milling,*
- A) the old stone process was completely discarded
 - B) more kinds of wheat were grown by the farmers
 - C) the time required for the milling process was reduced
 - D) more varieties of wheat could be made into high-grade flour
 - E) particles of wheat were no longer used for animal feeding

56. INSTIGATE means most nearly to
- A) inquire
 - B) combine
 - C) establish
 - D) provoke
 - E) contend
57. The saying "None knows the weight of another's burden" means most nearly
- A) Only he who bears the troubles can understand their heaviness.
 - B) The man who carries the heaviest load is usually last to complain of his load.
 - C) Every man thinks his own misfortunes are the hardest.
 - D) Hardships may be borne only by those on whom they fall.
 - E) He who has sorrows of his own rarely is aware of the trials of others.
58. (*Reading*) "The arts of painting and sculpture constitute a universal form of communication. They embody, to an even greater extent than literature, the common qualities of mankind, and help to break down the barriers that separate human beings from one another."
- The quotation best supports the statement that the arts of painting and sculpture*
- A) have consistently progressed with the development of civilization
 - B) flourished in ancient times
 - C) are important mediums of expression
 - D) have surpassed literature in popularity
 - E) appeal to men's finer feelings
59. To REPUDIATE means most nearly to
- A) blame
 - B) reprove

- C) disown
 - D) encourage
 - E) challenge
60. CHAOS is related to ORDERLY as WASTE is related to
- A) expensive
 - B) economical
 - C) routine
 - D) careless
 - E) agitated
61. To say that testimony IS IRRELEVANT means most nearly that it
- A) has no bearing on the case
 - B) duplicates previous evidence
 - C) is not given under oath
 - D) concerns minor detail
 - E) is not based on fact
62. CIVILIZATION is related to REFINEMENT as BARBARISM is related to
- A) efficiency
 - B) crudeness
 - C) culture
 - D) decadence
 - E) craftiness
63. The saying "The burnt child dreads the fire" means most nearly
- A) Another's loss is never keenly felt by us.
 - B) Avoidance is the safest policy.
 - C) Don't worry about troubles before they come.
 - D) No one willingly seeks to repeat an unhappy experience.
 - E) We learn less by precept than by experience.
64. (*Reading*) "Braille is a system of printing for the blind in which points raised above the surface of the paper are used as symbols to designate the letters

of the alphabet. There are several modifications of the system, all distinguished by the fact that no more than two vertical rows of points are used in each letter of the alphabet."

The quotation best supports the statement that the system of braille

- A) uses two rows of points for every letter
 - B) has been standardized for use in most countries of the world
 - C) was developed by the blind
 - D) has been simplified in recent years
 - E) utilizes raised dots to indicate letters
65. The saying "As the wind blows, you must set your sail" means most nearly
- A) You should always make your own decisions.
 - B) You must adapt yourself to changing circumstances.
 - C) Public opinion is too strong to be resisted by one man.
 - D) No man may expect to go through life without meeting some obstacles.
 - E) When bad fortune strikes, it is easy to lose sight of your goal.
66. SUSCEPTIBLE means most nearly
- A) privileged
 - B) expectant
 - C) distrustful
 - D) sensitive
 - E) reliable
67. APPROXIMATE is related to EXACT as SIMILAR is related to
- A) comparative
 - B) inaccurate
 - C) conclusive
 - D) valuable
 - E) identical

68. (*Reading*) "The selling price of goods and the cost of transportation control the flow of goods from one place to another. There will be trade as long as the difference in the prices of the same commodity in two markets is greater than the cost of transportation between these markets."

The quotation best supports the statement that goods are shipped from one place to another whenever

- A) production costs are lower in one market than in another
 - B) the prices in a certain market are higher than those in another
 - C) each section specializes in a particular product
 - D) transportation costs are low
 - E) the additional profit in a particular market exceeds the cost of transportation
69. Brand names are in general use by manufacturers to distinguish their products from those of competitors. To the consumer, the *chief* advantage of a brand name is that
- A) the composition or contents of a product are described in detail on the brand label
 - B) a product which has previously given satisfaction may be readily identified and procured again
 - C) the price of a product with a brand name does not fluctuate
 - D) an unsatisfactory product can always be returned to the manufacturer
 - E) through use of a brand name a manufacturer guarantees a product to be of high quality
70. COVERT means most nearly
- A) candid
 - B) weird
 - C) craven
 - D) artificial
 - E) secret

71. CIRCLE is related to SPHERE as SQUARE is related to
- A) box
 - B) cube
 - C) pyramid
 - D) solid
 - E) flat
72. The saying "Slander flings stones at itself" means most nearly
- A) Unjust accusations reflect on the accuser.
 - B) Suspicion is not often wholly without foundation.
 - C) A gossip harms his victim more than he intends.
 - D) Men are often injured by their own carelessness.
 - E) Guilt will eventually be revealed.
73. ADROIT means most nearly
- A) bold
 - B) lifeless
 - C) tangled
 - D) skillful
 - E) tedious
74. (*Reading*) "Group insurance is a purely American contribution to insurance designed to protect the employee against financial hazards occasioned by conditions such as sickness and old age. In many cases it is an employer-employee cooperative plan contributing to the improvement of industrial relationships by the elimination of forms of preventable distress to the employee."
- The quotation best supports the statement that group insurance*
- A) was developed in order to improve employer-employee relationships
 - B) is financially supported primarily by employer contributions

- C) protects an employee from unwarranted dismissal from his job
 - D) provides financial assistance to employees during periods of need
 - E) has been universally adopted by American industrial establishments
75. LATENT means most nearly
- A) recumbent
 - B) radiant
 - C) powerful
 - D) fluid
 - E) dormant
76. TIMIDITY is related to HESITATION as COURAGE is related to
- A) action
 - B) submission
 - C) vengeance
 - D) security
 - E) sacrifice
77. ACRIMONIOUS means most nearly
- A) miserly
 - B) tearful
 - C) cowardly
 - D) honest
 - E) bitter
78. The saying "Few words for the wise suffice" means most nearly
- A) He whose speech is most worth hearing never wastes words.
 - B) It is a wise man who realizes that silence is more eloquent than speech.

- C) A man reveals the extent of his knowledge as soon as he begins to talk.
 - D) The intelligent man understands without long explanations.
 - E) A man who has studied much still has much to learn.
79. (*Reading*) "During the millions of years when coal was forming, volcanoes thrust great mountains of melted rock over some of the buried layers of vegetation. These hot and massive weights packed down the buried forests beneath them. The result in this case was anthracite, or hard coal."
- The quotation best supports the statement that*
- A) heat is necessary for the formation of coal
 - B) anthracite coal was formed under great pressure
 - C) many ancient forests were destroyed by volcanic action
 - D) hard coal is a form of melted rock
 - E) most coal was formed by the action of volcanoes
80. The saying "The way to be safe is never to be secure" means most nearly
- A) When in doubt concerning what to do, do nothing.
 - B) Constant caution wards off danger.
 - C) Worry about possible calamities does not prevent them.
 - D) Disaster often strikes in unexpected ways.
 - E) He who acts timidly never makes a mistake.

Series No. 173
February 1970

Test No. 21

PRINT
NAME _____
Last name First Name Middle Initial

BIRTH _____ IDENTIFICATION NO. _____
Month Day Year

UNITED STATES
CIVIL SERVICE COMMISSION

Fill in the identifying blanks at the top of the answer sheet and test booklet. Place no other identifying marks on your answer sheet and test booklet.

The questions in this test need not be taken up in order. Answer first those that you can answer without any delay. Then use the remainder of the time on the questions you have passed over.

For each question, select the BEST ANSWER, and darken the space on the answer sheet that bears the same letter as the answer.

1. ORDINARY means most nearly
 - A) uncommon
 - B) worthless
 - C) usual
 - D) tiresome
 - E) lasting

2. SMILE is related to HAPPINESS as FROWN is related to
 - A) surprise
 - B) ridicule

- C) face
 - D) displeasure
 - E) inquiry
3. Laws restricting hunting to certain regions and to a specific time of the year were passed *chiefly* to
- A) prevent people from endangering their lives by hunting
 - B) keep our forests more beautiful
 - C) raise funds from the sale of hunting licenses
 - D) prevent complete destruction of certain kinds of animals
 - E) preserve certain game for eating purposes
4. The saying "All things are easy that are done willingly" means most nearly
- A) Work undertaken without reluctance proceeds smoothly
 - B) To the lighthearted all things are easy.
 - C) Many hands make light work.
 - D) Easy things are done willingly.
 - E) Everyone likes a cheerful worker.
5. PECULIARLY means most nearly
- A) calmly
 - B) stubbornly
 - C) wonderingly
 - D) sensibly
 - E) strangely
6. (*Reading*) "Dates are the fruit of a species of palm tree which ranges from the Canary Islands through northern Africa and the southeast of Asia to India. These trees have been cultivated and their fruit much prized throughout most of these regions from remotest antiquity. In Arabia date palms are an important source of national wealth, and their fruit forms the staple article of food in the country."

- The quotation best supports the statement that date palms*
- A) are the chief source of wealth in many countries
 - B) have long been valued as a source of food
 - C) were first grown in the Canary Islands and Africa
 - D) were not prized for their fruit in early times
 - E) cannot be grown in other than tropical climates
7. SKETCHING is related to PEN as PHOTOGRAPHY is related to
- A) brush
 - B) camera
 - C) picture
 - D) pose
 - E) studio
8. The *best* reason, of the following, for requiring that ballots be marked in secret is that
- A) this provides for a permanent record of results
 - B) the results are thus unknown until voting is over
 - C) the vote is intended to indicate the real opinion of the voter
 - D) this permits several matters to be voted on at the same time
 - E) this is the established custom of our country
9. BOUNTY means most nearly
- A) generosity
 - B) limit
 - C) service
 - D) fine
 - E) duty
10. Strands of fiber used in a rope are twisted or braided together *chiefly* in order to make the rope
- A) more flexible
 - B) less expensive
 - C) unbreakable
 - D) more rigid
 - E) stronger

11. CANOE is related to PADDLE as STEAMSHIP is related to
 - A) wharves
 - B) propeller
 - C) water
 - D) routes
 - E) yard
12. The saying "No gains without pains" means most nearly
 - A) Progress is made only at the expense of effort.
 - B) The lazy man rarely reaches his goal.
 - C) One cannot always be certain that results will justify his efforts.
 - D) Achievement without toil deserves little appreciation.
 - E) To plan one's work is to hasten its completion.
13. The purpose of trademarks is to
 - A) show that a tax has been paid
 - B) distinguish the brand of goods manufactured
 - C) show that a patent has been granted
 - D) indicate that goods are unadulterated
 - E) distinguish home from foreign products
14. CRISP means most nearly
 - A) broken
 - B) frosty
 - C) brittle
 - D) burnt
 - E) dry
15. (*Reading*) "The practical skill of primitive man became, in time, quite admirable in the treatment of certain kinds of disease and even more so in surgery. Examples of his accomplishments may be seen today among primitive tribes, and, together with prehistoric remains, testify to the status of medicine before history was written."

The quotation best supports the statement that primitive man

- A) lacked knowledge of surgery
 - B) exhibited more skill in medicine than in surgery
 - C) was not easily affected by disease
 - D) developed a definite skill in dealing with physical ailments
 - E) buried complete records of his ability
16. WEED is related to PLANT as FLY is related to
- A) screen
 - B) disease
 - C) insect
 - D) food
 - E) spider
17. The saying "A drowning man will catch at a straw" means most nearly
- A) Help sometimes comes after we have abandoned all hope of it.
 - B) Great effort is necessary to overcome great difficulties.
 - C) He who relies on too slim a chance is lost.
 - D) A man will try anything as a last resort.
 - E) No disaster is entirely without remedy.
18. SCARCELY means most nearly
- A) minutely
 - B) fittingly
 - C) partially
 - D) precisely
 - E) barely
19. (*Reading*) "A great many small mammals, and not a few of considerable size, have developed the arboreal habit. Most climbing forms have taken to the trees for food, and, perhaps even more important, to escape terrestrial enemies which would readily overcome them had they not evolved climbing habits.

The only entirely tree-living mammals, however, are confined to the tropics.

The quotation best supports the statement that tree-living mammals

- A) are afraid to descend to the ground
 - B) have to be small to find sufficient food in trees
 - C) damage trees by consuming the leaves
 - D) developed climbing habits as a matter of necessity
 - E) are confined to small, tropical animals
20. GARDEN is related to FLOWER as LAKE is related to
- A) pool
 - B) river
 - C) beach
 - D) cottage
 - E) fish
21. PERTURBED means most nearly
- A) agitated
 - B) distrustful
 - C) impelled
 - D) repulsed
 - E) unmoved
22. The saying "To believe a thing impossible is a way to make it so" means most nearly
- A) It is unwise to begin what is beyond one's ability.
 - B) The only way to prove a thing can be done is to do it.
 - C) We can do whatever we think we can do.
 - D) What is easy to obtain is not worth having.
 - E) Lack of confidence leads to failure.
23. SPEAK is related to SHOUT as DAMAGE is related to
- A) sue
 - B) repay
 - C) destroy

- D) condemn
- E) repair

24. (*Reading*) "Men who have good mechanical ability, and especially those who have had some experience in mechanical work, will, when they show their worth, be detailed as helpers in machine shops and engine rooms, where opportunity will be given them for acquiring training with machinists' tools."

The quotation best supports the statement that the qualifications for helpers in machine shops and engine rooms must include

- A) the demonstration of mechanical ability or training
 - B) special experience in mechanical work
 - C) training with machinists' tools
 - D) previous apprenticeship on the job
 - E) similar duties in previous positions
25. Of the following reasons, the one that *best* explains the continued sale of records in spite of the popularity of the radio is that the
- A) records make available the particular selections desired when they are desired
 - B) appreciation of records is more widespread than appreciation of radio
 - C) collection of records provides an interesting hobby
 - D) newest records are almost unbreakable
 - E) sound effect of records is superior to that of the radio
26. The saying "The fire in the flint shows not till it is struck" means most nearly
- A) One should be prompt to recognize one's opportunities.
 - B) The first attempt is not always successful.
 - C) Unless abilities are demonstrated, they remain unrecognized.

- D) There is a proper time for everything to be done.
 E) Only by repeated efforts can skill be achieved.
27. ISOLATION is related to COMPANIONSHIP as DESPAIR is related to
- A) despondency
 - B) success
 - C) strength
 - D) recovery
 - E) hope
28. The saying "Straight trees are the first to be felled" means most nearly
- A) Honest effort is always rewarded.
 - B) The best are the first chosen.
 - C) Ill luck passes no one by.
 - D) The highest in rank have farthest to fall.
 - E) The stubborn are soon broken.
29. SUN is related to HEAT as FOG is related to
- A) moisture
 - B) twilight
 - C) storm
 - D) winter
 - E) evening
30. (*Reading*) "The Pure Food and Drugs Act would be totally incapable of enforcement were it not for the fact that chemists have perfected methods of investigation whereby the claims of composition of various foods and drugs can be verified or exposed. The Government has an ever-watchful force of 'chemist detectives' trying to protect the Nation's health in respect to remedies sold to the public."
- The quotation best supports the statement that Government chemists*
- A) prosecute violators of the Pure Food and Drugs Act
 - B) improve the quality of foods and drugs
 - C) discourage the sale of patent medicines

- D) test the chemical composition of foods and drugs
E) have considerably improved the health of the Nation
31. To DEVIATE means most nearly to
A) intend
B) vary
C) steer
D) enlarge
E) return
32. BECAUSE is related to REASON as THEREFORE is related to
A) result
B) heretofore
C) instinct
D) logic
E) antecedent
33. The saying "Do not make the bite larger than the mouth" means most nearly
A) Do not attempt to do work which you do not enjoy.
B) Magnifying one's difficulties makes one less able to overcome them.
C) Those who want too much are never satisfied.
D) An individual should not attempt a task which is beyond his capacity.
E) It is unwise to indulge one's appetite.
34. (*Reading*) "Although the types of buildings in ghetto areas vary from the one-story shack to the large tenement building, they are alike in that they are all drab, unsanitary, in disrepair, and often structurally unsound."

The quotation best supports the statement that all buildings in ghetto areas are

- A) overcrowded
 - B) undesirable as living quarters
 - C) well-constructed
 - D) about to be torn down
 - E) seldom inspected
35. Which of the following is the *chief* reason that posters placed in busses are a successful medium of advertising?
- A) Their bright colors and pictures attract attention.
 - B) They can be understood by children.
 - C) They are an inexpensive method of advertising.
 - D) All passengers are in a receptive mood when riding in such vehicles.
 - E) They reach a working, and therefore consuming, public.
36. To RETRENCH means most nearly to
- A) impede
 - B) replace
 - C) counteract
 - D) attack
 - E) curtail
37. BRAKE is related to MOTION as DAMPER is related to
- A) draft
 - B) furnace
 - C) accelerator
 - D) chimney
 - E) humidity
38. The saying "The good seaman is known in bad weather" means most nearly
- A) Everyone has an opportunity to show his ability.
 - B) Skill is chiefly a matter of practice.
 - C) People seldom complain when things run smoothly.
 - D) One's skill becomes apparent in times of stress.
 - E) No one can do his best under certain conditions.

39. (*Reading*) "Brass is an alloy consisting mainly, if not exclusively, of copper and zinc, but in its older use the term was applied rather to alloys of copper and tin, now known as bronze. It is quite likely that from very early times brass was made accidentally, owing to the mixture of zinc ores with those of copper, but was not recognized as distinct from bronze. One of the earliest examples of Roman brass is a coin made in 20 B. C., containing 17.3 percent zinc."

The quotation best supports the statement that

- A) brass developed somewhat earlier than did bronze
 - B) bronze and brass have one essential ingredient in common
 - C) the earliest known coins were made from brass
 - D) alloys of copper and zinc are now known as bronze
 - E) bronze and brass were first made by the Romans
40. The saying "A little knowledge is a dangerous thing" means most nearly
- A) It is better to be ignorant than to know too much.
 - B) No one knows so much but that he could know more.
 - C) Those who know the least usually do the most talking.
 - D) To know a little about many things is to know nothing well.
 - E) Incomplete information may have unfortunate results.
41. ARTIFICIAL means most nearly
- A) disguised
 - B) awkward
 - C) genuine
 - D) unnatural
 - E) useless

42. FRAME is related to PICTURE as MARGIN is related to
- A) edge
 - B) decoration
 - C) page
 - D) border
 - E) width
43. (*Reading*) "There are two basic types of silent reading. In one type, called cursory reading, the reader does not try to grasp the meaning of every word but only the essential concept. The other form of silent reading is careful and exact. In the latter type, detailed attention is required in order to assimilate the complete thought. Cursory reading is a valuable tool, but much of the reading required in business must be careful and exact. Too often, people who have become habituated to cursory reading cannot adapt themselves to careful reading."
- The quotation best supports the statement that the businessman*
- A) cannot afford to read so rapidly as to miss the fine points of the matter read
 - B) is required to relearn his whole method of silent reading
 - C) must do so much reading that he does not take time to read carefully
 - D) soon becomes highly skilled in reading with speed as well as with accuracy
 - E) fails to realize the need for becoming adept in the two basic types of silent reading
44. The saying "Nothing ventured, nothing gained" means most nearly
- A) Persistent effort brings success.
 - B) Cooperation is vital to achievement.

- C) A certain amount of risk is required to win anything.
- D) Success attained without effort is not enduring.
- E) Success encourages continued effort.

45. (*Reading*) "A sudden brief heavy rain will penetrate the soil less than the same amount of water falling for a longer period, since it takes time for water to expel the soil air and work its way downward among the soil particles. The downward movement is hastened by soil cracks, roots, root paths, and the holes of burrowing animals."

The quotation best supports the statement that penetration of the soil by rain

- A) is rapid as soon as the soil air is expelled
- B) is affected by the intensity of the rainfall
- C) depends on the amount rather than the duration of rainfall
- D) is affected more by the amount of vegetation than by other soil conditions
- E) is affected only slightly by the presence of soil cracks

46. SKEPTIC means most nearly

- A) guide
- B) enthusiast
- C) mystic
- D) doubter
- E) exile

47. ACCIDENT is related to NEGLIGENCE as SAFETY is related to

- A) indifference
- B) appliance
- C) security
- D) danger
- E) carefulness

48. (*Reading*) "A brush properly selected for the job at hand will not only make the application of paint easier but will also add to the appearance of the finished surface by increasing its smoothness. Brushes with medium or long bristles hold more paint than do brushes with short bristles and therefore reduce the number of times the brush is dipped into the paint, thus saving time. Longer bristles are more flexible and insure a smoother application."

The quotation best supports the statement that in painting a house

- A) choice of the correct type of brush is the most important step
 - B) frequent dipping of the brush into the paint will cause much waste
 - C) use of a thin paint tends to make the job shorter and easier
 - D) best results are likely to be achieved by using a brush with long bristles
 - E) a smooth finish is hard to get with a soft brush
49. The saying "Muddy springs will have muddy streams" means most nearly
- A) A bad ending does not always follow a bad beginning.
 - B) No effort should be made to improve what is worthless.
 - C) Causes are usually less important than results.
 - D) Good cannot come out of evil.
 - E) What cannot be corrected must be accepted.
50. (*Reading*) "When minerals split easily with smooth faces in certain directions, they are said to have the property of cleavage. Some minerals having the property of cleavage, like quartz, when struck a blow, will break into fragments of various shapes; others, like calcite, break into fragments each of the same general shape."

The quotation best supports the statement that when minerals are broken into fragments

- A) the size of the fragments shows whether the mineral possesses cleavage
- B) the smoothness of the surfaces of the fragments reveals the skill of the worker
- C) the manner in which the mineral breaks shows if the mineral possesses cleavage
- D) many of the fragments are more beautiful than the original piece of material
- E) those minerals possessing cleavage to a high degree break into fragments similar in shape

51. IMPERTINENCE means most nearly

- A) impatience
- B) briskness
- C) conceit
- D) curiosity
- E) incivility

52. The saying "Habits are at first cobwebs, at last cables" means most nearly

- A) Good work habits make any task easier.
- B) Habits grow stronger with time.
- C) It is sometimes difficult to acquire good habits.
- D) Bad habits are the hardest to break.
- E) Good habits should be acquired early in life.

53. (*Reading*) "Illustrations should really illustrate; too often they are simply photographic inserts to help sell the book. They should develop from and enliven the text and be so much a part of the book that they harmonize with it in spirit and in appearance. Moreover, they should be placed as nearly as possible next to or opposite the paragraph or page illustrated and not scattered at random through the book with a consequent loss of interpretative value."

The quotation best supports the statement that the illustrations of a book

- A) should be grouped rather than scattered through the book
 - B) increase sales appeal only when they truly illustrate
 - C) should be photographs taken from real life
 - D) may be of more value to the reader than is the text
 - E) should serve to add interest to the text
54. A tenant who holds a long-term lease on a building will be *most likely* to gain by the transaction if during the period covered by the lease
- A) business rentals vary considerably
 - B) real estate becomes cheaper
 - C) prices in general are increased
 - D) living costs are lowered
 - E) the tax rate is decreased
55. (*Reading*) "Although metals may occur in nature as pure native metal, they are more commonly found in combination with other materials in an ore. An ore is a metal-bearing substance from which a metal, alloy, or metallic compound can be extracted at a profit."

The quotation best supports the statement that

- A) an ore contains other materials in addition to metal
- B) few metals occur in a pure form in nature
- C) the extraction of metal from an ore is an expensive process
- D) some metals are not mined because the cost of extraction is prohibitive
- E) metals found in ores do not occur in nature as pure native metals

56. DISPARAGEMENT means most nearly
- A) depreciation
 - B) distinction
 - C) idealization
 - D) jealousy
 - E) reputation
57. The saying "Other times, other customs" means most nearly
- A) Change is more frequent today than in the past.
 - B) Modes of living change with the times.
 - C) Tolerance is a virtue in every society.
 - D) Certain values have remained constant for centuries.
 - E) The ideals of civilization are becoming continually higher.
58. (*Reading*) "Individuals develop personality characteristics on the basis of their innate physiological equipment, the experiences which beset them from birth on, and their relationships with other human beings and with the social institutions that surround them."
- The quotation best supports the statement that the formation of personality*
- A) is affected as much by physique as by environment
 - B) becomes evident at an earlier age in some persons than in others
 - C) is based on certain factors outside the control of the individual
 - D) determines the types of persons with whom an individual will associate
 - E) is based on hereditary factors rather than social experiences
59. PLACIDITY means most nearly
- A) ignorance
 - B) serenity

- C) solitude
 - D) timidity
 - E) freedom
60. NEWS is related to INFORM as ARGUMENT is related
- A) understand
 - B) convince
 - C) defy
 - D) entertain
 - E) deceive
61. To CAREEN means most nearly to
- A) hurry
 - B) thrust
 - C) quiver
 - D) jostle
 - E) lurch
62. RUBBISH is related to DISCARD as TREASURE is related to
- A) share
 - B) discover
 - C) cherish
 - D) lose
 - E) worry
63. The saying "They wrangle about an egg and let the hens fly away" means most nearly
- A) They dispute at every opportunity.
 - B) Attention to details is important.
 - C) Arguing is seldom worth while.
 - D) They have a poor sense of values.
 - E) A grasping person has few friends.
64. (*Reading*) "Adhering to old traditions, old methods, and old policies at a time when new circumstances demand a new course of action may be praiseworthy from a sentimental point of view, but success is won

most frequently by facing the facts and acting in accordance with the logic of the facts.”

The quotation best supports the statement that success is attained through

- A) recognizing necessity and adjusting to it
 - B) using methods that have proved successful
 - C) exercising will power
 - D) remaining on a job until it is completed
 - E) considering each new problem separately
65. The saying “The first blow is as much as two” means most nearly
- A) He who takes the initiative gains a distinct advantage.
 - B) One hard blow is more effective than numerous lighter ones.
 - C) In any struggle the stronger participant makes the first move.
 - D) The wise man takes advantage of every opportunity.
 - E) He who strikes first will win the battle.
66. To EVINCE means most nearly to
- A) claim without good reason
 - B) state with certain reservations
 - C) show in a clear manner
 - D) follow against one’s will
 - E) deny in an indirect fashion
67. INSERT is related to REMOVE as INTRUDE is related to
- A) interrupt
 - B) withdraw
 - C) conceal
 - D) disclaim
 - E) enter

68. (*Reading*) "Fireboats should be of light draft for harbor work, and the larger sizes should be equipped with twin screws for quick turning. Boats of recent construction have steel hulls and steel deck houses; plank-covered decks are preferable to metal, as steel decks are slippery."

The quotation best supports the statement that fireboats must be

- A) entirely fireproof
 - B) built of wood
 - C) of recent construction
 - D) all of the same size
 - E) capable of quick movement
69. In installing fire hydrants, a city should make sure that the outlets are of the same standard thread as those in adjacent cities *chiefly* because
- A) in emergencies it is sometimes necessary to borrow fire apparatus from neighboring cities
 - B) one set of apparatus will do for several cities
 - C) the same repairmen can be utilized by several cities
 - D) small cities are dependent on the larger cities for fire-extinguishing service
 - E) unused equipment can be returned to dealers
70. TENACIOUS means most nearly
- A) boisterous
 - B) obstinate
 - C) industrious
 - D) inseparable
 - E) honorable
71. AMPLIFIER is to HEARING as TELESCOPE is to
- A) astronomy
 - B) lens
 - C) sight
 - D) mirror
 - E) sound

72. The saying "Blind zeal only does harm" means most nearly
- A) People are not likely to devote their best efforts to work they do not understand.
 - B) Appearances should not affect one's attitude.
 - C) It is difficult to pretend enthusiasm in a hopeless case.
 - D) At times we must let others do the leading.
 - E) Enthusiasm ought to be rightly directed.
73. PROMONTORY means most nearly
- A) marsh
 - B) monument
 - C) headland
 - D) boundary
 - E) plateau
74. (*Reading*) "Soldering is the binding together of two or more metals by means of a fusible alloy of tin and lead called solder. The solder used in the operation must melt at a lower temperature than the metals being joined together. However, the nearer the melting points of the solder and the soldered metals, the stronger the completed joint."
- The quotation best supports the statement that the melting points of metals being soldered should be*
- A) identical with the melting point of the solder
 - B) identical with each other
 - C) high enough to permit a strong joint
 - D) lower than the melting point of tin or of lead
 - E) higher than the melting point of the solder
75. VIVID means most nearly
- A) rare
 - B) intense
 - C) imaginary
 - D) absurd
 - E) attractive

76. NOTE is related to MESSAGE as PICTURE is related to
- A) scene
 - B) camera
 - C) artist
 - D) frame
 - E) gallery
77. An EXIGENCY means most nearly
- A) an undue hurrying in acting
 - B) a series of misfortunes
 - C) an act causing disorder
 - D) a case demanding urgent action
 - E) a task requiring specific skills
78. The saying "That is well spoken which is well taken" means most nearly
- A) Sensitive people are quick to imagine insults.
 - B) To accept reproof meekly shows nobleness of spirit.
 - C) The way in which a remark is received demonstrates its appropriateness.
 - D) He who ignores one insult will receive many others.
 - E) He who laughs at his own expense has few enemies.
79. (*Reading*) "When the snow of one winter does not entirely melt during the summer but is added to that of the following winter, there is a gradual accumulation of snow which may result in a glacier. The lower layers are compressed into ice by the weight of the overlying snow and the mass in time begins to spread. The glaciers move downward, following the valleys and ravines, until they reach a point at which the rate of melting equals or exceeds the rate of ice advance."

The quotation best supports the statement that glaciers

- A) cease advancing only upon the arrival of summer
 - B) move very slowly even on steep slopes
 - C) move downward and forward until checked by warmth
 - D) form in all areas that are cold and snowy
 - E) cover great distances in their advance each year
80. The saying "Anger dies quickly with a great man" means most nearly
- A) A good man is slow to anger.
 - B) Nothing ruffles a good disposition.
 - C) One can forgive but not forget.
 - D) Strong passions cannot last.
 - E) To continue to bear malice is petty.