

CITY OF ITHACA 108 East Green Street Ithaca, New York 14850-5690

OFFICE OF HUMAN RESOURCES / CIVIL SERVICE Telephone: 607 / 274-6539 Fax: 607 / 274-6574 E-mail: hrdept@cityofithaca.org

FIREFIGHTER OPEN-COMPETITIVE EXAM NO. 67-741

Application Fee:

\$15.00 non-refundable fee for Tompkins County residents

The fee is waived for City of Ithaca residents.

The fee may also be waived for candidates who are unemployed and primarily responsible for the support of a household, or who are receiving public assistance.

- Examination Date: April 25, 2020
- Application Deadline: March 12, 2020
- Who May Apply: Residents of Tompkins County Affidavits of Residence must be submitted within one week of the above application deadline (no later than March 19, 2020).

<u>APPLICATION FEE</u>: Tompkins County residents must pay a non-refundable \$15.00 application fee at the time of application. Application fees may be paid by check or money order payable to the "City of Ithaca", or by electronic payment through our online application. Please be sure to include your name and examination number on your check or money order. <u>We do not accept cash</u>. Payment must be received by application deadline of March 12, 2020 by 4:30 p.m.

Be sure to compare your qualifications carefully with the requirements listed on this announcement, including the residency and age requirements. No refunds will be made if your application is disapproved, if you fail to appear for the exam, or if you fail the exam.

Applications submitted without the required fee or waiver request will be disapproved. A check that is returned due to insufficient funds may result in the disapproval of your application and further service charges.

<u>APPLICATION FEE WAIVER</u>: The application fee will be waived for all residents of the City of Ithaca, provided that you submit a "Request for Application Fee Waiver" with your application.

The application fee will also be waived for applicants who are unemployed and primarily responsible for the support of a household, eligible for Medicaid, receiving Supplemental Security Income (SSI) payments or Public Assistance (Temporary Assistance for Needy Families/Family Assistance or Safety Net Assistance), or certified as eligible for the Job Training Partnership Act/Workforce Investment Act through a State or local social service agency, provided that you submit a "Request for Application Fee Waiver" with your application.

All requests for application fee waivers are subject to verification.

<u>ACCEPTANCE OF APPLICATIONS</u>: Applications must be received by the City of Ithaca Human Resources Department no later than 4:30 PM EST on the last filing date indicated above. Postmarks

are not accepted. All applications must be original applications, either hard copy or electronically submitted through our online application program. We do not accept faxed applications, e-mailed applications or photocopies of applications.

<u>APPLICATION MATERIALS REQUIRED</u>: A City of Ithaca application, copy of high school transcript or GED, driver license, Affidavit of Residence, and application fee or waiver.

VACANCIES: Currently, there are two (2) vacancies in the City of Ithaca Fire Department. The eligible list established as a result of this examination may be used to fill this vacancy and any future vacancies that may occur during the life of the eligible list.

RESIDENCY: Candidates must be legal residents of Tompkins County at least one month prior to the date of the examination. Preference in certification may be given to candidates who are residents of the municipality in which appointment is to be made, provided that the candidate is a resident of such municipality at the time of examination and remains a resident of such municipality continuously thereafter, up to and including the dates of certification and appointment.

SALARY: \$42,698

DISTINGUISHING FEATURES OF THE CLASS: The work involves responsibility for the combined functions of preventing, controlling and suppressing fires and providing emergency medical services to residents. Firefighters are also responsible for hazardous materials incident response and technical rescue incident response. The work involves driving and operating fire apparatus, as well as a variety of specialized tools and equipment used when responding to emergency incidents. When not responding to emergencies, firefighters are responsible for the routine maintenance, repair and cleaning of equipment, tools, buildings and property. Firefighters may also perform fire code enforcement activities, public education activities, and training. Work is performed under the direct supervision of a superior officer. Does related work as required.

<u>MINIMUM QUALIFICATIONS</u>: Graduation from high school or possession of a high school equivalency diploma.

SPECIAL REQUIREMENTS:

- 1. Candidates must obtain certification as a New York State Emergency Medical Technician (EMT) within two years of appointment, and maintain said certification for the duration of employment.
- Possession of a valid New York State Class D driver license or a valid driver license equivalent to a New York State Class D driver license at the time of appointment and maintenance of said license for the duration of employment.

If you expect to complete the educational requirement within six (6) months of the date of examination, you can be admitted to this examination. If successful on the examination, you will not be certified for appointment until you have submitted proof of completion of the requirements to the Civil Service Commission. Proof must be submitted within eight months of the date of examination. Failure to do so will result in removal of your name from the eligible list.

ADDITIONAL REQUIREMENTS:

1. AGE: Candidates must be at least nineteen (19) years of age to be eligible for appointment.

 MEDICAL REQUIREMENTS: Candidates must meet the medical standards prescribed by the City of Ithaca Civil Service Commission. Candidates who are offered employment as Firefighters will be required to pass this job-related medical examination, which verifies that the candidate is medically able to perform the essential duties of a firefighter. Employment offers will be conditional upon the successful completion of the medical examination.

Copies of the medical standards are available from the Office of Human Resources/Civil Service – 108 East Green Street – Ithaca, NY 14850 or hrdept@cityofithaca.org.

BACKGROUND INVESTIGATION: Applicants may be required to undergo a State and national criminal history background investigation, which will include a fingerprint check, to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification.

<u>SCOPE OF THE EXAMINATION</u>: The written examination will cover knowledges, skills and/or abilities in such areas as:

1. Ability to learn and apply information

These questions test for the ability to learn new information and apply it to answer questions effectively. Candidates will read information presented in a Training Lesson and then answer questions regarding the information and procedures covered in the Training Lesson. All information needed to answer the questions will be provided in the Training Lesson, and candidates will be able to refer to the Training Lesson when answering the questions. Some of the questions may require candidates to combine information from different portions of what has been learned in the Training Lesson. No prior knowledge of any specific job or subject matter is needed.

2. Basic arithmetic

This section requires candidates to use basic arithmetic (add, subtract, multiply, divide) to find a missing value in a table of numbers. Candidates will not need to refer to the Training Lesson or any other section of the test to answer the questions in this section. All information needed to answer each question will be contained in this section. No knowledge of firefighting or any other job is required. **Candidates should bring a hand-held battery- or solar-powered calculator for use on this test.** Candidates will **not** be permitted to use the **calculator** function on their **cell phone**.

3. Reading comprehension

These questions test for the ability to understand written materials (e.g., sentences, passages) and answer questions about the information presented. Candidates will be provided with reading passages, followed by questions related to each passage. Each question will require candidates to demonstrate that they have read and understood the information contained in the passage.

4. Situational judgment

This section tests for the ability to identify appropriate and effective responses to work-related challenges. Candidates will be presented with several scenarios that reflect the types of challenges one could encounter in a work environment. They will then be asked to rate the effectiveness of a number of possible responses to each scenario.

A Guide for the Written Test for **Firefighter** is available at the New York State website: <u>https://www.cs.ny.gov/testing/testguides.cfm</u>. Candidates not having access to a computer or the internet may request copy of the test guide from the municipal civil service office conducting this examination using the contact information found elsewhere on this announcement.

NOTE: Most Civil Service examinations do not require the use of a quiet, hand-held calculator or slide rule; however, candidates have the option of bringing a battery-operated or solar-powered calculator to the test room unless specifically notified that their use is prohibited. Devices with typewriter keyboards, spell checkers, Personal Digital Assistants, Address Books, Language Translators, Dictionaries, or any similar devices are prohibited. **USE OF CALCULATORS IS RECOMMENDED FOR THIS EXAM.**

RELIGIOUS ACCOMMODATION - CANDIDATES WITH DISABILITIES - MILITARY MEMBERS:

- Applicants whose religious beliefs or military service prevent their taking examinations on the scheduled date and candidates with disabilities who require special accommodations to take the test should indicate the need for special arrangements on their application. Candidates who are called to military service after filing an application should send requests for an alternate test date to the City of Ithaca Human Resources/Civil Service Department before the test date.
- Military Service Members: If you apply for an examination during the filing period but are on active military duty on the date the examination is scheduled, you may request a military makeup examination. Contact the City of Ithaca Human Resources/Civil Service Department for more information. If you are on active duty or discharged after the filing period has begun, you may apply for the examination up to ten days before the test date.

SECTION 23.2 STATEMENT: This examination will be prepared and rated in accordance with Section 23(2) of the Civil Service Law. The provisions of New York State Civil Service Law, Rules and Regulations dealing with the preparation and rating of examinations will apply to this examination.

<u>APPLICATIONS MAY BE OBTAINED</u>: at the City of Ithaca Human Resources/Civil Service Department - 108 East Green Street - Ithaca NY 14850. You may also apply online or download an application at <u>www.cityofithaca.org</u>.

TIME AND PLACE OF THE EXAMINATION: Approved candidates will be notified by mail regarding the time and place of the examination. If notice of approval or disapproval is not received three (3) days prior to the exam date, please call the City of Ithaca Human Resources/Civil Service Department at (607) 274-6539.

MULTIPLE EXAMINATIONS SCHEDULED FOR THE SAME DAY: If you have applied to take a written test announced by either one or several local jurisdictions (county, town, city) scheduled to be held on the same test date as this written test, you must notify each of the local jurisdictions no later than two weeks before the test date, so they can make arrangements for taking all tests at one test site. All examinations for positions in State government will be held at a State examination center.

VETERAN'S CREDIT: Veterans or disabled veterans who are eligible for additional credit must submit an application for veteran's credit with their application for examination or at any time between the dates of their application for examination and the date of the establishment of the resulting eligible list. Applications for veteran's credit are available from this office. Veteran's credits can only be added to a passing score on the examination.

Effective January 1, 1998, the State Constitution was amended to permit a candidate currently in the armed forces to apply for and be conditionally granted veteran's credit in examinations. Any candidate who applies for such credit must provide proof of military status to receive the conditional credit. No credit may be granted after the establishment of the list. It is the responsibility of the candidate to provide appropriate documentary proof indicating that the service was in time of war, as defined in Section 85 of Civil Service Law, and that the candidate received an honorable discharge or was released under honorable conditions in order to be certified at a score including veteran's credits.

ADDITIONAL CREDIT FOR CHILDREN OF FIREFIGHTERS AND POLICE OFFICERS KILLED IN THE

LINE OF DUTY: In conformance with section 85-a of the Civil Service Law, children of firefighters and police officers killed in the line of duty shall be entitled to receive an additional ten points in a competitive examination for original appointment in the same municipality in which his or her parent has served. If you are qualified to participate in this examination and are a child of a firefighter or police officer killed in the line of duty in this municipality, please inform this office of this matter when you submit your application for examination. A candidate claiming such credit has a minimum of two months from the application deadline to provide the necessary documentation to verify additional credit eligibility. However, no credit may be added after the eligible list has been established.

GENERAL INSTRUCTIONS AND INFORMATION

- 1. Falsification of any part of the "Application for Employment" will result in disqualification.
- 2. Applicants must answer every question on the application form and make sure that the application is complete in all respects. Incomplete applications will be disapproved.
- 3. Candidates who wish to take more than one examination must complete the "Application for Employment" for each examination. If you are cross-filing for another examination to be held on the same date, please indicate this on the application and specify the examination title and number, and the jurisdiction offering the other examination.
- 4. Appointments from an eligible list must be made from the top three candidates willing to accept appointment. The duration of an eligible list may be fixed for a minimum period of one (1) year and a maximum period of four (4) years.
- 5. It is the responsibility of the candidate to notify the City of Ithaca Human Resources/Civil Service Department of any change in address. No attempt will be made to locate candidates who have moved.
- Issued by: City of Ithaca Civil Service Commission January 17, 2020

THE CITY OF ITHACA AN EQUAL OPPORTUNITY EMPLOYER WITH A COMMITMENT TO WORKFORCE DIVERSIFICATION



A Guide to the Written Test

for the

Firefighter Series

(For all municipalities except White Plains, Mount Vernon, and New Rochelle)

Andrew M. Cuomo Governor Lola W. Brabham Acting Commissioner

TEST GUIDE

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GENERAL INFORMATION

Introduction: The New York State Department of Civil Service has developed this test guide to familiarize you with the written test used for the Firefighter *examination series*. The information presented below may help you in preparing to take one or more of the examinations in this examination series.

What is an examination series: An examination series is a collection of examinations that are held on the same date and use the same test booklet(s). Examination series may contain just a few examinations or several hundred.

Determining the Subject Areas in your examination(s): To determine the subject areas that are included in your examination(s), you should refer to the Examination Announcement(s) for the particular examination(s) you will be taking. The subject areas are listed under the heading "Subjects of Examination."

Using the Candidate Directions provided at the test site: When you take your examination(s), you will be given a set of Candidate Directions. Read these very carefully so that you correctly identify the questions you need to answer for the examinations you are taking.

Test questions: All the test questions included in the Firefighter examination series are multiple-choice questions. No specialized knowledge of firefighting is required. See the s*ample questions* in the subject area sections in this test guide for examples.

Subject area information: After the list of subject areas, information is provided on how candidates will be tested in each of the subject areas listed. For each subject area, a Test Task is provided. This is an explanation of how questions will be presented and how to correctly answer them. Read each explanation carefully. (Please note: This test guide may not provide information on every subject area included in your examination.)

Sample questions: This test guide provides at least one sample question for each subject area listed. The sample questions will be similar to what will be presented in the test booklet(s). This test guide provides the Solution and correct answer for each sample question presented. You should study these in order to understand how the correct or best answers were determined.

Test security: Please read the brief discussion on Test Security provided at the end of this guide. It provides an explanation of test takers' obligations and responsibilities.

Helpful tips for taking the test: The last section of this guide contains some helpful tips on how to prepare for and take a Civil Service test.

LIST OF SUBJECT AREAS

- 1. ABILITY TO LEARN AND APPLY INFORMATION: These questions test for the ability to learn new information and apply it to answer questions effectively. Candidates will read information presented in a Training Lesson and then answer questions regarding the information and procedures covered in the Training Lesson. All information needed to answer the questions will be provided in the Training Lesson, and candidates will be able to refer to the Training Lesson when answering the questions. Some of the questions may require candidates to combine information from different portions of what has been learned in the Training Lesson. No prior knowledge of any specific job or subject matter is needed.
- 2. BASIC ARITHMETIC: This section requires candidates to use basic arithmetic (add, subtract, multiply, divide) to find a missing value in a table of numbers. Candidates will not need to refer to the Training Lesson or any other section of the test to answer the questions in this section. All information needed to answer each question will be contained in this section. No knowledge of firefighting or any other job is required. Candidates should bring a hand-held battery- or solar-powered calculator for use on this test. Candidates will not be permitted to use the calculator function on their cell phone.
- 3. READING COMPREHENSION: These questions test for the ability to understand written materials (e.g., sentences, passages) and answer questions about the information presented. Candidates will be provided with reading passages, followed by questions related to each passage. Each question will require candidates to demonstrate that they have read and understood the information contained in the passage.
- 4. SITUATIONAL JUDGMENT: This section tests for the ability to identify appropriate and effective responses to work-related challenges. Candidates will be presented with several scenarios that reflect the types of challenges one could encounter in a work environment. They will then be asked to rate the effectiveness of a number of possible responses to each scenario.

SUBJECT AREA 1

ABILITY TO LEARN AND APPLY INFORMATION: These questions test for the ability to learn new information and apply it to answer questions effectively. Candidates will read information presented in a Training Lesson and then answer questions regarding the information and procedures covered in the Training Lesson. All information needed to answer the questions will be provided in the Training Lesson, and candidates will be able to refer to the Training Lesson when answering the questions. Some of the questions may require candidates to combine information from different portions of what has been learned in the Training Lesson. No prior knowledge of any specific job or subject matter is needed.

TEST TASK: In this section of the exam, candidates will read information from a Training Lesson to help them learn how to operate a piece of equipment. The training information is about a piece of equipment that is not real; it was created for the exam. Because the piece of equipment is not real, no prior knowledge of any specific job or subject matter is needed to answer the questions in this section.

Candidates will study the information presented in the Training Lesson, take notes if desired, and answer questions about information contained in the Training Lesson. Each question will be followed by four possible answers. Candidates must select the correct answer to demonstrate what they have learned in the Training Lesson. Candidates will be able to refer to the Training Lesson while answering the questions.

SAMPLE TRAINING LESSON:

Introduction to the Systems Monitor

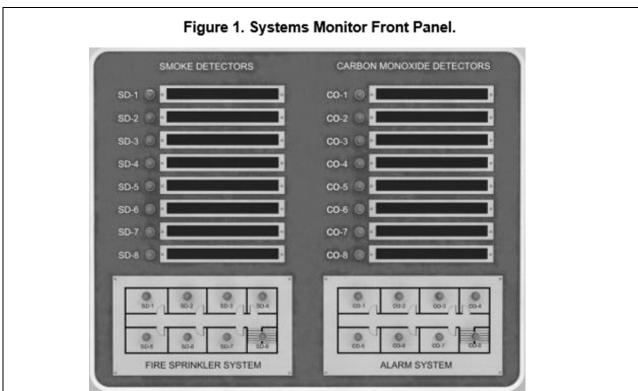
This training lesson will provide you with a brief introduction to the Building Safety Systems Monitor (i.e., Systems Monitor). The Systems Monitor is a wall-mounted panel that monitors the building's security and fire safety systems, including the building's smoke detectors, carbon monoxide detectors, alarm systems, and fire sprinkler systems.

Smoke Detector Monitoring Functions

A picture of the Systems Monitor front panel is presented in Figure 1.

At the top left of the panel, you will see the "Smoke Detectors" section with eight displays labeled SD-1 through SD-8. These displays provide information about the eight smoke detectors installed throughout the building. Each display has an indicator light and a status message display.

SUBJECT AREA 1 – CONTINUED



The table below presents the various possible smoke detector conditions, what will be displayed on the indicator light, the status message display under each condition, and the appropriate action to be taken under each condition.

Smoke Detector Condition	Indicator Light will be …	Status Message Display will read 	Appropriate Action
Operating normally; no smoke detected	Green	Blank	No action needed.
Smoke detected	Flashing Red	"808 Smoke Detected"	Alert building security, who will investigate the area and contact local fire department if necessary. Immediately after alerting building security, you must alert a supervisor.
Failed self-check	Red	"801 Failed Self- Check"	Send technician who will examine detector, and repair or replace it if necessary.
Power loss to smoke detector	Off	"802 Power Loss"	Notify electrician.

Table 1. Smoke Detector Conditions.

This concludes our brief introduction to the smoke detector monitoring features of the Systems Monitor.

SAMPLE QUESTION 1:

If power is cut to a smoke detector, what will you see displayed on the Systems Monitor for that detector?

- A. 808 Power Loss
- B. 802 Power Loss
- C. 801 Failed Self Check
- D. nothing; blank display

The correct answer to sample question 1 is B.

SOLUTION TO SAMPLE QUESTION 1: To answer this question correctly, candidates must refer to the information presented in Table 1 in the Training Lesson.

Choice A: Table 1 in the Training Lesson lists the possible status message display readings, and "808 Power Loss" is not among the displays listed. Therefore, choice A is incorrect.

Choice B: Table 1 in the Training Lesson states that, in the event of a power loss to the smoke detector, the status message display will read "802 Power Loss." Therefore, choice B is the correct answer.

Choice C: Table 1 in the Training Lesson states that the status message "801 Failed Self-Check" will be displayed if the smoke detector self-check fails, and not in the event of power loss to the smoke detector. Therefore, choice C is incorrect.

Choice D: Table 1 in the Training Lesson states that the status message display will be blank if the smoke detector is operating normally and no smoke is detected, not in the event of power loss to the smoke detector. Therefore, choice D is incorrect.

SUBJECT AREA 1 – CONTINUED

SAMPLE QUESTION 2:

What should you do **first** if the Systems Monitor shows a smoke detector with the message "808 Smoke Detected?"

- A. alert building security
- B. contact local fire department
- C. alert a supervisor
- D. alert a technician

The correct answer to sample question 2 is A.

SOLUTION TO SAMPLE QUESTION 2: To answer this question, candidates must refer to the information presented in Table 1 in the Training Lesson.

Choice A: Table 1 in the Training Lesson states that, in the event of smoke detected, the first thing you should do is alert building security. Therefore, choice A is the correct answer.

Choice B: Table 1 in the Training Lesson states that, in the event of smoke detected, you should alert building security. It also states that building security, not you, will then contact the local fire department if necessary. Therefore, choice B is incorrect.

Choice C: Table 1 in the Training Lesson states that, in the event of smoke detected, you should alert a supervisor **after** you have alerted building security. Therefore, choice C is incorrect.

Choice D: Table 1 in the Training Lesson states that you should alert a technician in the event of a failed selfcheck, and not in the event of smoke detected. Therefore, choice D is incorrect.

SUBJECT AREA 2

BASIC ARITHMETIC: This section requires candidates to use basic arithmetic (add, subtract, multiply, divide) to find a missing value in a table of numbers. Candidates will not need to refer to the Training Lesson or any other section of the test to answer the questions in this section. All information needed to answer each question will be contained in this section. No knowledge of firefighting or any other job is required. **Candidates should bring a hand-held battery- or solar-powered calculator for use on this test.** Candidates will **not** be permitted to use the **calculator** function on their **cell phone**.

TEST TASK: Questions in this section will present numeric information in a table, with some values missing, and ask candidates to calculate the missing value(s) using basic arithmetic functions. Candidates may write in the test booklet and/or use a calculator for this section. Quiet, hand-held, solar- or battery-powered calculators are permitted. Cell phones and devices with typewriter keyboards are strictly prohibited.

SAMPLE TABLE:

Yearly Alarm Events Number of Each Type of Alarm Per Year					
	2014	2015	2016	2017	2018
Smoke Detected	8	12	14	CCC	5
Smoke Detector Failed Self-Check	12	19	15	15	9
Smoke Detector Power Loss	18	21	25	6	DDD
CO Detected	12	19	16	12	13
CO Detector Failed Self-Check	23	ΑΑΑ	19	10	24
CO Detector Power Loss	22	17	20	5	8
Yearly Total	95	101	BBB	69	77

The table below presents yearly alarm events, per each type of alarm, for each year from 2014 through 2018. The total number of alarms for each year is presented in the bottom row.

Please refer to this table when answering sample questions 1 and 2 on the next page.

SUBJECT AREA 2 – CONTINUED

SAMPLE QUESTION 1:

What number should be entered into the table in place of missing value AAA?

- A. 9
- B. 13
- C. 15
- D. 19

The correct answer to sample question 1 is B.

SOLUTION TO SAMPLE QUESTION 1: To answer this question correctly, candidates must note that there were a total of 101 alarms in the year 2015. In other words, when the values for all six types of alarm events from the year 2015 are added together, the total will equal 101. Adding the number of alarms for the five types of alarm events presented in the table (excluding "CO Detector Failed Self-Check" for missing value AAA) produces a total of 88.

12 + 19 + 21 + 19 + 17 = 88

88 plus missing value AAA will equal 101. To find missing value AAA, candidates must therefore subtract 88 from 101.

101 - 88 = **13**

Therefore, choice B is the correct answer.

SAMPLE QUESTION 2:

What number should be entered into the table in place of missing value BBB?

- A. 89
- B. 99
- C. 109
- D. 119

The correct answer to sample question 2 is C.

SOLUTION TO SAMPLE QUESTION 2: Missing value BBB represents the total number of alarms in 2016. To find this missing value, simply add together the values for all six types of alarm events that occurred in 2016.

14 + 15 + 25 + 16 + 19 + 20 = **109**

Therefore, choice C is the correct answer.

SUBJECT AREA 3

READING COMPREHENSION: These questions test for the ability to understand written materials (e.g., sentences, passages) and answer questions about the information presented. Candidates will be provided with reading passages, followed by questions related to each passage. Each question will require candidates to demonstrate that they have read and understood the information contained in the passage.

TEST TASK: In this section of the exam, candidates will read a number of brief written passages. Each reading passage will be followed by questions pertaining to that passage. Each question will be followed by four possible statements. Candidates must choose the statement that best answers the question.

SAMPLE READING PASSAGE:

BRG Services Website Excerpt

Thank you for choosing to install the Building Safety Systems Monitor, manufactured by BRG Services (BRG). At BRG, our mission is to provide equipment and services to ensure the safety and security of your building and its occupants in a cost-effective, professional, and personalized manner. To that end, our Solutions Consultants will work closely with you to identify a solution that is the right fit for your needs.

Devices such as the Building Safety Systems Monitor provide cutting-edge, premium, continuous monitoring to immediately alert you to fire- or carbon monoxide-related issues. But the protection of your personnel and property go beyond being alerted to an emergency – you also need a plan of action in the event such an emergency arises, and you need someone responsible for ensuring that plan is well executed when the time comes. In fact, local law requires all buildings within the city limits to have an Emergency Plan Director (EPD).

At BRG, we can fill this need for you. Our trained, professional EPDs identify the possible scenarios in which emergency action plans are necessary. They also then form those plans, review them with your organizational leadership and local first responders, and ensure all plans are legal, thorough, and actionable. EPDs break down each plan for you into concrete steps. They work closely with you to ensure that the needed equipment, hardware, and supplies for each plan are on hand and available across your facility.

More importantly, BRG's EPDs make sure the people within your facility know their roles in the event of any kind of emergency. We ensure they get the appropriate training to handle their responsibilities should the need ever arise. We offer regular refresher training and even formal certification if needed to ensure staff on your premises are up to date with the established action plan.

Contact us today if you are in need of an EPD!

SUBJECT AREA 3 – CONTINUED

SAMPLE QUESTION:

According to the reading passage, what is the primary reason you should have an Emergency Plan Director?

- A. to alert you to fire- or carbon monoxide-related issues in the building
- B. to ensure you have a well-designed plan to protect your personnel and property in case of emergency
- C. to train and certify your staff on the proper operation of the Systems Monitor
- D. to ensure you have a direct contact with local law enforcement and first responders

The correct answer to sample question 2 is B.

SOLUTION: To answer this question correctly, candidates must evaluate each choice against the written material provided and determine which choice is correct.

Choice A: Paragraph 2, Sentence 1 of the reading passage states that the Building Safety Systems Monitor (not the Emergency Plan Director) will "alert you to fire- and carbon monoxide-related issues." Therefore, Choice A is incorrect.

Choice B: Paragraph 2, Sentence 2 of the reading passage states that "...the protection of your personnel and property go beyond being alerted to an emergency – you also need a plan of action in the event such an emergency arises, and you need someone responsible for ensuring that plan is well executed when the time comes." The Emergency Plan Director is referred to in paragraph 3 as the trained professional who can help with the creation and execution of such a plan. Therefore, Choice B is the correct answer.

Choice C: Paragraph 4, Sentence 3 of the reading passage states that an EPD can provide training and certification "to ensure staff on your premises are up to date with the established [emergency] action plan" (not on the operation of the Systems Monitor). Therefore, Choice C is incorrect.

Choice D: Paragraph 2, Sentence 3 of the reading passage states that "local law requires all buildings within the city limits to have an EPD," but it does not state that the EPD would be in direct contact with local law enforcement and first responders. Therefore, Choice D is incorrect.

SUBJECT AREA 4

SITUATIONAL JUDGMENT: This section tests for the ability to identify appropriate and effective responses to work-related challenges. Candidates will be presented with several scenarios that reflect the types of challenges one could encounter in a work environment. They will then be asked to rate the effectiveness of a number of possible responses to each scenario.

TEST TASK: In this section, candidates will read a scenario that describes a challenge one might encounter in a work setting. After reading each scenario, candidates will then be presented with options for addressing the challenge presented in that scenario. Candidates will rate the effectiveness of **each** of the response options using one of four possible ratings: Highly Ineffective, Somewhat Ineffective, Somewhat Effective, or Highly Effective.

There may be several approaches that effectively (or ineffectively) address a given challenge. In other words, candidates may use the same rating (e.g., Highly Effective, Somewhat Effective, Somewhat Ineffective, Highly Ineffective) for more than one response option for a particular scenario.

SAMPLE SCENARIO:

Setting:

John is part of the night crew at a manufacturing company. John's supervisor has asked him to help Kevin, a coworker who has been on the job a few months less than John. Kevin has not been performing well in a particular area, and the supervisor wants John to help Kevin develop his skills.

John: "Kevin, I wanted to share with you some ideas that I really think could help you out."

Kevin: "Thanks, but no thanks. I know our supervisor asked you to help me, but I'm doing just fine on my own."

John: "Actually, our supervisor is concerned that your performance in this area is not where it should be. That's why he asked me to try and help you."

Kevin: "Look, I don't need your help and you're not my boss. In fact, you were only hired a couple of months before me, so why do you think you're so much better than I am?"

Instructions: A number of possible responses to this scenario are listed on the next page. Read each response option and then rate the level of effectiveness that best describes each possible response to the scenario, using the scale provided.

Be sure to rate the effectiveness of <u>all</u> the response options. Note that the same rating (Highly Effective, Somewhat Effective, Somewhat Ineffective, Highly Ineffective) may be used for more than one response option.

SUBJECT AREA 4 – CONTINUED

Highly Ineffective	Somewhat Ineffective	Somewhat Effective	Highly Effective
Likely to result in far more negative than positive outcomes	Likely to result in somewhat more negative than positive outcomes	Likely to result in somewhat more positive than negative outcomes	Likely to result in far more positive than negative outcomes
$\textcircled{\ }$	(A) (B)		Ø

Please rate each possible scenario response using this scale.

Possible Scenario Responses:

- 1. John tells Kevin that he is just doing what he was told.
- 2. John tells Kevin that they need to work together or the supervisor will be upset with both of them.
- 3. John tells Kevin it is disrespectful to talk to any of his colleagues that way, even if they are not his supervisor.
- 4. John tells Kevin that they will both be more successful if they work together and learn from one another.
- 5. John explains to Kevin that this is an area where he could be of help, and suggests that Kevin may be able to help him in a different area.

SOLUTION: The correct rating for each response option is presented and explained below.

Response Option 1: This response is **Somewhat Ineffective**. Though it is true that John is doing what his supervisor told him to do, this response does not further the goal of helping Kevin develop his skills.

Response Option 2: This response is **Somewhat Effective**. John's attempt to try and work with Kevin is positive, but the reason should be so they can help one another to each improve their skills/performance, not simply to avoid the supervisor's disapproval.

Response Option 3: This response is **Highly Ineffective**. Calling Kevin disrespectful will likely only aggravate Kevin more, and this response does not further the goal of helping Kevin develop his skills.

Response Options 4: This response is **Highly Effective**. This response emphasizes cooperation and mutual benefit and keeps the focus on the ultimate goal of performing more effectively.

Response Options 5: This response is **Highly Effective**. This response represents a positive, constructive approach to the situation. John is demonstrating that he does not think he is superior to Kevin and that they can both be of help to each other to achieve the ultimate goal of performing more effectively.

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HELPFUL TIPS FOR TAKING THE TEST

Your attitude and approach to the test will influence how well you perform. A positive attitude will help you do your best.

Before the test ...

- Study and review this guide to familiarize yourself with what the test will cover.
- Study and review the subject areas that will be covered on the test.
- Read the General Guide to Written Tests on our website, www.cs.ny.gov/testing/testguides.cfm.
- Get plenty of rest the night before the test.

On the day of the test ...

- Arrive at the test site on time.
- Bring your Admission Notice, two No. 2 pencils, a photo ID containing your signature, a quiet lunch or snack, and any other **allowed** materials.
- Do **NOT** bring this test guide to the test site.

At the test site ...

- Do **NOT** bring cell phones, beepers, headphones, or any electronic or other communication devices to the test site.
- The use of such devices anywhere on the grounds of the test site (this includes the test room, hallways, restrooms, building, grounds, and parking lots) could result in your disqualification.

During the test ...

- Read and follow all directions on your Admission Notice, test booklets, answer sheets, and Candidate Directions.
- Follow the Monitor's instructions.
- Before choosing an answer, read all of the answer choices.
- Be sure the answer you mark on your answer sheet corresponds to the response option you are choosing.
- Be sure the question number on your answer sheet corresponds to the number of the exam question you are answering.
- Keep track of time.

After the test ...

- Do **NOT** remove any test materials from the test room.
- Do **NOT** paraphrase, reconstruct, or reproduce the test material in any way.
- Do **NOT** discuss the test material with others.

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Booklet ITTS

Improving Your Test-Taking Skills

The CSEA Examination Preparation Booklet Series is designed to help members prepare for New York State and local government civil service examinations. This booklet is designed for practice purposes only and its content may not conform to that of any particular civil service examination.

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IMPROVING YOUR TEST-TAKING SKILLS

The information in this booklet is the result of ten years of studying the Civil Service exam system and teaching people how to improve their scores. Many people have found that this information has been extremely helpful to them, especially when they've combined it with systematic practice with exam preparation questions. We have included practice questions and explanations in this booklet. In addition, there are other test-taking booklets available through CSEA which will provide you with more practice if you feel you need it. Many of these other booklets were prepared for state promotional exams, but the categories they cover are the same or very similar to those found on county exams. There is a list of available booklets in the Appendix.

This booklet is divided into two sections: test-taking tips and sample reading comprehension questions. The test-taking tips section includes an outline of general test-taking tips, a more detailed version of the general test-taking tips, and a few tips for answering reading comprehension questions correctly. The sample questions section includes the reading comprehension questions themselves, an answer key, and full explanations. As we mentioned above, there is also an appendix in the back of the booklet which gives a listing of the booklets available from CSEA, as well as the Diagnostic Worksheet. We will explain the use of the worksheet later.

GENERAL TEST-TAKING TIPS

First, a quick review:

- 1. Practice, practice, practice
- 2. Be positive
- 3. Be patient and persistent
- 4. Know where you're going and get there early
- 5. Be prepared
- 6. Bring food
- 7. Don't be thrown by initial anxiety
- 8. Pace yourself
- 9. Take deep breaths and short rest breaks
- 10. Read very carefully
- 11. Pick the best possible answer
- 12. Assess the reasonableness of your answer
- 13. Don't overanalyze and don't jump to conclusions
- 14. NEVER, NEVER leave an answer blank
- 15. Treat your scrap paper with respect

1) PRACTICE

PRACTICE, PRACTICE, PRACTICE. Practice is crucial. We have been told countless times by people that practicing with sample questions has significantly raised their scores, sometimes by more than thirty points. Keep practicing, even if you have doubts about your ability to do any better. If you take the time to practice, you will improve. As you practice, you develop an understanding of how to do well on these exams. It's as if you are adding a new compartment in the brain, a "multiple-choice mind," that you can trot out for the exams and keep in mothballs the rest of the time if you like.

We have included a number of sample questions and complete explanations for them in this booklet. If you make a separate answer sheet for yourself rather than marking your answers in the booklet, you'll be able to work with the questions more than once. It's best to do a few questions and then check your answers rather than doing all of the questions at once. In this way, you can see whether or not you're on the right track. Even if you've answered a question correctly, read the explanation once to make sure your answer is right for the right reasons. If you have time, go back over the questions the week before the exam. You should be able to see an improvement in your scores, and this should increase your self-confidence. Doing the same questions over a period of time will also help you to be more aware of the tendencies and habits you have that do you in. In order to further help you assess your test-taking habits, we've included a diagnostic worksheet in the Appendix. It contains a listing of some common problems people have and has proven to be a valuable self-assessment tool.

Practicing is also important because the exam can be a test of your endurance as much as a test of your reasoning ability. Most of us are not used to sitting for hours reading something that we aren't particularly interested in, and trying to figure out questions that we could care less about. Since practicing with exam preparation questions at home does not require the same amount of endurance as taking the actual exam, we've tipped the scales a bit by making the reading passages in this booklet longer than the ones you would most likely find on an exam.

If you'd like more questions to practice with, you can match up many of the subjects listed on your exam announcement with the other test preparation booklets that are available through CSEA, and order those you feel might be helpful to you. No matter how many questions you choose to work with, try to spread your studying out over a period of time. It isn't wise to pack all of your studying into the week or night before the exam. Some people are successful at cramming, but, for most of us, cramming results in lost sleep and not being able to think clearly during the exam. It's fine to do something fun the night before the exam if you can, but not too much fun or else you'll be tired and unable to think. Of course, if you would rather spend the evening before the exam reviewing some test-taking material, then you should do so. In either case, whether you decide to work or play, moderation is important.

Plan to reward yourself after you finish the exam. Getting ready for and taking an exam can make people feel deprived; having something to look forward to can do a lot to foster perseverance. It doesn't have to cost money. It might be something you'd feel guilty about otherwise -- taking the rest of the day to do something just for yourself perhaps. It doesn't matter what it is as long as it makes you feel rewarded.

2) BE POSITIVE

It helps so much to look at this as a positive experience rather than as a dreaded activity that's being forced upon you. You may hate the idea, the very thought may send you into a spasm of negativity, but please try to figure out some way that taking this exam is benefiting you. (At the very least, it's good practice for the next one.) Whenever you start to feel anxious, put upon, resentful, or whatever, remind yourself of the benefits.

Of course, we aren't saying that positive thoughts are all that are necessary. In most cases, practicing with the test-taking booklets is more valuable. But what we tell ourselves has a great effect on how we view what's happening to us, and this can affect what <u>will</u> happen to us. Many studies have shown that people who consciously try to think positively can improve their performance significantly. This is true even in such areas as job interviews where it would seem that our own thoughts wouldn't carry as much weight as those of the interviewer.

What <u>do</u> you tell yourself about the exams and your prospects? If your internal communication runs something like: "I'M NOT A TEST-TAKER, I NEVER DO WELL ON THESE EXAMS, AND I'M TERRIBLE AT MATH," it's probably preventing you from doing as well as you otherwise might. If we already feel doomed to failure, how can we put much energy into learning how to do well? The more we repeat negative phrases, the more we reinforce them and the more difficult it is to overcome them. If we worry and obsess about the exam before, during and/or even after it's

over, we're also wasting a lot of energy. Thinking takes energy, and negative thinking takes even more energy. Fear, anxiety, or any other type of negative thinking is often very draining. That's why we feel exhausted when we're extremely worried about something or when we're under a lot of emotional strain.

It's very important to take the time to listen to your thinking so you can discover what really goes on in your mind. Once you have become better acquainted with your thought processes and have observed patterns of negative communications, you can change these habits by saying things that are the opposite of your fears or expectations. If math is your demon, then keep telling yourself, "I do well in math." If you get anxious when taking tests, and the page starts swimming before your eyes, tell yourself, "I think clearly under pressure." Create sentences that are positive and in the present. It's better to say, "I am perfectly calm whenever I take an exam" than to say, "I will not be nervous during the exam." The latter phrase introduces an element of doubt, and there are generally enough doubts in our minds already.

For some people, their negative self-talk involves putting themselves down, perhaps because they don't feel they do well on tests. If this is true for you, try to remember that being able to answer test questions correctly does not reflect upon your intelligence, your worth, or how well you actually do your job. It just reflects upon your ability to answer test questions. That's all. If you doubt this, think about people you know who are good at taking tests, but lacking in other areas like job competence or personality or basic human decency. Then think of those who are great people, highly intelligent, or incredibly effective in their jobs, but who do terribly on the exams.

3) BE PATIENT AND PERSISTENT

Have patience with yourself, with the exam preparation questions we've provided, and with the exam itself. When you practice, don't get depressed or upset if you do poorly at first -- or if you have done poorly in the past. You will improve.

A favorite trick of the impatient mind is to think that there must be a typo in the exam booklet or to be overly enamored with choice d: "none of the above." Typos do occur, but not that frequently, and "none of the above" is rarely the correct answer. In fact, it's not even given as a choice for most questions.

There are good test-takers and there are bad test-takers. Good test-takers have confidence; they believe that the problem can be solved and that they can solve it. Because they believe they can do it, they have the persistence to be good problem solvers. They stick with a problem until they get an answer. They analyze problems step by step, breaking them down into parts, and solving them piece by piece. And finally, they are active thinkers. They do anything to make the problem manageable and concrete: translate it into real life examples, draw diagrams, write things down in simple terms, or reorganize the facts.

4) KNOW WHERE YOU'RE GOING AND GET THERE EARLY

Make sure you know where you're going, how to get there, and if parking will be a problem. Try to leave the house a little bit early. Of course, you can still take the exam even if you're late, but why do that to yourself?

5) BE PREPARED

Be prepared -- provision yourself.

- 1. Bring your admittance card, and some form of I.D. in case you need it.
- 2. Bring a calculator if math or tables are included on the exam. In the past, people weren't allowed to use calculators in the exams, but people have been able to use them in recent years. So bring one just in case.
- 3. Bring a watch to reassure yourself that you have enough time, or to time yourself. There is generally enough time to answer the questions, but timing yourself will keep you from using up too much time and energy on one section.
- 4. Bring a few #2 pencils.

6) BEING PREPARED INCLUDES BRINGING FOOD

We made this a separate category because it is so important.

Civil Service tells people to bring food for the longer exams, but very few people do so. For some, it's hard enough to get themselves there without packing a lunch, too. Others are self-conscious about bothering people with noisy bags and wrappings. If that's the case, use plastic wrap instead of aluminum foil, but please take food.

Blood sugar levels rule our lives. Our brains need a constant, steady supply of glucose (blood sugar) to function properly. The average American lifestyle -- full of stress and fueled by a diet laden with sugar, caffeine, nicotine, processed foods, and alcohol -- very often interferes with the proper functioning of the brain. Most people need coffee, Coke, or donut injections throughout the day, but because their internal regulating mechanisms are so out of whack, they still feel as if they're in a trance by 11:30 in the morning and after 3:00 (or so) in the afternoon. When blood sugar is low, we are likely to become spacy, irritable, frustrated, depressed, or impatient. We may get headaches, or have trouble thinking clearly and concentrating. And during an exam, when the stakes are high, we often get anxious, so the adrenalin is pumping and throwing off blood sugar levels even more. For this reason, bringing food to an exam may be critical. But stay away from candy bars and other sweets because they provoke an adrenalin response. While they will bring the blood sugar up, they cause it to rise too high and too quickly. Blood sugar levels drop quickly when they are elevated by processed sugars, and so not too long after the quick high comes an equally rapid low. These extreme fluctuations are hard on the body and prevent the brain from functioning as well as it could. Instead of bringing sweets or junk food, take foods that contain protein: cheese, nuts (preferably unsalted), chicken legs, a tuna fish sandwich. If you're a smoker, you especially need to bring food because your body is used to using cigarettes to stabilize your blood sugar levels. Since you can't smoke in the room, you'll feel the effects of the blood-sugar roller coaster even more than a non-smoker would. But if you're addicted to caffeine, and can't think without it after 10 AM (or even before), bring a big thermos of coffee or tea by all means. This is no time to decide to do without and get healthy.

Bring something to eat even if it is a short exam.

7) DON'T BE THROWN BY INITIAL ANXIETY (if you have any)

Are you one of those people who takes one look at the booklet and gets an anxiety attack? Do the words of the first question swim before your eyes? Do you enter a trance-like state? Are there times when you can read a passage over and over yet have no idea what the words mean? There is hope for you, too.

One trick is to take a deep breath -- perhaps you might even close your eyes -- and just take a few seconds to become aware of how you feel. Fear or anxiety is a signal sent by your body. Your body is urgently telling you that you're in some kind of danger. If you acknowledge the signal and just watch it, your body becomes satisfied that you're paying attention, and it will allow you to calm down. If you try to ignore the signal or push it away, as most people do, then it often acts like an alarm that gets louder and louder if no one turns it off. The more you try to ignore it, the worse it affects you.

You might try taking inventory. Notice how your body is reacting, and dispassionately make a list of the symptoms: pounding heart, panicky feeling, words swimming, and so on. Believe it or not, this helps by allowing you to witness what's happening as if it were happening to some-one else. It gives the body time to calm down rather than feeding it more anxiety-producing thoughts. (When we try to argue away a feeling or get mad at ourselves for feeling a certain way, we usually prolong the feeling.) You may also want to think about your past experiences in this kind of situation and reassure yourself: "I'll be nervous at first, but I always settle down and am able to think after a while. Even if I waste some time being nervous, I still have enough time to finish the exam." (If you tend to stay nervous and unable to think, skip this step because it obviously won't be very reassuring.)

Another technique that works for many people is to spend a few seconds doing some deep breathing. Try it now:

Sit up straight, cross your legs at the ankles or put your feet flat on the floor, close your eyes, and place your hands loosely on your abdomen. Take a long, slow breath in through your nose and pretend that you are breathing into your abdomen. Allow your abdomen to expand. Then exhale slowly and evenly through your nose. As you exhale, allow your abdomen to go in, to slowly collapse as if the breath were coming out of your abdomen like air slowly being

released from a balloon. Continue to breathe in this way for five to ten breaths.

If you took the time to do this exercise, rather than just read it, you probably feel a difference in your state. You may feel calmer, more peaceful, or more energized. We asked you to close your eyes and put your hands on your abdomen because it's easier to learn the technique this way, but you can do it more discreetly. You can keep your eyes open and simply take slow, quiet breaths into your abdomen whenever you feel anxious -and no one will know what you're doing.

If you are still anxious after doing the above exercises, you might try one or both of the following techniques:

- Skim the passages until you find one with a question that you can answer. After you've successfully completed one question, you will most likely feel more calm and be able to return to the first question with your mind functioning. (Be careful when you skip questions, however, and be sure to mark the correct space on your answer sheet.) This approach does work for a lot of people, but it can backfire. All the passages might look like gibberish, even the most simple ones, and your panic might increase.
- 2. You might want to work from the answers and the question stem. Figure out what the question stem is asking of you and then look at the first answer choice. Next, skim the passage to see if you can find something similar to the answer choice or something that contradicts it. Do this for each choice, and then select the best answer for that question.

8) PACE YOURSELF

Know how much time you have, and watch the time so you can pace yourself. You don't have to speed through the exam; the individual sections aren't timed, and you generally have enough time to finish them all. You usually are given 3 to 5 hours for 60 to 90 questions, but some sections and questions will take longer than others. If this isn't your first exam, you probably know which sections will take more of your time. If this is your first exam, just be aware of the time and don't get bogged down. There is often enough time both to finish the exam and to go back into each section to recheck the difficult questions or the ones you weren't sure of.

9) TAKE DEEP BREATHS AND SHORT REST BREAKS

It helps to take short rest breaks throughout the exam to reduce the building cycle of tension. The exams can be tedious, anxiety-producing, and frustrating. Often we are forcing ourselves to concentrate -- using all the will power we have to keep from just giving up and saying the heck with it. All this creates fatigue and a building cycle of tension which can interfere with optimal performance. By taking deep breaths, stretching, staring into space (or out the window if there is one), closing our eyes, or doing other tension release exercises, we break the cycle of tension and start over with a relatively cleaner slate.

Here are a few tension-release exercises that might help you:

Hold your arm out in front of you. Make a fist, as tight as you can -- tighter, tighter. Now quickly release it and let your arm just fall. Do the same with the other arm.

Hunch your shoulders as if you were trying to touch your ears with the tops of your shoulders -- higher, higher. Now drop them.

Straighten your leg out in front of you and lift it about 6 inches off the floor. Point your toe -- more, more. Now point your heel -- tighter, tighter. You should feel the stretch all the way up your leg. Now drop it. Do the same with your other leg.

As we mentioned earlier, it's also helpful to take deep breaths every once in a while. The brain normally uses 20 percent of the oxygen we take in. The trouble is that when we are under stress we tend to need more oxygen but take air in less efficiently. When the brain doesn't have enough oxygen, it tends to get spacy, unable to focus, unable to concentrate, impatient, anxious, and so on. Doing a little <u>quiet</u> deep breathing (like that described in Point 7) can significantly improve our ability to function when taking an exam because deep breathing increases oxygen intake, calms the nervous system, and increases vitality. The problem is that we often forget to do these things at the times we need them the most. If you (discreetly) practice doing these exercises at work and while you are practicing with the exam booklets in the days before the exam, you'll be more likely to remember to do them <u>during</u> the exam. Try to remember to do them often because they are worth the few seconds they take. (It is not advisable to take deep breaths in an area where the air quality is poor. Sometimes heavily polluted air is very noticeable -- when pumping gas or standing near a bus, for example. At other times, when the pollutant is asbestos or odorless chemicals, there are no obvious clues. If you find yourself feeling worse after doing some deep breathing, go back to your normal breathing habits.)

The most relaxed you can stay in general, the better off you will be. Along with practicing with the test-taking booklets, it would be good to practice relaxation techniques before the exam. If you develop a habit of relaxation, you will be able to think more clearly and easily, and you will be less likely to produce an excess of adrenalin.

10) READ VERY CAREFULLY

We can't stress this enough. Sometimes there will be **just one word** in an answer that will make that choice the wrong one.

11) PICK THE BEST POSSIBLE ANSWER

Read all the choices and pick the best one. If you want to do well on the exam, you have to get used to picking the least rotten choice. It's like voting for president sometimes. Your candidate didn't make it, you don't like what you're stuck with, but you have to pick the best of what's available. And, as sometimes happens when voting for president, it comes down to just two choices, and you have a heck of a time deciding.

Don't expect all the questions to be well-written. Civil Service has tight budgets and a lot of exams to prepare. Remember this, and don't get frustrated when you come across a badly written question. Do the best you can, and try to appeal it later. If you come upon a question that you feel is incorrect and should be appealed, try to make a mental note about it so that you can remember it later.

Don't get angry, and don't let a question unnerve you. Everyone taking the exam has the same questions you have, so no one has an advantage when a

question is badly written. And please don't pick an answer on principle. In other words, don't pick an answer because you think it's the best one even though you know that the exam writers would probably disagree with you. This is most likely to occur with some supervisory questions. You may know the "proper" response, the one you believe the exam writers would prefer, but you may feel that there is no way that that response would work in real life. You may very well be right, but it doesn't matter. It's not worth throwing the points away just to make a stand.

12) ASSESS THE REASONABLENESS OF YOUR CONCLUSIONS

Above all, be sure to evaluate the reasonableness of your answer. Don't be falsely reassured if your answer is one of the choices. Have you ever spent a lot of time working on a math problem and then discovered that your answer wasn't even there? Perhaps that's better than a false positive: being so relieved that the answer is there that we don't recheck or rethink the question. Test-makers will often figure out the mistakes people are most likely to make and use those as the choices.

Sometimes we pick an answer that is so far off that it's hard to imagine how we could have ever done such a thing. For example, on one exam there was a question that went something like:

How much does June earn per month if the \$350 she pays for rent is 20% of her salary?

You wouldn't believe how many people came up with \$70 as an answer, saw that it was one of the choices, and selected it. They multiplied by 20% rather than dividing -- a natural mistake. But if they had stopped to wonder how June could pay \$350 for rent if she only made \$70 a month, they would have noticed their mistake. It's always better to stop for a moment and think about the answer because we sometimes get into a trance when doing exam problems and make mistakes as outrageous as this one.

13) DON'T OVERANALYZE; DON'T JUMP TO CONCLUSIONS

Be careful of having too analytical (too picky) a mind. Some people get too involved in one aspect of a question, or they start reading too much into the question. This kind of behavior is normal, but it can cause a lot of frustration and lead to the wrong answer. A related problem is knowing too much about the subject of the question. When we know too much, we may not read very carefully, or we may read things into the passage that aren't there.

Don't jump to conclusions -- don't be in such a rush to get the dreaded thing over with that you fasten onto something too quickly. Also, beware of picking the first choice prematurely. It's not that "Choice a" can't be the answer, but it is sometimes used to mislead people who tend to be impatient and careless.

14) NEVER, NEVER LEAVE AN ANSWER BLANK

In many cases, each section of the exam will consist of three or four questions that seem so difficult you'll want to give up, and three or four more that are so easy you'll think there has to be some trick to them. The rest will be in between.

Don't be afraid to skip the really hard questions for a while. Just remember to go back and answer them. Since you can generally eliminate one or two choices, this gives you a 33 to 50 percent chance of getting the right answer. Even if you are totally at sea, you have a 25 percent chance of getting the right answer. If you do need to skip a question for the moment, don't forget to skip the corresponding space on the answer sheet. There is nothing worse than getting to the end and realizing that you have a space left over. If that happens, don't see it as a sign you were never meant to take this exam. Just patiently work backwards, retracing your answers to see where you went wrong.

Don't be intimidated by technical topics or strange words in reading comprehension questions. The answer has to be there, and you don't need to be an expert in the subject to answer the question correctly.

15) TREAT YOUR SCRAP PAPER WITH RESPECT

Try to keep your scrap paper labeled and in order. It can help you later, particularly in the math sections when you need to check your work. It can also help in those cases where a math question could be answered based on information already written on your scrap paper.

As far as tabular questions are concerned, it's wise to look over all of the choices first. You may not need to do as much calculating as it might appear at first. For example, sometimes tables on exams contain question marks instead of data. It's important to not waste time doing the calculations to fill in <u>all</u> of the question marks before you begin because it's unlikely you'll need all of the information.

READING COMPREHENSION TIPS

There are a number of techniques to use when attacking reading passages and the questions that follow them.

- 1. Sometimes it helps to quickly look over the material before actually reading it. Skimming over the material will give you a general sense of what it is about and how it is organized. If you know what is coming, you can more easily recognize what will be important as you actually read the material.
- 2. Sometimes the only way to understand a particularly difficult passage is to analyze it and then translate it into words that make sense to you. This is especially true if the sentences are long and contain a number of ideas. If this is the case, look at the sentence and try to cut it down until you get to the meat of it. Don't try to fit in everything that is in the original sentence. Just try to get to one or two simple sentences that express the writer's basic ideas. Breaking a sentence down into smaller parts, and cutting out the extra words or those that are confusing, can help you understand what the author is trying to say, as well as help you remember what you read. It is also helpful to (silently) read the passage as if you were reading it aloud -- slowly, word for word, pausing for commas and other punctuation. But don't spend so much time on a particular question or set of questions that you run the risk of sacrificing the exam as a whole. Although you will often have more than enough time to finish the exam, you don't want to wear yourself out on a few questions.
- 3. Be careful of qualifying words like: *no, few, many, most, all, never, occasionally, usually, frequently, always,* and *except.* They are another reason why you need to read very carefully. When they appear in a question, they change the nature of that question. Beware of these same words in the answers. Make sure the word used in the question or answer agrees with what was said in the passage. Does the author say something happened *frequently* or *rarely?* Does the writer say that a certain thing is *usually true* or only *sometimes true?* Be especially careful of words like *all, none, always,* and *never.* They <u>may</u> make the statement too strong to be true.

- 4. Sometimes you can just look at a question and know the answer, but <u>always</u> check with the reading passage to make sure that you are correct.
- 5. When you don't know an answer to a question that asks for a specific detail, resist the temptation to reread the entire passage if the passage is a long one. Think about where in the passage the needed information might be located. Skim the passage to see if you can find the information. As you skim, look for key words that relate to what you are searching for.
- 6. You may want to read the questions before you read the passage. Some people find that it helps them to locate the information they need when they are actually reading the passage. As we mentioned earlier, this is also helpful for those who have problems getting into a particular passage or even trying to begin the exam.
- 7. Finally, a word about comprehending what you read. If you find yourself reading without holding on to any of it, you may want to stop and think about what is being said. What is important about what the author is trying to say? What points did he or she make? Asking yourself questions, trying to answer them, and going back into the passage to find the ones you could not answer are all good ways to make more sense out of a reading passage that is giving you trouble. Just remember not to spend more time on the passage than it deserves.

If, after asking yourself questions about the passage, you still have trouble understanding what you're reading, try taking a few deep breaths, stretching, eating something or getting up to sharpen your pencil. Moving around or taking a short rest break will often be what you need, but if even that doesn't work, go on to the next question. You can always come back to it later.

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SAMPLE QUESTIONS

Please read the following passages carefully and then select the answer that you feel is best. We suggest that you write your answers on a separate sheet of paper so that you can practice with these questions again later. We also suggest that you only do one or two questions before checking your answer and reading the corresponding explanation in the next section.

1. Mass markets are dead. It's time to let go of the old mass marketing strategies -- or so it would seem. Markets are subdividing like crazy, creating a kaleidoscope of goods and services. Every day a new product, or a new variation on an old product, appears. There's Shredded Wheat, and Mini-Wheats, and Frosted Mini-Wheats. There's diet Coke and Classic Coke, Cherry Coke and decaffeinated Coke. It's a global phenomenon. In the urban centers (at the very least) of each nation, countless brands of soaps and soups, jeans and jerseys, soft drinks and softballs can be found, each promising to be better or different. But lest we be too hasty, perhaps we should look at this more closely. Have the markets really been transformed into a myriad of unrelated niches, creating the need for a multitude of ad campaigns? Is it all change and no consistency? Are there no theories or traditions to make sense out of this? In reality, large markets have always subdivided into smaller specialty ones. The main difference is that today they subdivide at a phenomenal rate. Market division is happening faster and faster, and the new segments show up everywhere, almost simultaneously. But who are the customers? In all product categories and places, people increasingly occupy many, and often disparate, segments and opt for many different brands. It's no longer brand loyalty that holds sway, and you can't use the old stereotypical guidelines. It doesn't hold that customers who buy herbal tea prefer cotton t-shirts and brown rice. It's coffee and a bagel in the morning, sushi for dinner, and herbal tea before bedtime. In this world of rapid transit and instantaneous communication, people everywhere are becoming more alike in their tastes and preferences. And one thing they certainly share is the desire for ever-present, everchanging variety. Companies who continue to have a line of items specifically for clearly defined preference groups have certainly failed to accurately assess the marketplace.

- 1. Which of the following statements is best supported by the passage?
 - a. The existence of so many products prevents successful marketing strategies.
 - b. It's not that there are no more mass markets; it's that the nature of the mass has changed.
 - c. Ad campaigns need to be more varied and creative to keep the attention of the new consumers.
 - d. People's tastes are very ethnic.

2. Too many consumers believe in the quick fix, the easy solution, the magic ingredient, the miracle cure. And, of course, there are corporations ready to provide them with the product which will solve their health care problems. An independent review board is needed to interpret the nutritional data available. If such a review procedure is not adopted, then our society is left to the whims of the private sector whose vested interests and public pronouncements on very specific products already seriously compromises public understanding of these health issues. The nutrition information Americans are getting may be fragmentary, contradictory and confusing, when it's not outright incorrect, according to nutritional biochemist T. Colin Campbell. Campbell, who has been doing nutrition research for the past 25 years, is one of the co-authors of the National Academy of Sciences' report on "Diet, Nutrition and Cancer," which recommended increased consumption of fruits, vegetables and wholegrain cereals. He says that confusion about nutritional guidelines and chronic disease risk is directly attributable to the use of scientific data which are much too narrowly focused for policy and marketplace purposes. An extensive nutritional study conducted in China recently provides some examples of the inconsistencies that Campbell is concerned about. Some U.S. studies associate low cholesterol levels in the blood with increased risk of colon cancer. In China, however, incidences of colon cancer were low among those who had low cholesterol levels, a finding much more consistent with the recognized beneficial effects of low cholesterol levels. Such an observation provides further evidence that the U.S. data showing an increase in colon cancer at lower cholesterol levels is an experimental fluke. Another example, dieting is the way to lose weight in the States. We count calories, but obviously have limited success with this method since so many of us are constantly dieting and continually overweight. Chinese people consume about 20 percent more calories than Americans, yet there is very little obesity amongst the Chinese, and they are healthier in general than Americans. This finding tells us that excess caloric intake does not necessarily cause excess body weight nor is it likely to be the determinant of chronic disease risk. One difference between the diets is the proportion of fat in calories consumed. Chinese fat consumption ranges from 6 to 25 percent, with an average of about 15 percent of daily calories from fat. This is well below the 30 percent usually recommended in American diets. So, the current wisdom which says that people cannot subsist on diets with fat intakes much lower than 30 percent of calories is seriously called into question by the Chinese study.

- 2. Which of the statements given below is best supported by the passage above?
 - a. The Chinese suffer from less obesity because they have a more active life-style.
 - b. The average person in China consumes half the fat of the average American.
 - c.- The existence of an independent review board keeps corporations from peddling products whose effectiveness is questionable.
 - d. Confusion about nutritional guidelines in the U.S. is due to the improper use of scientific research.

3. According to Hume, all of life and it's experiences is merely a passing fancy with nothing tying it together. There is no order, no organization, merely a dizzying array of fantastic and bewildering images. Kant revolutionized Western philosophy by proving that true experience consists of the judgments we impose upon the data of the senses. The senses yield information about the world, but it's understanding which gives the world its true and proper form. Understanding applies its own laws on the sense experiences and transforms them into a coherent and consistent body of knowledge. Kant called these laws *categories*, and said that they are intrinsic to the mind. The mind intuits them; they are basic to the mind. For Kant, space and time are forms of intuition and man can only experience his world within a spacio-temporal frame. Nothing can be known outside of this framework.

Some of the following statements are true according to the passage, some are false.

- I. According to Kant, categories are basic to the mind.
- II. Kant revolutionized Eastern philosophy.
- III. True experience comes directly from the data of the senses, according to Kant.
- IV. According to Kant, man can only experience his world within a framework of time and space.
- 3. a. Statements I and III are true.
 - b. Statements I and IV are true.
 - c. Statements II and IV are true.
 - d. Statements I, II, and IV are true.

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4. Since there is such a strong link between emotional states and susceptibility to illness, it behooves us to take the time to identify these links in our own lives in order to begin to take action. If we demonstrate to ourselves that this linkage has operated in our lives in the past, the impetus for change will be greater; and if we know what our weak spots are, we can begin to change the attitudes and behaviors that put us at risk. The first step is to make the time to think about it. Then, we need to examine a recent illness and the major stressors in our lives in the six months preceding the onset of that illness. If we suffered a relapse, we need to list the major stresses that occurred in the six months before the recurrence. It's important to include both internal and external stresses. Possible stressors could include: too little sleep, divorce, death of a loved one, work overload, or excess fear, worry or anxiety. Once the stressors have been identified, it's time to think about how we contributed to creating them or to exacerbating them. It's difficult in many cases to acknowledge our own contribution to our problems, but, in truth, the only things we can change are those that are within our control -- those that we have had a hand in creating.

- 4. The author of the above passage would most likely agree with all of the following statements, except
 - a. self-analysis is a wellness technique.
 - b. your thoughts can make you ill.
 - c. life-threatening illnesses are usually caused by traumatic events.
 - d. it's important to identify what you can and cannot control.

5. With the coming of the VCR and the camcorder, personal and affordable television production became a reality. Yet the same technological revolution that allowed the amateur to produce near studio-quality productions has given the television industry an amazing array of special effects. Through advances in computer technology, we are treated to such wonders as digital representation of athletic events, photos of athletes spinning into view, screens split any which way, and logos exploding into fireworks. And, of course, versions of this same technology are starting to be available in the home. Called desktop video, because all the components can fit on a standard desk or table, this system uses the computer to create and the VCR to print. They offer titling, computer graphics, animation, digital video effects, and the ability to mix live video with computer pictures. What's needed is a computer to generate and manipulate images, a camera to originate pictures, a VCR or camcorder to use

as a source for editing and overdubbing, another VCR to edit and re-record and finally the right software to make it all happen. Systems also take advantage of a variety of components like: character generators to create electronic text in a variety of styles and colors; video titling programs which mix words with pictures, animate images, and move from screen to screen; painting systems that let you draw, paint, or manipulate pictures; animation systems that create moving images in two or three dimensions using realistic, shaded objects; and digital video effects hardware which let images and words roll, tumble, and dance around the screen.

5. According to the above passage,

- a. the technological revolution has allowed the amateur to produce studioquality productions.
- b. video titling systems allow you to create electronic text and mix words with pictures.
- c. digital video effects hardware lets images and words roll around the screen.
- d. a camera may be used for editing and overdubbing.

6. Nothing has changed in our gene pool for 10,000 to 50,000 years, yet our lives have changed a great deal. Two thousand generations ago we needed the "Fight or Flight" response. We were quick or we were dinner. If you're a cave person and a bear sneaks up on you, you don't want to have to wait to say: "Blood flow increase, please. Prepare for an attack." You need an immediate response. The problem is that there aren't many physical bears out there today -- but there are lots of psychological ones. The old physiological response was supposed to be for a matter of minutes, not throughout the day. In modern life, our body is constantly alarmed and prepared for fight or flight -- but we can't flee or fight very often. Picture it: You're stressed at work; you've had a tough day. A nasty person comes in and antagonizes you. You run out of the office, keep running, and don't come back. Someone in the office asks: "Where's Joan today?" The response is: "Oh, she fled for the day. She'll be back tomorrow. But only if things go well for her." We can't do that -- nor can we fight -- so we sit there and keep working and keep stewing in our own stress chemicals. If an electrical system becomes overloaded, fuses or circuit breakers will protect it. Since we aren't provided with circuit breakers, we have to devise them ourselves. We must pay attention to when we are overloaded and institute life-style and behavioral changes which will relieve the stress of our day-to-day lives.

6. According to the passage above, all of the following are true, except

- a. nothing has changed in our gene pool for 10,000 to 60,000 years.
- b. two thousand generations ago, we were quick or we were dinner.
- c. we need a quick physiological response for emergency situations.
- d. the body of the typical person of today is constantly prepared for fight or flight.

7. Nearly twenty years ago, the United Farm Workers boycott of grapes was successful in eliminating deadly poisons like DDT, DDE, and Dieldrin from fields worked by union workers. Yet today more than fifty other chemical products used on table grapes have been identified. The most lethal poisons are listed below. Each has injured or killed farm workers, and each might be present on the grapes you buy. There is methyl bromide, responsible for more occupationally-related deaths than any other pesticide and for permanent brain damage or blindness. Parathion and Phosdrin also can kill, sometimes very quickly. Since they are sprayed from the air, they also negatively affect people in the surrounding areas. (Ninety percent of all aerially sprayed pesticides miss their targets.) Dinoseb has a cumulative effect, causing illness and blindness. Finally, there is Captan which can cause cancer, birth defects, and changes in cell structure. This compound is the one most frequently found on store-bought grapes. Federal and state agencies have recommended the ban of each of these substances yet they continue to be used today (1988). Pesticide poisoning has doubled in the past ten years: more than 300,000 farm workers are made ill every year through pesticide exposure, and female farm workers are seven times more likely to suffer miscarriages than the average American woman. Of course, farm workers are not the only ones affected by the massive amounts of pesticides dumped on the nation's food supply. A survey done in San Francisco showed that 44 percent of fruits and vegetables contained measurable amounts of pesticide residues and 42 percent of those contained more than one chemical. Pesticides are thought to be responsible for groundwater contamination in 23 states -- groundwater provides 50 percent of our drinking water supply.

- 7. All of the following are true according to the above passage, except
 - a. methyl bromide is responsible for more occupationally-related fatalities than any other pesticide.
 - b. United Farm Workers have called for another nation-wide boycott of table grapes.
 - c. more than forty chemical products used on table grapes have been identified.
 - d. Captan can cause cancer, birth defects, and changes in cells.

8. In spite of the fact that very few organizations keep accurate records of employee exit interviews, we can make some generalizations about why women leave and how long they stay. A small proportion of women leave their jobs after working less than a year. Usually, they leave because they dislike the work, their co-workers or supervisors, or because there has been a change in their personal lives. Another small percentage leave after ten to fifteen years, and they tend to leave for personal reasons or because it would significantly advance their careers. Women who leave after working between three and five years are likely to do so because they feel blocked in their careers. Many trainee jobs are merely interesting, moderate-paying jobs without much hope for advancement. Young women find the jobs attractive when they are first starting out, but become disappointed over time because they are looking for more and are qualified for more. Often women leave jobs that they like and are good at because they watch others advance more rapidly simply because they are men.

- 8. Which of the following statements is best supported by the passage?
 - a. Most young women find their first jobs attractive if they lead to more advanced positions.
 - b. Women become frustrated when they see men advancing rapidly.
 - c. Organizations should keep accurate exit interviews.
 - d. Many trainee positions do not lead very far on the career ladder.

9. Most of us assume that we and other human beings are basically rational. Being rational means that once we figure out what we want to happen, we develop a theory or plan to bring it about, act in such a way as to foster the plan, seek to correct any action which interferes with our desired result, and feel good or badly depending on our degree of success. This concept of rationality assumes that people plan their actions and are therefore personally responsible for them. It also assumes that people would not act against their intentions. In addition, it assumes that people do their utmost to control their own ability to put their actions and desires in motion, rather than being pawns in someone else's game or victims of fate. Given these assumptions, it's understandable that, when confronted with their own irrationality, most people become rather upset. They become frightened when they realize that their actions are countering their intentions and that they have been unaware of this fact. If they can't trust themselves, whom can they trust? In this rational society, where concrete facts and the scientific method are worshipped, the only logical conclusion anyone can come to is that there is something wrong with him/herself. (Such thinking might run something like this: "If I want one thing, but do something that works against that outcome, there must be something wrong with my thinking, or my ability to plan and assess my actions.") Therefore, people become confused, bewildered, ashamed, frustrated, guilty, and angry when they realize that they were unable to plan and put into effect what they intended to, that they were predisposed to sabotage their plans, and that others were aware of what they were doing all along. It would be far better for most of us if we realized that we very often do things for reasons that make no sense to our intellect. If we did, we would spend far less time defending our actions, and we would be able to spend more time figuring out how to get where we want to go and what's really stopping us.

- 9. Which of the following is best supported by the passage?
 - a. Most of the time people act in ways that are consistent with their intentions.
 - b. It is sometimes easier for someone else to see that we are working against ourselves than it is for us to see it.
 - c. If a person wants one thing but does another, there is something wrong with him or her.
 - d. People do their utmost to control their own ability to put their desires in motion.

10. Early research on leadership and effectiveness stemmed from the premise that those who became leaders were different from those who remained followers. The goal of the research was to pinpoint specifically what unique features of the individual were associated with leadership. The success of the mental testing movement in the early part of the century encouraged researchers to employ the recently developed "personality tests" in their search for the leadership trait. A large number of studies were done in which leaders and followers were compared on various measures thought to be related to leadership status and effectiveness. Measures of dominance, social sensitivity, moodiness, masculinity, physical appearance, and many others were used. The typical study involved giving one or more of these different measures to members of an organization that had leaders and followers. Military units, corporations, and universities were used. Then all these leaders and followers were compared for significant differences. Finally, in 1948, Ralph Stogdill reviewed over 120 of such studies in order to find a reliable and coherent pattern. His conclusion was that there was no trait or cluster of traits which would definitively single out those destined to be leaders. His view was that theories about leadership would be inadequate until personal and situational characteristics were integrated.

10. Which of the following is best supported by the passage?

- a. It is likely that different situations demand different traits of their leaders.
- b. It is easier to assess mental ability than personality traits.
- c. There is no difference between those who become leaders and those who remain followers.
- d. The studies failed because they were designed with men only in mind.

1. The answer is Choice b. There is no one statement that tells us Choice b is correct, so we have to build a case to support it. One clue can be found in the first two sentences: "Mass markets are dead . . . or so it would seem." Right away the author indicates that she doesn't really believe that they are dead. Then, in the middle of the passage, she asks, "have the markets really been transformed into a myriad of unrelated niches . . . ?" In other words, have they been split into a multitude of segments that have nothing in common? Because this is in the form of a question and because she uses the word "really," we can infer that she does not believe this idea is true either. Finally, in the last third of the passage she tells us that: "People everywhere are becoming more alike in their tastes and preferences. And one thing they have in common is the desire for ever-present, everchanging variety." Thus, the author is saying that there is still a mass market -- a mass of consumers world-wide. And, rather than strictly following the old guidelines (health food types, Middle-Americans, Asians, Central-Europeans, and so on), these consumers have formed themselves into a new kind of mass market which is broad-based but varied and changeable.

We could also use the process of elimination to answer this question because none of the other answers works very well. Choice a is not supported by the passage. The author does say, "It's time to let go of the old mass marketing strategies," but she lets us know that she doesn't really believe this by using the phrase "or so it would seem." And she goes on to question whether there are, in fact, no consistencies, no theories, nothing to make sense out of this multiplicity. At one point, she says: "Have the markets really been transformed into a myriad of unrelated niches, creating a need for a multitude of ad campaigns?" As we stated earlier, the use of the word "really" and the fact that this statement is put into question form leads us to believe that she doesn't think so. The author also plays up the similarities within the new marketplace and definitely seems to be leading the reader toward finding ways to work with the new trends. When the entire passage is taken into consideration, we must conclude that the author would feel that successful marketing strategies are possible. Choice c is incorrect because it is neither stated directly nor hinted at in the passage. The author never says how the ad campaigns should be different; she just says that the old ways won't work any more. The products are varied, but she never says that the advertising campaigns have to be varied, also. While ad campaigns probably should be creative and varied to attract consumers, the passage says nothing about this. Therefore, Choice c is incorrect because there is really nothing in the passage to support it. Choice d is incorrect; in fact, we could almost say that it is contradicted by the passage. The passage mentions bagels and sushi, but if anything it indicates that people are becoming less ethnic. It speaks of the multitude of products "in the urban centers of <u>each</u> <u>nation</u>" and the fact that "people <u>everywhere</u> are becoming <u>more alike</u> in their tastes and preferences." In effect, it is saying that many people are not staying in their ethnic groups any more.

2. The answer is Choice d. This is supported by a sentence in the middle of the passage which says, "Confusion about nutritional guidelines and chronic disease is directly attributable to the use of scientific data which are much too narrowly focused for policy and marketplace purposes." The passage then backs this up with a few examples. It calls the U.S. data showing an increase in colon cancer at lower cholesterol levels an experimental fluke. It also mentions two commonly held but incorrect beliefs: that excess intake of calories necessarily leads to excess body weight and that people need a diet consisting of 30 percent fat. Even though the entire article talks about scientific research and incorrect nutritional beliefs held by Americans, you may not have liked the answer. You may have felt that the confusion could have been caused by other factors. You might have thought that saying the confusion was "due to the improper use of scientific research" was assuming too much. If so, this is what we meant earlier when we talked about being overly analytical and picky. The question stem asks what statement is "best supported by the passage," and the entire article is about narrow scientific information improperly used for nutritional guidelines. In addition, none of the other choices is possible. Choice a is incorrect because it isn't stated anywhere in the passage. You may feel that Choice a is correct because you can't figure out why the Chinese aren't overweight if they eat so many more calories than they need, but the author says nothing about how active they are. Choice b is incorrect, but tricky. You may have been misled by the sentences near the end of the passage. One sentence says that the average Chinese diet is about 15 percent fat. The next sentence says that a diet consisting of 30 percent fat is recommended for Americans. Since 15 percent is half of 30 percent, it is tempting to choose Choice b. Note, however, that it says recommended. Nowhere does it say that the average American diet consists of 30 percent fat. As we said, it's tricky. (In fact, the average American is lucky if his/her diet is only 30 percent fat, but that information wasn't in the passage either.) Choice c is also tricky because it sounds as if the review board is <u>already</u> in existence. It says, "The existence of an independent review board keeps" The passage on the other hand asks for a

review board to save consumers from the claims of companies in the private sector. For Choice c to be in line with the passage, it would have to say something like <u>would keep</u>. We didn't think up tricky little things like this to be mean. We did it to show you how important it is to read every word, to look at every clue, to think about the meaning of the passages and the choices, and to recheck your answers whenever you have the time.

3. The answer is Choice b. This may have been an intimidating question for a number of reasons: 1) it concerns philosophy, 2) it uses a number of words that you may not be familiar with, and 3) it has a strange form. First of all, don't be intimidated by the subject matter. You don't have to have a background in a certain area to answer basic reading comprehension questions. All the information you need should be right there in the passage. Second, you may often come across words you're not that familiar with when dealing with exam questions. Some makers of questions like to create long, complicated sentences and use unfamiliar words because it's an easy way to create difficult questions. Usually you can get around this by translating the sentences into your own words, or by looking for clues in other sentences or in the other choices given. Finally, there's the strange form of the question. This style of question is called a permutation item question. The easiest way to deal with a question of this type is to look at each statement separately to determine if it is true or false. Then, after you've figured out that Statement I, for example, is true, make a note of it somewhere. If you're allowed to write in your exam booklet (or if you have a good eraser), make a T or write "true" next to the statement. Otherwise, make a note on your scrap paper. Then do the same for all the other statements. When you've taken care of all of them in this way, it will be very easy to answer the question.

<u>Statement I is true</u> because it is stated almost word for word in the sixth and seventh sentences. The passage says Kant called these laws "categories" and said they were intrinsic to the mind. The next sentence expands on this, saying that "the mind intuits them; they are basic to the mind." Therefore, it's safe to say that categories are basic to the mind. You may not have known what <u>intrinsic</u> meant, but reading along you can see that the author seems to be going on about the same thing in Sentence 7 that he started in Sentence 6. Therefore, you can guess that Statement I is true. Another way that you can figure out that Statement I is true is by putting a question mark next to it, examining each of the other statements, and then seeing how it fits into the scheme of things. As it turns out, Statement I is included as part of the answer in all the choices except Choice c. Choice c says that Statement II is true. As you will see in the next paragraph, Statement II is false. Therefore, Statement I has to be true.

<u>Statement II is false</u> because Kant revolutionized <u>Western</u> not <u>Eastern</u> philosophy. (As we said earlier, you need to read carefully and pay attention to <u>every</u> word.)

<u>Statement III is false</u> because Kant thought that "true experience consists of the judgments we impose upon the data of the senses. The senses yield information about the world, but it's <u>understanding</u> which gives the world its true and proper form." Now, this is one of those passages that you might have wanted to translate into your own words to make sense of it. You could have said something like: "True experience is the judgments we put on the info that comes from our senses. The senses give information, <u>but</u> understanding gives the true form." Then, you could have simplified it even more: "True experience = judgments. Senses give information, but not the true form." By reorganizing the sentences in this way, it becomes clear that true experience only comes from the judgments we make; it doesn't come <u>directly</u> from the senses.

<u>Statement IV is true</u> according to the last two sentences which talk about space and time: "For Kant, space and time are forms of intuition and man can only experience his world within a spacio-temporal frame. Nothing can be known outside of this framework." From the first of these two sentences, you probably figured out that spacio-temporal meant time and space even if you didn't know this to begin with. (They are in the same sentence, and "spacio" closely resembles "space.")

So, now that you know Statements I and IV are true, you can pick Choice b and feel secure. But let's say you are doing this on your own, and you're not too sure about I or IV, but you know that Statements II and III are false. By knowing that II and III are false, you can eliminate any choice that contains one of them. Since Choice a contains Statement III and Choices c and d contain Statement II, you are left with the only possible right answer --Choice b. As you can see there are often many ways to arrive at the correct answer.

4. The answer is Choice c. This question is slightly different because we are asked to read the author's mind. We have to decide which opinions the author would share. It's also different because it asks us for the one statement which is false. This type of question stem sometimes causes trouble. Sometimes we go merrily along and become over-confident. Or we just

want to get the thing over with, so we're not as careful as we should be. Up to this point, we've been looking for the statements that are true according to the passages, and perhaps not reading all the answer choices, so we miss the fact that this answer stem says EXCEPT. We look at the first choice, figure it's obviously true because the entire passage concerns examining ourselves to see why we have become ill, and so we pick Choice a. Such carelessness is one of the reasons why people often do so much worse on reading comprehension questions than they think they did.

Now, to answer the question. We've already shown that the author would agree with Choice a. It makes sense that the author would also agree with Choice b because she says there is a strong link between emotional states and susceptibility to illness. She also talks about identifying internal stressors like fear, worry or anxiety in order to determine what contributed to the illness or the relapse. Since it's rare to find fear, worry, or anxiety unaccompanied by thoughts, and since thoughts fuel these emotional states, it's safe to assume that she would believe that thoughts can make us ill. Choice c is harder to justify because it contains the word "usually." If it had said that life-threatening illnesses can be caused by traumatic events, there would be no problem accepting it as something the author would agree with. But the author never singles out life-threatening illnesses, and most of the events (or stressors) she mentions are not major, traumatic ones. She appears to give equal weight to fears, lack of sleep, divorce, death, and work overload. So, we'll leave this one for the time being and see if Choice d is better or worse. According to Choice d, "it's important to identify what you can and cannot <u>control</u>." Choice d seems like something the author would agree with because much of the passage concerns how to identify what makes us ill. Control also seems important to the author because she says that "the only things we can change are those that are within our <u>control</u>." Since the thrust of the paragraph is the need to identify and change the things that put us at risk and since the only things we can change are those we can control, it is logical to assume that the author would agree with Choice d. Therefore, Choice c is the correct answer because it is least supported by the passage.

5. The answer is Choice c. Unless you are a person with an electronics phobia, or someone who panics when faced with any technical writing, the only trick to this question is reading carefully. Choice a is incorrect because the second sentence in the passage says that the amateur is allowed to produce <u>near</u> studio-quality productions. The productions are close to being as good as the real thing, but they're not quite good enough. Choice b is incorrect because, according to the passage, video titling programs "mix

words with pictures, animate images, and move from screen to screen." It's <u>character generators</u> which create electronic text. Choice d is incorrect because a camcorder (a device which contains the capability of both a camera and a VCR), not a camera, is used for editing and overdubbing. Choice c is correct and is found in the last sentence of the passage.

6. The answer is Choice a. This is another question that relies heavily on reading carefully. We have to be aware that the question asks us to look for the one incorrect statement, and that the numbers in the passage are not the same as the numbers given in Choice a. The first sentence of the passage says that nothing has changed in our gene pool for 10,000 to 50,000 years. Choice a says: "10,000 to 60,000." While it could in actuality be 60,000 vears because the author is not being very precise, we can't form that conclusion with the information we are given. The number in the passage is less than the number given in Choice a, and that is all we can go by. Choice b. on the other hand, can be found word for word in the second and third sentences. Choice c is supported by the passage. The passage explains why a quick response of the body is important to a cave person who needs to run away from a bear. Although the passage goes on to say that this response is more than what we need in the modern world, it does allow that there are some physical bears out there and that sometimes we may fight or flee. ("There aren't many physical bears out there today . . . we can't fight or flee very often.") In this case, the term "physical bears" is used to represent any actual physical danger which calls for a physical response. Common sense would also tell us that this is true -- sometimes we still need that spontaneous physiological response to handle danger. (This is one of those cases where we can use common sense to bolster what we have read in the passage.) Choice d is supported by the sentence in the middle of the passage which states: "In modern life, however, our body is constantly alarmed and prepared for fight or flight." (Since "alarmed" and "prepared" are linked by "and," "constantly" refers to both of them.)

7. The answer is Choice b. This question illustrates the danger of using common sense and/or outside knowledge when neither are called for. You may know that the United Farm Workers called for another grape boycott, which was still going on when this booklet was written (1988), but the passage never says this. You may have inferred that this is the direction in which the passage is going, but, again, the passage never says it. Be very careful never to read things into passages on exam questions. Just stick to the facts as they are given -- unless you are <u>forced</u> to infer something, which <u>occasionally</u> you will have to do. Choice a is found in the fifth sen-

tence of the passage. Choice c is covered by the second sentence. The sentence says "more than 50," but since more than 50 is also more than 40, there is no contradiction between Choice c and the passage. Choice d is found in the tenth sentence. Since changes in cell structure would be considered the same as changes in cells, there is no contradiction between the passage and the answer choice.

8. The answer is Choice d. Choice a is incorrect because it jumps to a conclusion. We don't know if most young women are looking to get ahead. It seems that this is the direction that the passage is taking, but the passage gives us nothing solid upon which to base this conclusion. Choice b also jumps to a conclusion. The passage says that "often women leave jobs . . . because they watch others advance more rapidly simply because they are men." This means that it is not the rapid advancement of men that bothers the women, but the fact that the men are advancing more rapidly "simply because they are men," and not because they are more qualified. The wording of Choice b, on the other hand, is such that it seems the women don't want the men to advance rapidly period. It's subtle, but there is a difference. Choice c is incorrect because it is too strong. While it may seem that the author would like more accurate exit interviews so that he could determine why women leave their jobs, he never says this. The word "should" is what makes this choice unacceptable. Choice d is supported by the passage which states that "many trainee jobs are merely interesting, moderate-paying jobs without much hope for advancement."

9. The answer is Choice b. The answer can be found in the third to the last sentence. This sentence says that people became upset when they realized that they were predisposed to sabotaging their own plans, and "that others were aware of what they were doing all along." Choice a is incorrect because the passage doesn't indicate how often people act in ways that are consistent with what they want to achieve. Choice c is incorrect because the passage doesn't say this. While it does say that "in this rational society . . . the only logical conclusion anyone can come to is that there is something wrong with him/herself," this doesn't mean that there actually is anything wrong with him or her. The author is merely giving the conclusion that would be reached by a person who believes that we should do things for rational reasons. It is the author's stated opinion, however, that we don't always do things for rational reasons, and we should just accept this. Choice d is incorrect because it isn't very well supported by the passage. The author says that "it assumes that people do their utmost to control their own ability to put their actions and desires in motion. . . ." The idea of

<u>rationality</u> assumes that people will do their utmost, but the passage does not tell us if people do their utmost or not. Perhaps people sabotage themselves more than they work toward their goals. Perhaps people spend more time blaming others and outside circumstances. Perhaps people would rather have others take responsibility for them than be independent. Choice d is incorrect because it makes too great an assumption.

10. The answer is Choice a. While the passage never actually says that "different situations demand different traits," there is more support for this choice than for any of the others. The passage starts out by talking about the early research, tells us that a particular trait or cluster of traits was examined, and says that leaders from different areas were tested. It goes on to say that, when Ralph Stogdill reviewed all these studies, he could find no "reliable and coherent pattern." Therefore, he decided that "theories about leadership would be inadequate until . . . situational characteristics were integrated." In other words, one of the factors that wasn't being taken into account was the arena, or situation, in which the "leading" was taking place. If you think about the organizations used -- military, corporations, and universities -- you can see that this is likely to be true. The head of a group of research scientists at a university would probably have a somewhat different set of characteristics than the leader of a group of combat pilots. You may not have liked this answer because you may have felt that there wasn't a strong enough case made for it in the passage. You may have felt that it was too much to assume that it's "likely that different situations demand different traits." This is true, but there is more justification for Choice a than for any of the others, and so it is the only one that could possibly be the correct answer. Choice b is incorrect because the passage doesn't indicate this at all. The failure of the early leadership research does not prove that the personality assessment tests were invalid. The personality tests may have been fine when measuring isolated personality factors like moodiness or social sensitivity. It's just that, according to Stogdill, the personality trait assessments used by early researchers were inadequate for defining leadership. Choice c is incorrect for a similar reason. Early researchers thought there was a difference between followers and leaders, but their failure to define this difference does not mean that it doesn't exist. Again, it could just mean that they were using the wrong measurements. Choice d is incorrect because it assumes too much. While it may be safe to assume that the studies were designed with men in mind because they used traits like masculinity and dominance, and because they were done so long ago, there is nothing to indicate that this is why they failed.

ANSWER KEY

B
 D
 B
 C
 C
 C
 C
 A
 A
 A

35

APPENDIX

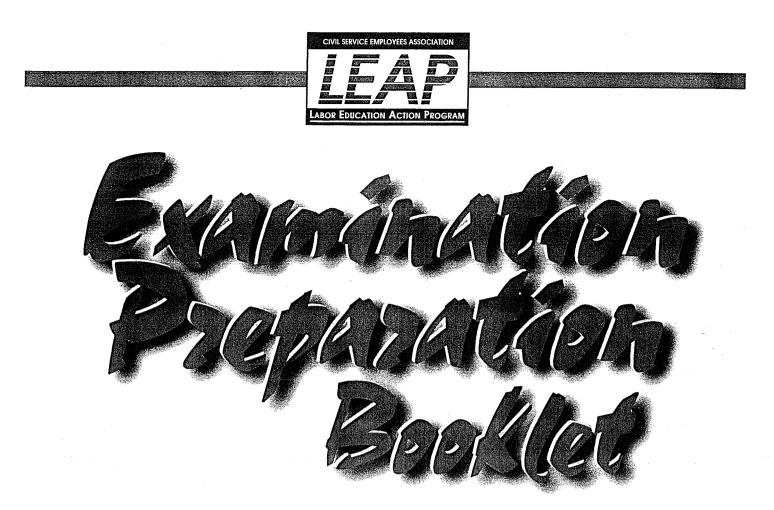
DIAGNOSTIC WORKSHEET

This is designed to give you insight into why you answered a question incorrectly. Analyze each question you miss in terms of the checklist. Put the number of the question missed next to each trait that you feel contributed to the error. This will show you the areas that you need to work on. By working to improve your abilities in these areas, your scores should improve.

Question Number(s)

Trait Exhibited

·	1.	I jumped to an incorrect conclusion.
	2.	I misinterpreted the question.
	3.	I didn't believe I could answer the question.
	4.	I didn't translate the reading passage into sentences that I could understand.
	5.	I knew I couldn't answer the question, so I gave up and guessed.
	6.	I was careless.
	7.	I "followed a hunch" without checking it through.
	8.	I didn't step back and evaluate the reasonable- ness of my answer.
	9.	I worked mechanically because I knew it was hopeless.
	10.	I became bored or frustrated, and guessed.
	11.	I misinterpreted part of the reading passage.
	12.	I tried to answer the question without realiz- ing that I didn't really understand parts of the reading passage.



Understanding and Interpreting Written Material

Booklet No. 4

5

CIVIL SERVICE EMPLOYEES ASSOCIATION, INC. LOCAL 1000, AFSCME, AFL-CIO Danny Donohue, President

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Booklet #4

Understanding and Interpreting Written Material

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Introduction

Purpose

This booklet is designed to help you prepare for specific New York State civil service exams. The 60 practice questions that follow are examples of the kinds of questions you're likely to encounter on actual exams. The format for this section of the exams is simple. You will be asked to read a paragraph and then answer a question about it. To do well on these questions, you need to read each paragraph carefully and then base your answer on what you have just read, not on what you may happen to know about the subject.

Study Guide Contents

The first part of this study guide is composed of 60 multiple choice questions. An answer key is located on page 39, followed by explanations of the correct answers, beginning on page 40.

How to Use This Booklet

Complete a few questions at a time and then review your answers in the back of the booklet. The explanations in the back of the booklet tell you why the right answer was right and why the wrong answers were wrong. If you answer a question incorrectly, try to analyze why you chose the wrong answer. Use the diagnostic worksheet on the next page to help you decide where you went wrong.

Good luck!

Diagnostic Worksheet for Understanding and Interpreting Written Material

For each question you answered incorrectly, go through the checklist below and place the number of the question missed next to each trait exhibited. This is designed to give you more insight into why you answered a question incorrectly. By working to improve your abilities in these areas, you should notice an improvement in your scores.

Question Number(s)	Trait Exhibited
	1. I jumped to an incorrect conclusion.
	2. I misinterpreted what the question was asking.
	3. I had little confidence I could solve the problem.
	4. I didn't break the reading passage down into more easily understood parts.
	5. I knew I couldn't solve the problem, so I gave up and guessed.
	6. I made a careless error.
	7. I "followed a hunch" without checking it through.
	8. I didn't step back and evaluate the reasonableness of my solution.
· · · · · · · · · · · · · · · · · · ·	9. I worked mechanically because I knew it was hopeless.
	10. I didn't check my work.
	11. I became bored or frustrated, and took a guess.
	12 I was inconsistent in my interpretation of parts of the reading passage.
	13. I didn't try to visualize the problem.
*	14. I misinterpreted part of the reading passage.
	15. I tried to answer the question without realizing that my understanding of a section of the reading passage was vague.

 Genetic engineering may lead to cures for many common diseases, but it may also create new, potentially deadly hazards. For example, introducing cancercausing genes into a common infectious organism, such as the influenza virus, could be highly dangerous. For this reason, experiments with recombinant DNA are closely regulated in the U.S. Potentially hazardous experiments are reviewed by both the National Institutes of Health (NIH) and the Food and Drug Administration (FDA). The FDA has already approved human drugs and vaccines, diagnostic devices, and food processing enzymes produced through recombinant DNA technology. It is also overseeing the creation of genetically engineered food crops. The U.S. Department of Agriculture (USDA) regulates use of genetically engineered plants, microorganisms, and veterinary biological products.

- a. The dangers of DNA research outweigh the potential benefits.
- b. Government regulation of genetic engineering is not strict enough.
- c. The FDA and the USDA have different views on the safety of genetic engineering.
- d. The potential hazards associated with genetic engineering require careful regulation.
- 2. In thinking about the many barriers to personal communication, particularly those that are due to differences of background, experience, and motivation, it seems to me extraordinary that any two persons can even understand each other. Such reflections provoke the question of how communication is possible when people do not see and assume the same things and share the same values. On this question there are two schools of thought. One school assumes that communication between A and B, for example, has failed when B does not accept what A has to say as being fact, true, or valid; and that the goal of communication is to get B to agree with A's opinions, ideas, facts, or information. The position of the other school of thought is quite different. It assumes that communication has failed when B does not feel free to express his feelings to A because B fears that they will not be accepted by A. Communication is facilitated when on the part of A or B or both there is a willingness to express and accept differences.

According to the author:

- a. Communication is not possible when people do not assume the same things or share the same values.
- b. Communication is facilitated when there is a willingness to express and accept differences.
- c. There are many barriers to personal communication.
- d. Communication is possible only when differences of background, experience and motivation are overcome.
- 3. Freedom of speech was one of the principles established in the 1st Amendment to the Constitution in 1791. Since that time, this basic right has frequently come under attack. In 1798, Congress passed the Alien and Sedition Acts, which made it a criminal offense to foster opposition to the federal government. During World War I, a wave of patriotic sentiment led Congress to pass the Espionage Act of 1917, which restricted the right of free speech of foreigners, labor organizers, pacifists, radicals, and others. The rise of Communism as a threat to democracy led to new questions about the role of free speech. In 1949, eleven American Communist leaders were tried on conspiracy charges because they advocated overthrowing the capitalist system. Since the early 1950s, however, the courts have adopted a more protective approach to free speech. Since 1957, advocating the overthrow of the government has been constitutionally protected speech under the 1st Amendment. In a controversial 1989 decision, the Supreme Court held that the burning of an American flag as an act of political protest is also protected by the 1st Amendment, sparking a public outcry and political efforts to ban desecration of the flag.

- a. Sometimes, freedom of speech must be restricted for the good of the country.
- b. On occasion, Congress has passed laws that have restricted freedom of speech.
- c. The 1st Amendment to the Constitution says nothing about freedom of speech.
- d. The Supreme Court has ruled that burning an American flag as an act of protest is unconstitutional.

4. Heisenberg's Principle of Uncertainty, which states that events at the atomic level cannot be observed with certainty, can be compared to this: in the world of everyday experience we can observe any phenomenon and measure its properties without influencing the phenomenon in question to any significant extent. To be sure, if we try to measure the temperature of a demitasse with a bathtub thermometer, the instrument will absorb so much heat from the coffee that it will change the coffee's temperature substantially. But with a small chemical thermometer we may get a sufficiently accurate reading. We can measure the temperature of a living cell with a miniature thermometer, which has almost negligible heat capacity. But in the atomic world we can never overlook the disturbance caused by the introduction of the measuring apparatus.

Which of the following statements is best supported by the above passage?

- a. There is little we do not alter by the mere act of observation.
- b. It is always a good idea to use the smallest measuring device possible.
- c. Chemical thermometers are more accurate than bathtub thermometers.
- d. It is not possible to observe events at the atomic level and be sure that the same events would occur if we were not observing them.
- 5. Between 1810 and 1816, a group of New York citizens made repeated efforts to get federal funding for a canal that would link Lake Erie and the Hudson River. When the federal government refused to provide any assistance, a group of New Yorkers led by De Witt Clinton proposed that the State fund the canal. Clinton was elected governor in 1817, and work on the Erie Canal, financed by the State, began on July 4 of that year in Rome, New York. A section of the canal, from Rome to Utica, was opened to navigation in 1819. The waterway was completed in 1825, and on October 26 of that year the canal boat Seneca Chief set out from Buffalo to New York City. It arrived with great fanfare on November 4. The high point of the celebration was the dumping of a barrel of Lake Erie water into the Atlantic Ocean.

- a. The federal government opposed construction of the Erie Canal mainly for political reasons.
- b. Construction of the Erie Canal took approximately 15 years.
- c. State funds were used to finance the construction of the Erie Canal.
- d. Construction of the Erie Canal began in Buffalo.

6. The universe is 15 billion years old, and the geological underpinnings of the earth were formed long before the first sea creatures slithered out of the slime. But it is only in the last 6,000 years or so that men have descended into mines to chop and scratch at the earth's crust. Human history is, as Carl Sagan put it, the equivalent of a few seconds in the 15 billion year life of the planet. What alarms those that keep track of the earth's crust is that since 1950 human beings have managed to consume more minerals than were mined in all previous history, a splurge of a millisecond in geologic time that cannot be long repeated without using up the finite riches of the earth.

Of the following, the main idea of the paragraph is:

- a. There is true cause for concern at the escalating consumption of the earth's minerals in recent years.
- b. Human history is the equivalent of a few seconds in the 15 billion year life of the earth.
- c. The earth will soon run out of vital mineral resources.
- d. The extraction of minerals from the earth's crust only began about 6,000 years ago.
- 7. Many economists believe that there are four phases of the business cycle: prosperity, liquidation, depression, and recovery. These terms were originally developed by the American economist Wesley Mitchell, who devoted his career to studying business cycles. During a period of prosperity, there is an increase in industrial production. Employment, wages, and profits increase as well. As the upswing continues, however, obstacles begin to appear. Production costs increase, interest rates rise, prices rise, and consumers react to increased prices by buying less. Manufacturers begin to cut back, laying off workers. These factors lead to a period of liquidation. Business executives become pessimistic as prices and profits drop. Money is hoarded, not invested. Production cutbacks and factory shutdowns occur. Unemployment becomes widespread. A depression is in progress. Recovery from a depression may begin for a variety of reasons, including a resurgence in consumer demand or government action to stimulate the economy. As a recovery picks up speed, consumers buy more and businesses invest in new capital equipment. A new cycle begins.

- a. Higher prices lead consumers to buy less.
- b. Government intervention has no effect on the business cycle.
- c. No one knows what causes an economic depression.
- d. The idea of the business cycle is no longer relevant in today's economy.

8. In naming intervals that are wider than the octave, musicians follow two practices. The first is simply that of starting all over again; thus the two tones C-D, which frame the nine tones (C-D-E-F-G-A-B-C-D) may be called a second; or one may simply count the full number of tones and call it a ninth. Both terms are used interchangeably. If the two tones are sounded simultaneously, they are commonly called a second, in that the second and the ninth are identical from the point of view of harmony. If they are sounded in succession, they are then called a ninth, inasmuch as there is a great difference in melody between a second and the leap of a ninth.

According to the passage, if the two tones C-D are sounded in succession:

- a. The result is called an octave.
- b. The result is called a second.
- c. The result is called part of a "minor third."
- d. The result is called a ninth.
- 9. Hurricanes consist of high-velocity winds blowing circularly around a lowpressure center, known as the eye of the storm. The strength of a hurricane is rated from 1 to 5. The mildest, Category 1, has winds of at least 74 mph. The strongest (and rarest), Category 5, has winds that exceed 155 mph. Within the eye of the storm, the winds stop and the clouds lift, but the seas remain very violent.

Which of the following statements is best supported by the above passage?

- a. Category 1 hurricanes are the most common type.
- b. The strength of a hurricane is determined by the size of the eye.
- c. It is common for winds in a hurricane to exceed 155 mph.
- d. For a storm to be classified as a hurricane, it must have winds of at least 74 mph.

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10. "Lack of challenge" and "excessive zeal" are opposite villains. You cannot do your best on a problem unless you are motivated. Professional problem solvers learn to be motivated somewhat by money and future work that may come their way if they succeed. However, challenge must be present for at least some of the time, or the process ceases to be rewarding. On the other hand, an excessive motivation to succeed, especially to succeed quickly, can inhibit the creative process. The tortoise and the hare phenomenon is often apparent in problem solving. The person who thinks up the simple elegant solution, although he or she may take longer in doing so, often wins. As in the race, the tortoise depends upon an inconsistent performance from the rabbit. And if the rabbit spends so little time on conceptualization that the rabbit merely chooses the first answers that occur, such inconsistency is almost guaranteed.

According to the above paragraph:

- a. Excessive motivation to succeed can be harmful in problem solving.
- b. It is best to spend a long time on solving problems.
- c. Motivation is the most important component in problem solving.
- d. Choosing the first solution that occurs is a valid method of problem solving.
- 11. Scientists use two scales of measurement to describe earthquakes. One is the Richter scale, named after the American seismologist Charles Francis Richter (1900-85). The Richter scale increases logarithmically. For example, a magnitude 7 quake is 10 times more powerful than a magnitude 6 quake, 100 times more powerful than a magnitude 5 quake, 1000 times more powerful than a magnitude 4 quake, and so on. Approximately 800 quakes of magnitudes 5 to 6 occur annually worldwide, in comparison with only about one quake of magnitudes 8 to 9.

- a. The Richter scale is the most precise way of measuring the strength of an earthquake.
- b. Earthquakes that measure 5 to 6 on the Richter scale are more common than earthquakes that measure 8 to 9.
- c. A magnitude 8 earthquake is twice as powerful as a magnitude 7 earthquake.
- d. Scientists use two scales of measurement to describe earthquakes because neither one is wholly accurate.

12. No people have invented more ways to enjoy life than have the Chinese, perhaps to balance floods, famines, warlords, and other ills of fate. The clang of gongs, clashing cymbals, and beating of drums sound through their long history. No month is without fairs and theatricals when streets are hung with fantasies of painted lanterns. Night skies are illuminated by fireworks—a Chinese invention—bursting in the form of flowerpots, peonies, fiery devils. The ways of pleasure are myriad. Music plays in the air through bamboo whistles of different pitch tied to the wings of circling pigeons. To skim a frozen lake in an ice sleigh with a group of friends on a day when the sun is warm is rapture, like "moving in a cup of jade." What more delightful than the ancient festival called "Half an Immortal," when everyone from palace officials to the common man took a ride on a swing? When high in the air, one felt like an Immortal, when back to earth once again human—no more than to be for an instant a god.

According to the above passage:

- a. If the Chinese hadn't had so many misfortunes, they wouldn't have created so many pleasurable pastimes.
- b. The Chinese invented flowerpots.
- c. Every month the Chinese have fairs and festivals.
- d. Pigeons are required to play the game "Half an Immortal."
- 13. On January 1, 1863, Abraham Lincoln issued the Emancipation Proclamation. This document declared that all slaves in the Confederate states "shall be then, thenceforward, and forever free." Abolitionists had been urging Lincoln to take this action for several years. Runaway slaves were now free to join the Union army without fear of being returned to their masters. The Proclamation left no doubt that the Civil War, then at its height, was about slavery. Other nations that were friendly to the Confederacy, particularly England and France, decided not to intervene in the conflict because of the strong anti-slavery sentiments of their citizens.

- a. Lincoln issued the Emancipation Proclamation after the Confederacy was defeated in the Civil War.
- b. The Emancipation Proclamation declared that all slaves in the Confederate states were free.
- c. Abolitionists were at first opposed to the Emancipation Proclamation.
- d. England and France considered the Emancipation Proclamation a trick to keep them from providing aid to the Confederacy.

14. Western scientists are now beginning to discover what the philosophers of India have known for millennia: that the entire universe consists of one energy. The ancient Indian philosophers, who were scientists of the spirit, called that energy Consciousness, or God. They felt that this supreme Consciousness created the entire cosmos out of its own being. A builder may use wood, stone, and other materials to construct something, but Consciousness used no existing materials; it brought everything from within itself. They felt we are all portions of this universe of Consciousness. According to the Indian philosophers, we are not different from one another, and we are not different from God. If one sows a mango seed, one will get a mango, never a lemon. In the same way, that which is born of God can never be other than God. They felt that within the human heart dwells a shimmering effulgence whose brilliance surpasses even that of the sun. This inner Consciousness is the same as that which creates and animates the entire universe. But we are not aware of this. Even though we have come from this Consciousness, we have changed our understanding about ourselves.

According to the author:

- a. Physicists are beginning to discover what Indian philosophers have known for many years, that the universe consists of one energy.
- b. Consciousness and God are identical, as are mangos and lemons.
- c. Ancient Indian philosophers knew more than modern scientists.
- d. The Consciousness that created the universe is also inside of us.
- 15. Nearly 50 percent of the world's labor force is employed in agriculture. The percentages vary greatly from one part of the world to another. In Africa approximately 64 percent of the labor force works in agriculture, while in the U.S. and Canada the number is approximately 4 percent.

Farm size also varies widely from region to region. The average for Canadian farms is about 570 acres, and the average for U.S. farms is about 460 acres. The average size of a single landholding in the Philippines, however, is less than 9 acres, and in Indonesia, a little less than 3 acres. Size also depends on the purpose of the farm. Commercial farming, or production for cash, is usually on large holdings. Wheat farms are most efficient when they comprise some thousands of acres and can be worked by teams of people and machines. Australian sheep stations and other livestock farms must be large to provide grazing for thousands of animals. On the other hand, farms that produce mainly fruits and vegetables for local consumption are often small enough to be operated by a single family.

10

Which of the following statements is best supported by the above passage?

- a. In terms of acreage, Canada has the largest farms in the world.
- b. Farms in the U.S. and Canada are more productive than farms in Africa.
- c. On average, farms in Indonesia are smaller than farms in the Philippines.
- d. Approximately one third of the workforce in Africa is employed in agriculture.
- 16. One of the central issues in the debate over the death penalty is its effectiveness as a deterrent to violent crime. Is the death penalty a more effective deterrent than life in prison? Defenders of the death penalty believe that it is; opponents of the death penalty disagree. Opponents cite the experience of adjacent states in which one has the death penalty and one does not. In these cases, there is no significant difference in murder rates between the states. Opponents also point out that murder rates are higher, not lower, in states that have the death penalty.

- a. Opponents of the death penalty believe that it is not a deterrent to violent crime.
- b. Defenders of the death penalty believe that anyone who commits murder loses the right to live.
- c. Opponents of the death penalty believe that it is no more effective than life in prison as a deterrent to violent crime.
- d. Defenders of the death penalty are not primarily concerned with whether it is an effective deterrent to violent crime.
- 17. Vegetarians have a variety of reasons for their beliefs. Some refuse to eat meat because they believe that the killing of animals is unnecessary or barbaric. They feel that processes such as butchering are degrading to the people who practice them and cruel to the animals slaughtered. Others believe that meat is harmful to the human body and that a purely vegetable diet is more nutritious. Still others choose vegetarianism because they believe that raising animals for meat is an inefficient use of land. They say that farmland could be put to better use growing crops for human consumption.

- a. Some vegetarians choose not to eat meat mainly for health reasons.
- b. A purely vegetable diet is more nutritious than a diet that includes meat.
- c. Vegetarians are opposed to any use of animals for the benefit of humans.
- d. Vegetarians favor laws to reduce the consumption of meat.
- 18. None of this would be worth saying if Descartes had been right in positing a one-to-one correspondence between stimuli and sensations. But we know that nothing of the sort exists. The perception of a given color can be evoked by an infinite number of differently combined wavelengths. Conversely, a given stimulus can evoke a variety of sensations, the image of a duck in one recipient, the image of a rabbit in another. Nor are responses like these entirely innate. One can learn to discriminate colors or patterns which were indistinguishable prior to training. To an extent still unknown, the production of data from stimuli is a learned procedure. After the learning process, the same stimulus evokes a different datum. I conclude that, though data are the minimal elements of our individual experience, they need be shared responses to a given stimulus only within the membership of a relatively homogeneous community-educational, scientific, or linguistic.

- a. One stimulus can give rise to a number of different sensations.
- b. There is a one-to-one correspondence between stimuli and sensations.
- c. It is not possible to produce data from stimuli by using a learned procedure.
- d. It is not necessary for a group to be relatively homogeneous in order to share responses to stimuli.

19. African artists have developed diverse traditions of sculpture, painting, architecture, furniture, pottery, textiles, and jewelry. Artists generally work as specialists, receiving their training from established artists living in the community or wider area. In some places, the artistic profession is seen as hereditary, with talent being passed from generation to generation, and with creativity and success often linked to a divine ancestral endowment.

In some African cultures, artists use deliberate distortion of the human figure to portray undesirable characteristics. The Ibo and Ibibio of Nigeria, for example, carve masks with diseased, horrific, monstrous, or asymmetrical features to represent characters who are evil or dangerous. In Ibo and Ibibio masquerade performances, such masks are often contrasted with other, more beautifully featured and aesthetically pleasing masks that are worn to portray persons who are good, or peaceful.

Which of the following statements is best supported by the above passage?

- a. All African artists follow similar artistic traditions.
- b. Most individual artists work in many different forms, such as sculpture, painting, and pottery.
- c. Some artists deliberately create distorted images to show negative personal characteristics.
- d. All of the masks created by the Ibo of Nigeria have ugly or asymmetrical features.
- 20. During the one second that blood is running through the capillaries of the lungs, the single atom of zinc that is set in the center of the enzyme carbonic anhydrase comes into contact with 600,000 of its target molecules, carbonic acid. As a result, each is broken down into one carbon dioxide and one water molecule. Only because the enzyme acts so quickly is it possible for the carbon dioxide to be freed fast enough from its components to leave the blood during that moment in the alveolus when it is separated from air only by a very thin membrane. So our ability to rid our bodies of CO₂ is totally dependent on these critically located atoms of zinc. Yet, up until a few years ago, zinc was considered to be of little significance in the body's functioning.

The author's main point is

- a. Zinc helps metabolize carbohydrates.
- b. Zinc is less important that it was previously thought to be.
- c. The enzyme carbonic acid has one atom of zinc in the center.
- d. Zinc is essential to the human body's ability to exhale CO₂.

21. In the nineteenth century, dairy farming was confined to the spring and summer months, when pasturage was plentiful. Cows, calving in the spring, were allowed to become dry in the fall and were poorly fed and sheltered during the winter. Under the present system, dairy farming is not confined to any season; during the winter, cows are fed fodder in the form of silage. The ratio of dairy cows to people in the U.S. has changed from one cow to every four persons in the population of the late 19th century to one cow to every six persons in the present population. One reason for this change is that today less milk is lost to contamination and spoilage. A properly managed dairy farm is extremely efficient. Most of the nutrients taken from the soil by crops may be replaced by the supply of manure provided by the dairy herd.

Which of the following statements is best supported by the above passage?

- a. Dairy farming is an efficient type of agriculture.
- b. There are fewer cows in the U.S. today than there were in the 19th century.
- c. Most dairy farms operate only in the spring and summer.
- d. Contamination and spoilage are still common problems in the dairy industry.
- 22. If a car breaks down on a busy highway, hundreds of drivers may go by before anyone stops to help. If a car breaks down on a nearly deserted country road, however, there is a good chance that the first car to come along will stop to offer assistance. The difference is the personal responsibility that a passerby feels. A driver on a little-traveled road knows that if he or she does not stop, the odds are good that the stranded person will not get help. On a busy highway, the same driver will probably feel that he or she is no more personally responsible than any of the many other drivers. Even though the event is an emergency, people in a group will usually feel less responsible than a witness who is alone. In a group, each bystander may feel that all the others are equally responsible for helping.

The main idea of the passage is:

- a. You are more likely to get help on a lonely country road.
- b. People who live in cities are less helpful.
- c. The personal responsibility a passerby feels decreases the smaller the number of people witnessing the event.
- d. The personal responsibility a passerby feels increases the smaller the number of people witnessing the event.

23. Vitamins are organic compounds required by the body in small amounts for metabolism, to protect health, and for proper growth in children. Vitamins also assist in the formation of hormones, blood cells, nervous-system chemicals, and genetic material. Vitamins act as catalysts, combining with proteins to create enzymes that in turn produce hundreds of important chemical reactions throughout the body. Without vitamins, many of these reactions would slow down or cease. Nutrition experts recognize 13 specific vitamins, all of which fall into two broad categories: fat-soluble or water-soluble. The fat-soluble vitamins, including A, D, E, and K, are stored in the body's fat, and therefore they do not have to be consumed every day. The water-soluble vitamins, including the eight B vitamins and vitamin C, cannot be stored and must be consumed frequently, preferably every day. The body can manufacture only vitamin D; all others must be derived from the diet.

- a. Fat-soluble vitamins are more important in preserving health than watersoluble vitamins.
- b. The 13 commonly recognized vitamins should be consumed in some form every day.
- c. Some vitamins can be consumed only from meat and fish.
- d. Water-soluble vitamins are not stored in the body and should be consumed frequently.
- 24. The idea of the sexual division of labor is a changeable concept, subject to the particular needs of segments of society which frequently change. For example, in 1917 the banking community was faced with a shortage of labor. They attracted women into clerical and lower level managerial jobs by arguing that women "are exceptionally fitted for work of this character their neatness, deft handling of money and papers, tact and a certain intuitive judgment all being qualifications that count in their favor." In the early 1930's, there was a very large supply of male workers available because of the Depression. The banking industry changed its mind, and said it could not hire women, even as tellers, because they were poor at figures, and because the public would not accept the notion of handing over their money to women. A few years later, faced with a shortage of labor due to the second world war, banks once again hired women as tellers. Industry journals argued then that women would make ideal tellers because they were so good at dealing with the public.

- a. Female bank tellers are more likely to be good at dealing with the public than male bank tellers.
- b. The kinds of work women are encouraged and expected to perform may depend on the particular needs of an industry.
- c. The banking industry promotes few women into higher management positions.
- d. Women are best suited for lower- and mid-level management positions.
- 25. The modern Olympics were conceived in the spirit of international friendship and cooperation, but conflicts between nations have sometimes interfered with this noble intention. In the 1936 Berlin Olympics, Adolf Hitler refused to recognize the achievements of Jesse Owens, a black American who won four gold medals. At the 1972 games, held in Munich, West Germany, an Arab guerilla organization killed two Israeli athletes and took nine others hostage. Two additional athletes and five of the guerillas were later killed in a gun battle with police. Conflict arose again at the 1976 games, held in Montreal. The host Canadian government refused to allow the team from Taiwan to carry its flag or have its national anthem played at the games. The Taiwanese withdrew from the games. The same year, several African nations demanded that New Zealand be excluded from the Olympics because one of its rugby teams had recently played in South Africa. When their demand was refused, the African nations withdrew from the games.

- a. An Arab guerilla organization carried out an attack on the Israeli team at the 1972 Olympics.
- b. In the 1976 Olympics, the host country, Canada, banned the Taiwanese from competition.
- c. The New Zealand team was banned from the 1976 games because a rugby team from New Zealand had recently played in South Africa.
- d. Adolf Hitler was the first national leader to inject the spirit of nationalism into the Olympics.

26. Plutarch, writing of a great battle that occurred in 102 BC, believed that noise produced rain. Since nature's rain was accompanied by thunder, people might get the same results in the same way. This association of ideas eventually came to link weather control with concussion. In the 16th century, Benvenuto Cellini wrote that he had brought on rain by artillery fire. Church bells have been rung in France and Italy to jar the air and so wring precipitation from the skies. A modern scholar, Clark C. Spence, has noted that "shooting with cannon, handguns, and rockets to produce rain was common in the Beaujolais wine districts almost to the twentieth century."

Which of the following statements is best supported by the above passage?

- a. Benvenuto Cellini proved the skies will give up their moisture after sufficient noise.
- b. Beaujolais wine was improved with shooting cannon, handguns, and rockets.
- c. Studies have never been able to disprove the theory that noise produces rain.
- d. In some cultures people believe that noise and rain are related.
- 27. Parkinson's disease is a slowly progressive disabling ailment, marked by tremor and increasing stiffness of the muscles. It affects more men than women, and it is most likely to develop after the age of 35. About 200,000 cases are recorded annually in the U.S. The disease results from degeneration of the basal ganglia, an area of nerve cells at the base of the brain. Nerve signals are carried through this area by a chemical called dopamine. Patients with Parkinson's disease have a marked shortage of this chemical. The reason for this deficiency is not known. The symptoms of the disease include excessive salivation, poor coordination, faulty body balance, tremors, and muscle rigidity. In some patients, shortening of muscles along the front of the neck tends to bend the head and spine forward. A number of experimental treatments have been used for the symptoms of the disease, but as yet no cure or comprehensive treatment has been developed.

- a. Parkinson's disease is a form of cancer.
- b. Dopamine is a powerful drug that can relieve some symptoms of Parkinson's disease.
- c. Parkinson's disease is more common among men than women.
- d. Approximately 200,000 patients die each year in the U.S. as a result of Parkinson's disease.

28. The instructions for a drain opener read as follows:

For a clogged drain there is no need to remove standing water. Use half of the bottle. Allow to work 30 minutes. Flush with hot water. Repeat application if necessary and let stand for one hour. Then flush with hot water. For severely clogged drains, let stand overnight before flushing with cold water. For slow running drains, use one third of the bottle. Let stand 15 minutes. Repeat application two more times. Flush with hot water after the third application.

Listed below are four statements:

- I. For a slow running drain, it's suggested that you use three applications.
- II. It's recommended that you flush a clogged drain with cold water after the drain opener has stayed in it for one hour.
- III. It's recommended that you let a severely clogged drain stand overnight before flushing with hot water.
- IV. According to the instructions, there's no need to remove standing water before using the drain opener.

Of the above,

- a. Only statements I, III, and IV are correct.
- b. Only statements I and III are correct.
- c. Only statements I and IV are correct.
- d. Only statements I, II, and IV are correct.
- 29. Wastewater is carried from its source to treatment facilities through various types of pipe systems. If the system carries both domestic and storm water sewage, it is called a combined system. Combined systems are usually found in the older sections of urban areas. As the cities expanded and began to provide treatment of sewage, sanitary sewage was separated from storm sewage by a separate pipe network. This arrangement is more efficient because it keeps storm sewage out of the treatment plant. Unlike domestic sewage, storm sewage usually does not need to be treated.

Urban sewer mains generally discharge into interceptor sewers, which join to form a trunk line that discharges into the treatment plant. Trunk lines are sometimes large enough for a truck to drive through them.

- a. Sewage usually flows directly from households into a trunk line
- b. Combined systems are usually found in older urban areas.
- c. Not all domestic sewage needs to go to a treatment plant.
- d. It is more efficient to have domestic and storm sewage flowing through the same pipes.
- 30. Susan B. Anthony and Elizabeth Cady Stanton were early leaders in the struggle for women's rights. From 1854 to 1860 they concentrated on reforming New York State laws discriminating against women. They both believed that women would not gain their rights or be effective in promoting reforms until they had the vote. After the Civil War, they concentrated on this issue. In 1869 they organized the National Woman Suffrage Association to work for a constitutional amendment giving women that right. Although the newly freed slaves were granted the vote by the 15th Amendment, women of all races continued to be excluded. From 1868 to 1870 Anthony and Stanton published a newspaper, Revolution, focused on injustices suffered by women. To dramatize her fight, Anthony defiantly registered and cast a ballot in the 1872 presidential election. She was arrested and convicted, but refused to pay the \$100 fine. She went to Europe in 1883, met women's rights activists there, and in 1888 helped form the International Council of Women, representing 48 countries.

- a. Freed slaves received the right to vote before women did.
- b. After the Civil War, Anthony and Stanton focused on reforming New York State laws that discriminated against women.
- c. Elizabeth Cady Stanton was arrested and convicted for voting in the 1872 presidential election, but she refused to pay the \$100 fine.
- d. Women won the right to vote shortly after the Civil War.

31. Novel or dangerous situations or disturbing thoughts that cause a person to feel frightened, angry, anxious, grief-stricken or depressed can set the body pinging like a pinball machine with a dozen balls in play. The chemicals that trigger the uproar can affect the entire body almost simultaneously. Electrochemical activity in the brain causes the hypothalamus to trigger the release of adrenocorticotropin (ACTH) from the pituitary gland. ACTH, a hormone, travels in the bloodstream. Reaching the kidneys, ACTH prompts the adrenal glands to release hormones like cortisol and epinephrine, which can affect virtually every organ in the body. Epinephrine signals the heart to beat faster, speeding up the response to a crisis. The stomach starts producing the hormone gastrin as part of a general acceleration of metabolism. The kidneys begin to produce renin, provoking the constriction of blood vessels. High cortisol levels may harm organs vital to the production of white blood cells. The spleen and thymus may shrink, weakening the immune system.

According to the passage, the reaction to stress is carried out in which of the following orders?

I. The adrenal glands release hormones likes cortisol.

II. The heart beats faster because of epinephrine.

III. The hypothalamus triggers the release of adrenocorticotropin.

IV. Adrenocorticotropin travels in the bloodstream.

a. I, II, III, IV

b. IV, I, III, II

с. IV, III, I, II.

d. III, IV, I, II

32. Wine is classified in three major categories. Table wines, also called still or natural wines, are consumed primarily as complements to food. Sparkling wines, for example champagne, are drunk for the most part on festive occasions. Fortified wines, such as sherry or vermouth, are most commonly drunk before or after meals and are also frequently used in cooking. These wines are called fortified because their alcoholic and sugar content are boosted by the addition of a more potent additive, usually brandy. Fortified wines have an alcohol content of 15 to 22 percent by volume. The alcohol content of table wines is typically 12 to 14 percent.

Table wines are classified by color (red, white, or rosé) and by flavor (sweet or dry). Red wines are made from dark grapes. The wine absorbs its color from the skins of the grapes, which are allowed to remain in contact with the juice for a period of two days to three weeks. White wines may be made from "white" (that is, green) grapes or from dark grapes. If dark grapes are used, the skins are not allowed to come in contact with the fermenting juice. True rosé wines are made from dark grapes, but their skins are allowed to stay in contact with the juice for only a short time.

- a. Fortified wines have a higher alcohol content than table wines.
- b. Fortified wines are made by blending two types of table wine.
- c. Fortified wines typically have three times as much alcohol by volume as table wines.
- d. Rosé wines are a mixture of red and white wines.
- 33. There are many ways status manifests itself in this country, depending upon the subculture and the individual's perceptions. One example is our fascination with and elevation of royalty, celebrities, and the rich. Inherent in the taunt, "If you're so smart, why aren't you rich?" is the idea that there is something lacking in those who do not have a lot of money. There is an especially strong tendency to classify people according to the work they perform, and then to accept or dismiss them on that basis. At parties often the first question asked is, "What do you do?" (meaning, "Where do you work, and what do you do there?"). The answer one gives may determine how long the conversation will continue. When people are identified only with the work they do, the other aspects of their existence lose importance, and they are transformed into one-dimensional beings. This can have very negative effects on their self-concepts.

- a. The success of television shows that glamorize wealth is a reflection of our fascination with royalty.
- b. Most Americans would prefer to have a British-style monarchy.
- c. The tendency to classify people solely by the work they do can have harmful consequences.
- d. Most people want to perform meaningful work.
- 34. Niagara Falls consists of two cataracts: the Canadian, or Horseshoe, Falls (161 ft high), on the Canadian side of the river, and the American Falls (167 ft high), on the U.S. side. The waterfalls are separated by Goat Island, N.Y. The Canadian Falls are crescent-shaped. They cover much more area than the American Falls, and about nine times as much water flows over them. A small section of the American Falls near Goat Island is also known as Bridal Veil Falls. Niagara Falls was formed about 12,000 years ago. Since that time, erosion has gradually pushed the falls upstream. At present, the Canadian Falls is being cut away at a rate of about 5 ft per year, and the American Falls erodes at a faster rate mainly because it carries more water. In 1954 a large part of the American Falls broke off, creating a large slope at the base of the falls.

Which of the following statements is best supported by the above passage?

a. The Canadian Falls are higher than the American Falls.

b. The American Falls are also called the Horseshoe Falls.

c. More water flows over the Canadian Falls than the American Falls.

d. The American Falls are receding faster than the Canadian Falls.

35. The most astounding and developed symbolic device humanity has evolved is language. By means of language we can conceive the intangible, incorporeal things we call our ideas, and the equally inostensible element of our perceptual world that we call facts. It is by virtue of language that we can think, remember, imagine, and finally conceive a universe of facts. We can describe things and represent their relations, express rules of their interactions, speculate and predict, and carry on a long symbolizing process known as reasoning.

According to the above paragraph, all of the following are true EXCEPT:

- a. Language allows us to think and to imagine.
- b. Although humanity has evolved language, reasoning is still a process that is frequently ignored.
- c. Language gives us the means to describe relationships between things.
- d. Facts and ideas are intangible things we conceive of through language.
- 36. The Iroquois Confederacy was an important group of native Americans living in what is now central New York. Founded in the 16th century, the original confederacy consisted of five tribes: the Mohawk, Onondaga, Cayuga, Oneida, and Seneca. These tribes were known as the Five Nations, or the League of Five Nations. In the early 18th century, the Tuscaroras, a tribe originally from what is now North Carolina, was formally admitted to the confederacy, and the name of the league was changed to the Six Nations, or the League of Six Nations.

The Iroquois economy was based on agriculture. Corn was the main crop, but it was supplemented with pumpkins, beans, tobacco, apples, and peaches. The Iroquois also made fine pottery, splint baskets, and mats of corn husks. Each town had several long, bark-covered communal houses. The families of a clan lived in semiprivate compartments, and the central areas were used as social and political meeting places. The common council of the entire confederacy met in such meeting places. Each town was represented by delegates to the league council. There was no overall leader of the Confederacy. Affairs of state were usually decided by a unanimous vote of the league council.

The stable social and political structures of the Iroquois enabled them to maintain a position of power during the Colonial period. In the conflict between the English and the French, most of the Iroquois sided with the English, because they opposed the spread of French settlements southward from Canada.

- a. At one time, the Iroquois Confederacy controlled most of the land from New York to North Carolina.
- b. In 1650, the Iroquois Confederacy consisted of six tribes or nations.
- c. The Iroquois were basically a nomadic people.
- d. The Iroquois Confederacy survived because of stable political and social structures.
- 37. "It was never assumed in the U.S. that the citizen of a free country has a right to do whatever he pleases; on the contrary, more social obligations were there imposed upon him than anywhere else. No idea was ever entertained of attacking the principle or contesting the rights of society; but the exercise of its authority was divided, in order that the office might be powerful and the officer insignificant, and that the community should be at once regulated and free. In no country in the world does the law hold so absolute a language as in America, and in no country is the right of applying it vested in so many hands. The administrative power in the U.S. presents nothing either centralized or hierarchical in its constitution; this accounts for its passing unperceived. The power exists, but its representative is nowhere to be seen."

The author refers to which of the following in this passage?

a. The generosity of Americans.

b. The American system of checks and balances in government.

c. American idealism.

d. The greed of the American people.

38. The Supreme Court of the United States operates mainly as an appellate body. This means that it reviews the decisions of the highest state courts and of the lower federal courts. In essence, it has complete authority over all U.S. courts. In addition to its appellate powers, the Supreme Court has jurisdiction in cases involving a public minister, an ambassador, or a consul. The Court's powers extend to all cases in which the U.S. is a party and to cases between governments or citizens of different states.

The Supreme Court consists of eight associate justices and the chief justice, all appointed by the president with the consent of the Senate. Members of the Court are appointed for life terms and can be removed only by resignation or impeachment. Since its establishment, the number of justices on the Supreme Court has varied from five to ten. The size of the Court is not specified by the Constitution; rather it is determined by the U.S. Congress. The Court reaches decisions by majority vote, but any justice may issue a dissenting opinion.

Which of the following statements is best supported by the above passage?

- a. The number of justices on the Supreme Court is specified in the U.S. Constitution.
- b. Currently, there are eight justices on the Supreme Court.
- c. The president has the authority to nominate justices and to remove them from the Supreme Court.
- d. The Supreme Court has authority over all U.S. courts.
- 39. A balloon filled with water reacts differently from a balloon filled with air. If both are dropped on the ground, the one filled with water will probably burst while the one filled with air will bounce. In the water balloon, the force produced when striking the ground breaks the balloon. It is transmitted to all surfaces of the balloon. However, the air balloon bounces because it absorbs the force. The air inside the balloon quickly compresses and then expands again. Pressure on a gas, such as air, causes the volume of the gas to decrease. This is not so with a liquid. Increased pressure does not compress a liquid any significant amount.

Car tires are filled with air instead of water because

a. Pressure on a gas causes the volume of the gas to increase.

b. Air can absorb the force of the bouncing tire.

- c. Liquid would freeze in the winter and evaporate in the summer.
- d. Air is cheaper to use.

40. Apple growing in the U.S. is limited to four major areas: the northwestern states, the Shenandoah-Cumberland region, the northeastern states, and the north-central states. The various kinds of Delicious apples are the most widely grown variety in the U.S. They are particularly well adapted to the Northwest but are grown commercially in all apple areas. McIntosh is the leading apple in the Northeast. In the Shenandoah-Cumberland area the most important varieties are York Imperial, Delicious, and Stayman Winesap. In the north-central area, the leading varieties are McIntosh, Jonathan, Rome Beauty, Wealthy, and Cortland.

Apple production in the U.S. is about 9 percent of the world total. Washington produces more apples than any other state. Next ranking in descending order are New York, Michigan, California, Pennsylvania, and Virginia.

Which of the following statements is best supported by the above passage?

- a. Delicious apples are the most widely grown variety in the U.S.
- b. New York produces more apples than any other state.
- c. The various kinds of Delicious apples are the most popular variety in every region of the U.S.
- d. The U.S. is the largest producer of apples in the world.
- 41. In the eighteenth century, medicine was practiced by a hierarchy of practitioners. At the top of the system were the physicians, who were university-educated and who enjoyed high social status. The number of physicians was strictly controlled by the profession's governing bodies. In England, the Royal College of Physicians licensed only 100 physicians in the early eighteenth century. Only licensed physicians could hold medical consultations and receive payment for their advice.

Below the physicians were the surgeons, who were still called barber-surgeons in many places. Their main functions were to bleed patients and to perform surgery. Bleeding (that is, draining a quantity of blood from a patient) was widely thought to cure a variety of ills. Surgery was performed in primitive conditions, without anaesthetic and with no attempt to prevent infection. During the course of the century, surgeons became more knowledgeable about the human body and gained greater prestige. By the end of the century, the distinction between surgeons and physicians began to disappear.

26

- a. Physicians and surgeons held different positions in the medical hierarchy during most of the eighteenth century.
- b. Surgery was uncommon in the eighteenth century.
- c. Surgeons in the eighteenth century were widely considered to be more knowledgeable about the human body than physicians.
- d. In England, the number of licensed surgeons was strictly controlled by the Royal College of Physicians.
- 42. The Great Lakes are a group of five large lakes in central North America. From east to west, they are Lakes Ontario, Erie, Huron, Michigan, and Superior. Lake Michigan lies entirely within the U.S., but the other lakes straddle the border between the U.S. and Canada. About two-thirds of the surface area is within the boundaries of the U.S. All are jointly controlled by the U.S. and Canada under the Boundary Waters Treaty of 1909. Taken together, the Great Lakes represent the largest body of fresh water in the world.

- a. Lake Michigan is west of Lake Huron.
- b. The Boundary Waters Treaty of 1909 gave sole control of the Great Lakes to the U.S.
- c. The U.S. and Canada have a long history of disputes over control of the Great Lakes.
- d. Most of the area of the Great Lakes falls within the borders of Canada.

43. There are approximately 340 species of sharks, the most feared of all fish. Some sharks are versatile hunters. Many species are able to hunt and eat nearly all the larger marine animals in both shallow and deep seas. Sharks have a long evolutionary history. Many of the shark species living today are quite similar to species that thrived more than 100 million years ago.

Sharks come in many sizes. The whale shark is the largest shark and also the largest fish in the sea, measuring up to 49 ft in length. (Some whales are larger, but they are mammals, not fish.) Sharks are especially abundant in tropical and subtropical waters. Many species migrate up rivers, and in Central America some species have been seen far inland. Sharks are best known as aggressive carnivores (meat eaters) that even attack members of their own species. Surprisingly, two of the largest sharks (the basking shark and the whale shark) are not hunters at all. They feed on plankton, which they strain from the water.

Which of the following statements is best supported by the above passage?

- a. Shark habitats are not confined to the oceans.
- b. Sharks have a long evolutionary history, but the sharks of today bear little resemblance to their ancient ancestors.
- c. Technically, sharks are mammals, not fish.
- d. Sharks are found only in tropical and subtropical waters.
- 44. President Theodore Roosevelt could best be described as an activist in foreign policy. At times he worked behind the scenes on the world stage. For example, he quietly halted German intervention in Venezuela in 1902, and he mediated several conflicts in Europe in 1904 and 1906. At other times, he acted openly and with considerable fanfare. He supported the revolution in Panama in 1903 that eventually led to U.S. acquisition of land for the Panama Canal. He proclaimed in 1904 that the U.S. had "police power" over all of Latin America, a statement that created great controversy at the time and in years to come.

Despite some of his war-like pronouncements, Roosevelt was also renowned as a peacemaker. His greatest achievement in this area was his mediation of the Russo-Japanese War in 1905. He won the Nobel Peace Prize for his efforts to resolve this conflict, becoming the first American to win the prestigious award. Roosevelt believed that peace must be based on military strength. Throughout his presidency he worked to strengthen and modernize the armed forces.

- a. Theodore Roosevelt was most renowned for his military accomplishments.
- b. Theodore Roosevelt mediated several international conflicts.
- c. Theodore Roosevelt received the Nobel Peace Prize for resolving conflicts in Latin America.
- d. Theodore Roosevelt always worked behind the scenes to resolve international conflicts.
- 45. The first great wave of immigration to the U.S. began early in the 19th century. Many Europeans left their homelands to escape the economic hardship caused by the Industrial Revolution and the change from small-scale to large-scale farming. During the first period, from 1820 to 1860, most of the immigrants came from Great Britain, Ireland, and western Germany. From 1860 to 1890. those countries continued to supply a majority of the immigrants, but a significant number of immigrants also arrived from the Scandinavian countries. After 1890, this pattern changed. The majority of immigrants in the early years of the twentieth century came from southern and eastern Europe. Immigrants from Austria, Hungary, Italy, and Russia constituted more than half of the total. The years from 1905 to 1914 saw an enormous increase in the number of immigrants, with more than one million aliens arriving each year. This number declined sharply during World War I. It increased again for a brief time after the war, but in the 1920's the number declined again, partly because of new restrictions placed on immigration by the U.S. government. In 1924, the government instituted a system of quotas for immigration from various nations. The quotas were higher for the nations of northern and western Europe because immigrants from these countries were supposedly more desirable than immigrants from eastern and southern Europe.

- a. In the early nineteenth century, most immigrants came from eastern and southern Europe.
- b. The number of immigrants declined during World War I.
- c. Immigration peaked during the 1920's.
- d. Restrictions imposed in the 1920's favored immigrants from eastern and southern Europe.

46. During a trial, questions of law are determined by the court and questions of fact are determined by the jury. The court decides whether evidence is admissible. The jury decides on the credibility and significance of evidence. After all the evidence has been presented, the two counsels, first for the defendant and then for the plaintiff or prosecution, summarize their arguments. Each addresses the jury, reviewing the evidence in the case and commenting on it in a manner favorable to that counsel's side of the case. The judge then makes a charge to the jury. The charge is a statement regarding the applicable law and the rules of evidence as they apply to the case. The jury then leaves the courtroom for deliberations. These deliberations continue until the jury reaches a decision or until the judge decides that the jury will not be able to reach a decision, an outcome known as a "hung jury." If the jury cannot reach a decision, a new trial may be ordered. In criminal trials the verdict of the jury must be unanimous. In civil trials in some states, a unanimous vote is not required to decide the outcome of the trial. In a civil trial, the jury also determines the amount of damages to be paid to the winning party.

- a. The rules of evidence are not as strict in a civil trial.
- b. The judge determines the significance of particular items of evidence.
- c. A hung jury represents a victory for the defendant.
- d. The court determines if a particular piece of evidence is admissible.

47. The term "gun control" generally refers to laws that place restrictions on legal ownership of certain firearms. These restrictions involve such things as background checks of gun purchasers, mandatory waiting periods, or banning the sale of some weapons altogether. It is estimated that some 70 million Americans own 200 million rifles and handguns. Since gun ownership is so widespread, the issue has considerable political significance. The basis for the debate is the Second Amendment to the U.S. Constitution, which guarantees that "the right of the people to keep and bear Arms shall not be infringed." Those opposed to controls interpret this to mean that the government does not have the right to limit or ban ownership of guns. Those in favor of controls believe that the Second Amendment refers only to arms to be used by "well regulated militia," not the general population.

Federal laws that were passed in the 1930s prohibited private possession of submachine guns and sawed-off rifles and banned the sale of guns to known criminals. In 1968 Congress passed the federal Gun Control Act, prohibiting interstate retailing of firearms. Many cities and states have banned handguns, or plastic guns, and bullets that can penetrate protective vests. In 1989 California became the first state to prohibit the sale or possession of semiautomatic assault weapons. In November 1993, the Brady Handgun Violence Prevention Act imposed a five-day waiting period on buyers of handguns nationwide.

- a. Gun control laws have been enacted at both the state and national levels.
- b. The Second Amendment imposed mandatory waiting periods on the sale of handguns.
- c. The Gun Control Act of 1968 repealed the Second Amendment.
- d. A majority of Americans own some type of gun.
- 48. When viewed without a telescope, Mars appears to be red. After Venus, it is the brightest object in the night sky. Mars has bright orange regions and darker, less red areas. The outlines and tones of these areas change with the Martian seasons. The reddish color of the planet results from its heavily oxidized, or rusted, surface. The dark areas are thought to consist of rocks similar to basalt. The brighter areas seem to consist of similar but even more weathered and oxidized material that apparently contains more fine, dust-sized particles than do the dark regions.

- a. Mars is the brightest object in the night sky.
- b. The surface of Mars is not really red.
- c. The appearance of Mars changes with the Martian seasons.
- d. Mars appears red because of gases in its atmosphere.
- 49. Heredity and environment interact to form personality. Infants differ widely because of variables that either are inherited or result from conditions of pregnancy and birth. Some infants are more attentive than others, for example, whereas some are more active. These differences can influence how parents respond to the infant. Their response, in turn, influences the infant's development.

Intelligence is widely believed to be influenced by heredity, but there is wide agreement that intelligence is also affected by environmental stimuli, especially in early childhood. Again, heredity and environment interact. Children who display natural intelligence and inquisitiveness are more likely to receive encouragement in their intellectual development.

Listed below are four statements:

- I. Intelligence is determined solely by heredity.
- II. It is difficult to separate the effect of heredity and environment in determining intelligence.
- III. Environmental stimuli are especially important to intellectual development during early childhood.
- IV. All infants begin life with basically the same intellectual capacity.

In the author's view, which of the above statements is correct?

- a. Only statements I and IV.
- b. Only statements II and III.
- c. Only statement I.
- d. Only statements I, II, and IV.

50. Physics is relatively new as a distinct intellectual discipline. It emerged as a separate science only in the early 19th century. Before that, a physicist was often also a mathematician, philosopher, chemist, biologist, or engineer. The field has grown so much in the last two hundred years that today physicists have to limit their work to one or two branches of the science.

The work of the physicist is often taken over by other specialists once it reaches maturity. For example, in the 19th-century electricity and magnetism were two of the main areas of interest for physicists. But as these subjects became widely understood, they were taken over by electrical and communication engineers. Nuclear physics has followed a similar development path. In the first half of the 20th century, physicists made profoundly important discoveries about the basic properties of matter. Their work was subsequently taken over by engineers and applied in the fields of electronics and nuclear energy.

Which of the following statements is best supported by the above passage?

- a. Physics has had few practical applications.
- b. No one was interested in physics before the 19th century.
- c. The work of the physicist is often taken over and put to practical use by engineers.
- d. Today, physics is not really considered a separate science.
- 51. Chronic marijuana users are said to develop an "amotivational syndrome" characterized by passivity, decreased motivation, and preoccupation with drug taking. No one has determined the physical causes of this syndrome. Its relationship to marijuana use has been established by clinical and statistical studies. Like alcohol intoxication, marijuana intoxication impairs reading comprehension, memory, speech, problem-solving ability, and reaction time. The effects on the intellect of long-term use are unknown. Consistent evidence that marijuana induces or causes brain damage does not exist.

- a. There is no evidence that marijuana use affects memory or speech.
- b. The effect of marijuana use are significantly different from the effects of alcohol.
- c. Chronic marijuana users are likely to exhibit violent behavior.
- d. There is no consistent evidence that marijuana use causes brain damage.

52. Glaucoma is the name given to a family of diseases characterized by abnormal pressure within the eyeball leading to declining vision and eventual loss of sight. Approximately one-eighth of all blindness in the U.S. is due to glaucoma. The variety of the disease known as chronic simple glaucoma usually responds well to local medication. If the disease does not respond to medical treatment, laser or mechanical surgery may be needed. Acute glaucoma represents an emergency situation. Unless pressure within the eyeball is lowered within 24 hours, permanent damage may occur.

Which of the following statements is best supported by the above passage?

- a. Most cases of blindness in the U.S. are caused by glaucoma.
- b. All cases of glaucoma eventually require surgery.
- c. Glaucoma is characterized by abnormal pressure in the eyeball.
- d. There is no effective treatment for acute glaucoma.
- 53. Consumer spending was weak in October, but it was not for lack of income growth. Personal income advanced a healthy 0.6% in the month to an annual rate of \$3,085.5 billion, seasonally adjusted. The \$17.6 billion increase in October was close to the \$19.8 billion average monthly gain since June. Income growth has slowed from the exceptionally strong pace in the first half, when incomes advanced \$24 billion per month. The slowing is primarily attributable to a moderation in the rate of gain of factory jobs. Because of a dip in hours worked in October, income from wages and salaries - about 60% of all income rose only about \$4.2 billion in October, compared with a \$12.3 billion gain in September. But continued strength in interest income - only about 15% of the total - added \$6.8 billion in October. Personal outlays, holding at \$2,469.2 billion, were virtually unchanged in October. But what consumers did not spend they saved: savings as a percentage of after-tax income rose to 6.5% in October. compared with the 6.3% rate in the third quarter and 5.7% in the second. That puts consumers in good shape to boost their spending during the holiday selling season.

According to the passage:

- a. Income from wages and salaries rose \$12.3 billion in October.
- b. Consumer savings resulted in an increase in the number of hours worked in October.
- c. Savings as a percentage of after-tax income was 6.3% in the second quarter.
- d. Income from wages, salaries, and interest comprised about 75% of all income in October.

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54. The most serious conflict in the Constitutional Convention concerned plans for a national government introduced by Virginia and New Jersey. The two plans differed in their approach to the composition of the legislature. The Virginia Plan, supported by the larger states, provided for a bicameral legislature; a House of Representatives elected by popular vote, and a Senate elected by the House. This would have given the more populous states control of the national legislature. The smaller states favored the New Jersey Plan, which provided for a unicameral legislation in which all the states were to have equal representation. The issue threatened to throw the Convention into a hopeless deadlock. The dispute was finally resolved, however, by the Connecticut Compromise (also called the Great Compromise), which established the present arrangement in which the states are equally represented in the Senate and are represented in the House of Representatives in proportion to their populations. In the negotiations that led to this compromise, the larger states won an important concession: revenue bills could originate only in the House, where the larger states had greater representation.

According to the passage:

- a. Connecticut favored the Virginia Plan.
- b. The New Jersey Plan gave greater power to larger states.
- c. The Connecticut Compromise gave all states the same number of representatives in the national legislature.
- d. Smaller states favored the New Jersey Plan.
- 55. The primary reason for the development of a separate administrative division for the direction of human relations is a growing recognition that people are endowed with characteristics different from those of machinery or raw material. If people are to be affected in ways that give best results, that direction must be specialized just as direction in the other major fields of management has been specialized.

Which statement is best supported by the above passage:

- a. Workers need supervision.
- b. It would be best if some organizations established a separate office of human resources.
- c. Workers are more important than machinery or raw materials.
- d. Workers perform best when they receive on-the-job training.

56. The Bauhaus school was based on the belief that art should meet the needs of society and that no distinction should be made between fine arts and practical crafts. Members of the Bauhaus school also believed that modern art and architecture should reflect the modern industrial world and that good designs must pass the test of both aesthetic standards and sound engineering. For this reason, the Bauhaus offered classes in crafts, typography, and commercial and industrial design, as well as in sculpture, painting, and architecture. The Bauhaus style, also known as the International Style, avoided ornament and ostentatious facades. It featured harmony between function and the artistic and technical means employed. The Bauhaus produced a number of influential artists and architects, both in Europe and in the U.S.

Which statement is best supported by the above passage:

- a. Members of the Bauhaus school believed there should be harmony between form and function.
- b. Members of the Bauhaus school believed in the superiority of traditional arts and crafts.
- c. Members of the Bauhaus school resisted the influence of modern industry on architecture.
- d. The Bauhaus movement wanted to return to the artistic values of an earlier era.
- 57. The three species of lobsters are considered to have an excellent flavor and are important to commercial fisheries in North America and Europe. The American and European lobsters have an enlarged, almost bulbous, pair of pincers or claws. The pincers of the Norway lobster are longer and thinner. One claw is usually a heavier crusher claw and the other a smaller biting claw. The lobster's head has two pairs of antennae; the eyes are compound, and the tail is fanlike. The female lays many thousands of eggs, usually once every two years, and the tiny young drift and swim for up to five weeks before settling on the bottom. They grow by molting and may live for about 15 years. All lobsters are primarily scavengers.

Which statement is best supported by the above passage:

- a. Lobsters are found only in waters off the coast of North America and Europe.
- b. Lobsters are unusually aggressive creatures.
- c. "Norway" lobsters are not true lobsters.
- d. One difference between the American and Norway lobster is the size and shape of their claws.
- 58. The charter of the United Nations established six principal UN components: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat. All member states are represented in the General Assembly. The General Assembly meets annually in regular sessions and in special sessions at the request of a majority of its members or of the Security Council. The assembly has no enforcement authority; its resolutions are recommendations to member states that carry the political and moral force of majority approval but lack power of direct implementation.

The Security Council is the UN's central means for maintaining peace. The council has 15 members. Five nations – China, France, Great Britain, Russia, and the U.S. – have permanent seats. Other members serve for two years, with five new members elected by the General Assembly every year. Decisions of the council require nine votes, including the concurring votes of the permanent members. In other words, each of the permanent members (but not the other members) has veto power over any proposed action to be undertaken by the Security Council.

Which statement is best supported by the above passage:

- a. All members of the Security Council have veto power over any proposed action to be undertaken by the Council.
- b. All members of the United Nations have a seat on the Security Council.
- c. There are five permanent members of the Security Council.
- d. To take effect, decisions of the Security Council must be unanimous.

59. Petroleum is formed under the earth's surface by the decomposition of marine organisms. The remains of tiny organisms that live in the sea become mixed with the fine sands and silts that settle to the bottom in quiet sea basins. The sediments grow thicker and sink into the seafloor under their own weight. As additional deposits pile up, the pressure on the ones below increases several thousand times, and the temperature rises by several hundred degrees. The mud and sand harden into shale and sandstone, and the remains of the dead organisms are transformed into crude oil and natural gas. The crude oil and natural gas rise into the microscopic pores of the coarser sediments lying above. Frequently, the rising material runs into a dense layer of rock that prevents further migration; the oil has become trapped, and a reservoir of petroleum is formed.

Which statement is best supported by the above passage:

a. Petroleum is formed from the remains of marine organisms.

b. Petroleum is actually a mixture of mud and sand.

c. Petroleum is usually found in remote areas.

- d. Petroleum is a byproduct of seismic activity.
- 60. The goal of a problem is a terminal expression one wishes to cause to exist in the world of the problem. There are two types of goals: specified goal expressions in proof problems and incompletely specified goal expressions in find problems. For example, consider the problem of finding the value of x, given the expression 4x + 5 = 17. In this problem, one can regard the goal expression as being of the form x = -, the goal expression. The goal expression in a find problem of this type is incompletely specified. If the goal expression were specified completely for example, x = 3 then the problem would be a proof problem, with only the sequence of operations to be determined in order to solve the problem. Of course, if one were not guaranteed that the goal expression x = 3 was true, then the terminal goal expression should really be considered to be incompletely specified something like the statement "x = 3 is (*true or false*)."

According to the preceding paragraph:

- a. The goal of the equation 4x = 5 = 17 is true, not false.
- b. If the goal expression was specified as being equal to 3, the problem 4x + 5 = 17 would be a proof problem.
- c. If the sequence of operations of the problem given in the paragraph is predetermined, the goal of the problem becomes one of terminal expression, or the number 17.

d. x cannot be found unless x is converted into a proof problem.

Answer Key

1. d	21. a	41. a
2. c	22. d	42. a
3. b	23. d	43. a
4. d	24. b	44. b
5. c	25. a	45. b
6. a	26. d	46. d
7. a	27. с	47. a
8. d	28. c	48. c
9. d	29. b	49. b
10. a	30. a	50. c
11. b	31. d	51. d
12. c	32. a	52. c
13. b	33. c	53. d
14. d	34. c	54. d
15. c	35. b	55. b
16. c	36. d	56. a
17. a	37. b	57. d
18. a	38. d	58. c
19. c	39. b	59. a
20. d	40. a	60. b

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Answers and Explanations

- 1. The answer is choice d. Choice a is incorrect because, while the passage speaks extensively about the potential dangers of genetic engineering, nowhere does it say that the dangers outweigh the benefits. Choice b is incorrect because the author expresses no opinion on whether government regulation of genetic engineering is strict enough. Choice c is incorrect because there is no statement or implication in the passage that the FDA and the USDA disagree on the safety of genetic engineering. Choice d is correct because the passage states that the potential hazards of genetic engineering require government regulation.
- 2. The answer is choice c. Choice a is incorrect because it is too sweeping a statement. Nowhere does the author state that "communication is not possible when people don't assume the same things or share the same values." This is too strong a statement. The author does wonder "how communication is possible," but that is not the same as stating that communication is not possible under those circumstances. Choice b is incorrect because you are supposed to choose the answer that corresponds with the phrase "According to the author." When that expression is used in these questions, you need to determine exactly what the author's opinion is. In this case, the author is comparing two schools of thought. While it may seem to us that the author favors the second school (choice b), nowhere does the author say he or she favors one school of thought over the other. Choice b implies too much. Choice d is incorrect because it too implies more than it should. Nowhere does the author state that communication is possible only when differences of background, experience, and motivation are overcome. Choice c is correct because it is the only statement of the four we can be sure the author agrees with, as in the first sentence the author says, "In thinking about the many barriers to personal communication..."
- 3. The answer is choice b. Choice a is incorrect because it is not really supported by the passage. The passage describes several instances in which Congress has passed laws restricting freedom of speech because it believed these laws were necessary for the good of the country, but the passage does not endorse this belief. Choice c is incorrect because, as the passage says, the 1st Amendment does establish freedom of speech as a basic right. Choice d is incorrect because the passage says that the Supreme Court has held that the burning of an American flag is protected speech under the First Amendment. Choice b is correct because it is the only statement that is really supported by the passage.

- 4. The answer is choice d. Occasionally reading passages will appear that contain potentially intimidating material. This is a good example of that type of question. At first glance this question appears to require unusual, specialized knowledge, specifically a knowledge of quantum physics. But you should not allow yourself to be intimidated just by the subject of a question. In fact, no special knowledge is needed to answer this question. It requires only a careful reading of the passage. Choice a is incorrect because it is directly contradicted by the last half of the first sentence. Choice b may look appealing because of the contrast in the paragraph between using a bathtub thermometer and a chemical thermometer to measure the temperature of coffee, but it is too sweeping a statement. Nowhere in the passage does it say that it is always a good idea to use the smallest possible measuring device. Choice c is incorrect because it also assumes too much. In the example given, the chemical thermometer was more accurate than the bathtub thermometer, but that doesn't mean that all chemical thermometers will always be more accurate than all bathtub thermometers, in all situations and applications. Choice d is confirmed by the first and last sentences.
- 5. The answer is choice c. Choice a is incorrect because it assumes more than the passage states. While the passage says that the federal government refused to provide funds for the construction of the Erie Canal, it does not say that the reasons for this decision were political. Choice b is incorrect because the passage clearly states that construction of the Canal began in 1817 and was completed in 1825. That is, construction of the Canal took eight years, not fifteen. It is true, as the passage says, that New Yorkers began to seek funding for the Canal in 1810, but construction did not begin until 1817. Choice d is incorrect because the passage states that construction began in Rome, New York. The first canal boat set sail on the Canal from Buffalo, but construction did not begin there. Choice c is correct because the passage states that work on the Erie Canal was "financed by the State."

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- 6. The answer is choice a. This question asks you to choose the "main idea" of the paragraph. To do this, you need to separate incidental information or examples from the main point that the author is trying to make. Often the best way to do this is to examine each possible answer on its merits. Choice b is incorrect because it is too specific. While the thought is contained in the passage, it does not represent the main idea of the paragraph. Choice c is incorrect because it is making an assumption that the earth will soon "run out of vital mineral resources." It's unclear exactly how long a time period is meant by the author in the last sentence. In addition, it does not do as good a job of summarizing the content of the paragraph as choice a. Choice d, while contained in the passage, is too specific to be a "main idea." Choice a is the best of these four choices because it best sums up the passage.
- 7. The answer is choice a. Choice b is incorrect because the passage says that "government intervention to stimulate the economy" may lead to recovery from a depression. Therefore, the author of the passage would not agree that "government intervention has no effect on the business cycle." Choice c is incorrect because the passage offers an explanation of what causes an economic depression. Choice d is incorrect because nothing in the passage suggests that the idea of the business cycle is no longer relevant in today's economy. Choice a is correct because the passage clearly states that "consumers react to higher prices by buying less."
- 8. The answer is choice d. Questions like this may seem intimidating at first, especially if you are not familiar with the subject (in this case, musical notation). But you should not be put off by a question just because the subject seems difficult or unfamiliar. In this case, you need no knowledge of musical notation to answer the question. All you need to do is read the passage. The answer is straightforward. It can be found in the last sentence of the paragraph.
- 9. The answer is choice d. Choice a is incorrect because it is based on an unwarranted assumption: The passage states that Category 5 hurricanes are the rarest, but this does not mean that Category 1 hurricanes are the most common. Choice b is incorrect because nothing in the passage suggests that there is a relationship between the strength of a hurricane and the size of the eye. Choice c is incorrect because the passage says winds that exceed 155 mph occur in Class 5 hurricanes, which are the rarest type; therefore, it is not common to have winds of this speed in a hurricane. Choice d is correct because the passage states that the passage states that the mildest category of hurricanes has winds of at least 74 mph.

- 10. The answer is choice a. Choice b is incorrect because it is a misinterpretation of the tortoise and hare example given. The passage does not state that it is best to spend a long time on solving problems; rather, it suggests that there is nothing wrong with spending a long time on solving problems. Choice c is a tempting answer. The passage does state that, 'You cannot do your best on a problem unless you are motivated." But nowhere does it say that motivation is the most important component in problem solving. Choice d is somewhat contradicted by the last sentence. Choice a is supported by the fifth sentence of the paragraph, and is the best of the four choices given.
- 11. The answer is choice b. Choices a and d are incorrect because there is nothing in the passage to support either statement. Choice c is incorrect because a magnitude 8 earthquake is ten times as powerful as a magnitude 7 earthquake, not twice as powerful. A careful reading of the paragraph would have given you the information you need to make this calculation. Choice b is correct because it is clearly supported by the last sentence of the paragraph.
- 12. The answer is choice c. Choice a is incorrect because it assumes too much. While the sentiments in choice a are expressed in the first sentence, the word "perhaps" is used. Choice a goes a step further and makes an assumption that is not supported by the paragraph. Choice b is incorrect because it is based on a misreading of information given in the fourth sentence. Choice d is not mentioned anywhere in the paragraph. Choice c is supported by the third sentence.
- 13. The answer is choice b. Choice a is incorrect because the passage states that the Emancipation Proclamation was issued when the Civil War was "at its height," not after the Confederacy was defeated. Choice c is incorrect because the passage states just the opposite: Abolitonists "had been urging Lincoln to take this action for several years." Choice d is incorrect because it is based on a misreading of the last sentence. England and France decided not to intervene in the conflict because their citizens were strongly opposed to slavery, and the Emancipation Proclamation made it clear that slavery was the issue at the heart of the war. But there is nothing in the passage that suggests that France and England considered the Emancipation Proclamation a "trick." Choice b is correct because it is clearly supported by the second sentence of the paragraph.

- 14. The answer is choice d. Choice a is incorrect because the word physicist is used. while the passage says "Western scientists." Choice b is incorrect and is a misinterpretation of sentences six and seven. While it may seem from the first sentence that choice c is a possibility, because philosophers had this knowledge first, it is too sweeping a statement. The author doesn't explicitly state that scientists do not know as much in this area. Also, any expertise that scientists do have, that Indian philosophers do not, is not addressed. Choice d is supported by the last four sentences.
- 15. The answer is choice c. Choice a may look like a good answer because the average farm size for Canada is larger than for any other country mentioned in the passage. But this does not mean that Canadian farms are the largest in the world. There may be other countries, not mentioned in the passage, that have larger farms. Choice b is incorrect because it is two sweeping an interpretation of the last sentence in the first paragraph. The passage does state that a larger percentage of the labor force works in agriculture in Africa than in the U.S. and Canada, but this does not mean that African farms are less productive. Choice d is incorrect because it is contradicted by the last sentence of the first paragraph. Choice c is supported by the third sentence of the second paragraph.
- 16. The answer is choice c. Choice a is incorrect because it misrepresents what the passage says about opponents of the death penalty. According to the passage, opponents believe that the death penalty is no more effective as a deterrent than life in prison. The passage does not say that opponents of the death penalty believe it is not a deterrent at all. Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is supported by the third sentence in the paragraph.
- 17. The answer is choice a. There is nothing in the passage to support choices b, c, or d. Choice a is supported by the fourth sentence in the paragraph.
- 18. The answer is choice a. Choice b is contradicted by the first two sentences. Choice c is directly contradicted by sentence seven. Choice d is not mentioned anywhere in the passage. Although choice d may "look good," it is important to break sentences like this down to see what they are really saying. Choice a is directly supported by sentence four.

- 19. The answer is choice c. Choice a is contradicted by the first sentence in the passage. Choice b is contradicted by the second sentence. Choice d is too sweeping a statement. The passage says that some not all of the masks created by the Ibo have ugly or asymmetrical features. In fact, the last sentence in the passage says that the Ibo also create beautiful masks "to portray persons who are good or peaceful." Choice c is more accurate, and is supported by the second sentence of the second paragraph.
- 20. The answer is choice d. Choice a is incorrect because the author talks about the action on carbonic acid and the release of carbon dioxide, not about metabolizing carbohydrates. Choice b is contradicted by the last sentence. Choice c is incorrect because the molecule that zinc is in the center of is carbonic anhydrase; carbonic acid is what is coming into contact with the enzyme. Choice d is supported by the next to last sentence, which acts as a summary of the passage.
- 21. The answer is choice a. Choice b looks like a good choice at first because the passage says that there are fewer cows per person today than in the nineteenth century. But this does not mean that there are fewer cows, as the answer says. The key words here are "per person." Choice c is incorrect because it is contradicted by sentence three. Choice d is incorrect because it is contradicted by sentence five. Choice a is supported by sentence six.
- 22. The answer is choice d. Choices a and b are generalizations that are not supported by the passage. Choice a, for example, states that "you are more likely to get help on a country road." While the passage states that an individual driver is less likely to *stop* on a crowded highway than on a lonely road, this does not necessarily mean that you would be less likely to *get help*. If 250 cars pass you on a city highway in ten minutes and one picks you up, you would be able to say that you were more likely to get help than if you were on a country road and the second car that passed in an hour helped you. Choice b plays on one's tendency to think that if something is true it means that a related idea is also true. It is too much to assume that people in a city are less helpful (choice b) simply because cars on a crowded highway are less likely to stop. Choice c is incorrect because it contradicts the passage. The author says that when there are many people who see an emergency, each person feels less responsible than if he or she were the only one who saw it. This is what choice d says, so choice d is correct.

- 23. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is incorrect because the passage says that fat-soluble vitamins do not need to be consumed every day. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the second to last sentence of the passage.
- 24. The answer is choice b. Choice a is incorrect because it is not actually stated anywhere in the passage, although you might be tempted to infer it. The last sentence of the passage does say, "women were so good at dealing with the public." But the author is quoting industrial journals, not giving his or her opinion and saying that this is true. He or she is just using this as another example of the different rationales industries have used to back up their policies. Choice c is incorrect because it is not supported by anything in the passage. You might have been tempted to assume that choice c is true because the passage mentions only clerical, teller, and lower management positions. If there weren't a better answer, you might have had to select it. Choice d is incorrect because it too is not supported by the passage. Choice b is supported by the first sentence of the paragraph.
- 25. The answer is choice a. Choice b is incorrect because it is not supported by the passage. According to the passage, Canada "refused to allow the Taiwanese team to carry its flag or have its national anthem." The Taiwanese "withdrew"; they were not banned. Choice c is incorrect because, again, it is not supported by the passage. Several African nations demanded that New Zealand be banned from the games, but their demands were not met. Choice d is incorrect because it, too, is not supported by the passage. Hitler is the first national leader mentioned who injected a spirit of nationalism into the games, but the passage does not say he was the first one to do this. Choice a is supported by sentence three.
- 26. The answer is choice d. Choice b is incorrect because it is not stated anywhere in the passage. The same is true of choice c. Choice a is incorrect because of the key word "proved." The passage states that "Cellini *wrote* he had brought on rain by artillery fire." This is not the same as proving it. You may not have been sure about this, but that shouldn't have been a problem because choice d is a much stronger and safer answer. The whole paragraph is about people relating noise and rain. Again, you need to choose the *best* of the four choices.

- 27. The answer is choice c. Choice a is incorrect because it is not supported by anything in the paragraph. Choice b is incorrect because the paragraph says that dopamine is a chemical in the brain; it says nothing about it being a drug. Choice d is incorrect because the paragraph says that 200,000 cases of Parkinson's disease are recorded annually, not that 200,000 people die of the disease. Choice c is supported by the second sentence of the paragraph.
- 28. The answer is choice c. When answering this type of question, it's best to take the statements one at a time and go back to the paragraph to see which are true. Statement I is correct and can be found in the last two sentences. Statement II is incorrect because the passage states that a clogged drain should be flushed with *hot* water after an hour, not cold water. Cold water is for severely clogged drains in which the liquid has been left standing overnight, not for an hour. Statement III is incorrect because the sixth sentence says that severely clogged drains should be flushed with *cold* water. Statement IV is correct and is stated in the first sentence. Choice c is correct because it states that only I and IV are correct.
- 29. The answer is choice b. Choice a is incorrect because the passage states that in urban areas, sewers generally discharge into interceptor sewers, not directly into a trunk line. Choice c is incorrect because it is not supported by the passage and it is indirectly contradicted by the last sentence of the first paragraph. Choice d is incorrect because it is contradicted by the fifth sentence of the first paragraph. Choice b is supported by the third sentence of the first paragraph.
- 30. The answer is choice a. Choice b is incorrect because it is contradicted by sentence four. Choice b is incorrect because Susan B. Anthony, not Elizabeth Cady Stanton, voted illegally in the 1872 election and refused to pay the \$100 fine. Choice d is incorrect because it is not supported by anything in the passage and is contradicted by sentence five. Choice a is correct because it is supported by sentence five.
- 31. The answer is choice d. An ordering question like this one requires very careful reading. If you break the passage down and take the statements one at a time, you'll find that the order is as follows: First, the hypothalamus triggers the release of adrenocorticotropin from the pituitary gland (III). Then, adrenocorticotropin travels in the bloodstream (IV). Then, adrenal glands release hormones like cortisol (I). And finally the heart beats faster because of epinephrine (II). The order is III, IV, I, II.

- 32. The answer is choice a. Choice b is contradicted by the fifth sentence in the first paragraph. Choice c is incorrect because the numbers in the last two sentences of the first paragraph do not support it. According to the passage, the least amount of alcohol in typical table wine is 12 percent. The greatest amount of alcohol in fortified wine is 22 percent. Therefore, at most, fortified wine has less than twice as much alcohol as table wine, not three times as much, as choice c says. Choice d is contradicted by the last sentence in the second paragraph. Choice a is supported by the last two sentences of the first paragraph.
- 33. The answer is choice c. Choice a is incorrect because it is not stated in the passage, and because it assumes too much. The same is true of choice b. Choice is also not stated anywhere in the passage. Choice c is supported by the last two sentences of the passage.
- 34. The answer is choice c. This question requires nothing more than a careful reading of the passage. Choices a and b are both contradicted by the first sentence. Choice d is incorrect because it is contradicted by the seventh and eighth sentences of the passage. Choice c is supported by the seventh sentence.
- 35. The answer is choice b. This question is different from the others you have seen so far because it asks you to find the one statement that is untrue. Choices a, c, and d are all supported by the passage. Choice a can be found in the third sentence, choice c in the fourth, and choice d in the second. Choice b is unsupported by the passage, which does not state anywhere that reasoning is still frequently ignored.

36. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is incorrect because its timing is off. According to the passage, the sixth tribe, the Tuscaroras, were not added to the Confederacy until the 18 century. In 1650, there were only five tribes in the Confederacy. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the first sentence of the third paragraph.

- 37. The answer is choice b. The passage is difficult to read because it was written by Alexis de Tocqueville, a Frenchman, in 1835. However, you don't need to understand all of it. You can just go through the choices and eliminate them. The passage does not say that Americans are generous (a), idealistic (c), or greedy (d). But it does refer to the system of checks and balances (b) which was built into the American system of government. ("The exercise of its authority was divided," and "in no country is the right of applying it vested in so many hands.") Again, you did not need to know this to answer correctly-you just had to pick the one choice you could not rule out.
- 38. The answer is choice d. Choice a is incorrect because it is contradicted by the fourth sentence of the second paragraph. Choice b is incorrect because the first sentence of the second paragraph says that there are currently eight associate justices and a chief justice, for a total of nine, not eight. Choice c is incorrect because the second sentence of the second paragraph says that justices "can be removed only by resignation or impeachment." Choice d is supported by the third sentence of the first paragraph.
- 39. The answer is choice b. The passage describes why balloons that are filled with water are more likely to burst when dropped than balloons that are filled with air. Sentence 5 states that "the air balloon bounces because it absorbs the force." You can infer that tires would be filled with air for a similar reason. Choice a is incorrect because the paragraph states that pressure on a gas such as air causes the volume of the gas to decrease, not increase. It's also incorrect because if choice a were true, tires would be more inclined to burst as the air expanded. This would make air a poor substance for tire filling. Choice c is incorrect primarily because choice b is a much better answer, and because not all liquids will freeze and evaporate according to the climate. Antifreeze, for instance, could perhaps be put into the liquid. Choice c is also incorrect because the passage explains that water balloons burst because the force of the impact is transmitted to the entire surface of the balloon when it is filled with water. Gases *absorb* the force of the impact because they compress and then expand again. The passage states that liquids do not compress when under pressure, and thus do not absorb the pressure. It is transmitted to the rest of the surface. This would make liquids a poor choice for filling tires. Choice d is incorrect because it is not implied or supported anywhere in the passage.

- 40. The answer is choice a . Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is incorrect because it is a more sweeping generalization than the passage supports. The passage does say that Delicious apples are the most widely grown variety in the U.S., but this does not mean that they are "the most popular variety in every region in the U.S." In fact, the last three sentences of the first paragraph suggest that other varieties are more popular in specific regions. Choice a is supported by the second sentence of the passage.
- 41. The answer is choice a. Choice b is incorrect because there is nothing in the passage to support it. Choice c is incorrect because it is based on a misreading of the fifth sentence of the second paragraph. The sentence says that during the course of the eighteenth century, surgeons became more knowledgeable about the human body. It does not say that they became more knowledgeable than physicians. Choice d is incorrect because the passage says that the Royal College of Physicians controlled the number or *physicians*, not the number of *surgeons*. Choice a is supported by the second sentence of the first paragraph and the first sentence of the second paragraph.
- 42. The answer is choice a. Choice b is incorrect because it is contradicted by the fifth sentence of the passage. Choice c is incorrect because it is not supported by anything in the passage. Choice d is incorrect because it is contradicted by the fourth sentence of the passage. Choice a is supported by a careful reading of the second sentence of the paragraph.
- 43. The answer is choice a . Choice b is incorrect because it is contradicted by the last sentence of the first paragraph. Choice c is incorrect because it is not supported by anything in the passage. (The passage says that whales, not sharks, are mammals.) Choice d is incorrect because it is a more sweeping generalization than the passage will support. The passage says that sharks are "especially abundant" in tropical and subtropical waters, but it does not say that they are found only there. Choice a is correct because it is supported by the fifth sentence of the second paragraph.
- 44. The answer is choice b. Choice a is incorrect because it is not supported by anything in the passage. Choice c is incorrect because Roosevelt won the Nobel Peace Prize for his mediation of the Russo-Japanese War, not for his efforts to resolve conflicts in Latin America. Choice d is incorrect because it is contradicted by the fourth sentence of the first paragraph. Choice b is supported by the entire passage.

- 45. The answer is choice b. Choice a is incorrect because it is contradicted by the third sentence. To realize this, you would have to know that Great Britain, Ireland, and Germany are not in eastern or southern Europe. But there is also another way to eliminate choice b as a possible answer. A little later in the passage, you are told that "After 1890, this pattern shifted. The majority of immigrants in the early years of the twentieth century came from southern and eastern Europe." If this is how the pattern shifted after 1890, then before 1890 most of the immigrants must not have come from southern and eastern Europe. Choice c is incorrect because the passage says that the number of immigrants declined in the 1920's. Choice d is incorrect because it is contradicted by the last sentence of the passage. Choice b is supported by sentence nine.
- 46. The answer is choice d. Choice a is incorrect because, while it is generally true, it is not supported by anything in the passage. Choice b is incorrect because it is contradicted by sentence three. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the second sentence of the passage.
- 47. The answer is choice a. Choices b, c, and d are incorrect because they are not supported by anything in the passage. Choice a is supported by the first three sentences of the second paragraph.
- 48. The answer is choice c. Choice a is incorrect because it is contradicted by sentence two. (Venus, not Mars, is the brightest object in the night sky.) Choice b is incorrect because it is contradicted by sentence five. Choice d is incorrect because there is nothing in the passage to support it and it is contradicted by sentence five. Choice c is supported by sentence four.
- 49. The answer is choice b. The way to approach questions like this is to consider each of the statements one at a time. Statement I is incorrect because it is contradicted by the first sentence of the second paragraph. Statement II is correct. It is supported by the last two sentences of the second paragraph. Statement III is also correct. It is directly supported by the first sentence of the second paragraph. Statement IV is incorrect because it is contradicted by the second sentence of the first paragraph. So in the author's view, only statements II and III are correct.

- 50. The answer is choice c. Choice a is incorrect because there is nothing in the passage to support it. Choice b is incorrect because it is a broader generalization than the passage justifies. The passage says that physics did not emerge as a separate discipline until the 19th century. It does not say that no one was interested in physics before that. Choice d is incorrect because it is not supported by anything in the passage. Choice c is supported by all of the second paragraph.
- 51. The answer is choice d. Choices a and b are incorrect because they are both contradicted by sentence four. Choice c is incorrect because it is not supported by anything in the passage. Choice d is supported by the last sentence of the passage.
- 52. The answer is choice c. Choice a is incorrect because the passage says that glaucoma is responsible for only about one-eighth of all blindness in the U.S. not "most cases of blindness." Choices b and d are incorrect because they are not supported by anything in the passage. Choice c is supported by the first sentence in the passage.
- 53. The answer is choice d. A tricky question. Choice a is incorrect because the increase was in September, not October. Choice b is incorrect because the sixth sentence states that there was a "dip in hours worked in October," and no connection between savings and hours worked in October was established. Choice c is incorrect because savings as a percentage of after-tax was 6.3% in the *third* quarter, not the second. While on first reading, choice d may appear to be incorrect, closer study will show that combining the income from wages and the salaries mentioned in the sixth sentence (60%) with interest (15%) will total 75% of all income. You also could have selected choice d by the process of elimination.
- 54. The answer is choice d. Choice a is incorrect because it is not supported by anything in the passage. Choice b is contradicted by sentence five. Choice c is incorrect because it is contradicted by sentence seven. Choice d is supported by sentence five.

- 55. The answer is choice b. Choice a is incorrect because it is not stated anywhere in the passage. The same is true of choices c and d. You may have liked choice c, but the passage doesn't say that people are more important, only that they have different characteristics. Although this passage was rather difficult to read, you probably could have answered correctly by the process of elimination. Incidentally, the point of this passage is that, since humans are a special case, the management of human resources should be specialized to meet their needs.
- 56. The answer is choice a. Choices b and d are incorrect because there is nothing in the passage to support them. Choice c is incorrect because it is contradicted by sentence two. Choice a is supported by sentence five.
- 57. The answer is choice d. Choices a, b, and c are not supported by anything in the passage. Choice d is supported by the second and third sentences.
- 58. The answer is choice c. Choice a is incorrect because, according to the last two sentences of the passage, only the permanent members of the Security Council have veto power. Choice b is incorrect because it is contradicted by the first three sentences of the second paragraph. Choice d is incorrect because it is contradicted by the last two sentences of the second paragraph. Choice c is supported by the second sentence of the second paragraph.
- 59. The answer is choice a. The other choices are incorrect because there is nothing in the passage to support them. Choice a is supported by the first sentence of the passage.
- 60. The answer is choice b. This is another example of intimidating material that is really not as difficult as it first appears. You don't need to know algebra to answer this question. Careful reading is all that is required. Many people pick choice a because it "sounds good." Yet, if you carefully ready through the passage, you would see that it is gibberish, and makes no sense. Choice b is correct, and this is stated clearly in sentence six, with help from sentences three, four, and five. Choices c and d are also gibberish, intended to impress. This is a difficult question because it is easy to lose confidence when confronted with a subject matter and a vocabulary you are unfamiliar with.

Booklet 13

UNDERSTANDING AND INTERPRETING WRITTEN MATERIAL II

Prepared for the N.Y.S. Committee on the Work Environment and Productivity A Joint Labor-Management Committee of CSEA, Local 1000, AFSCME, AFL-CIO

and

The N.Y.S. Governor's Office of Employee Relations

by the

New York State School of Industrial and Labor Relations - Cornell University

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UNDERSTANDING AND INTERPRETING WRITTEN MATERIAL II

We've had many requests for additional practice material with reading comprehension questions. There's a good reason for this. Our students have repeatedly told us that they have the most difficulty with this section, and the section on tabular material. In addition, good reading comprehension skills are critical for doing well on <u>all</u> sections of an exam.

The questions in this booklet are similar in difficulty to those you would find on an exam. There are usually 15 reading comprehension questions of varying levels of difficulty on the exam. A few will be very difficult, a few fairly easy, and the rest in between. One of the biggest problems many candidates have is losing concentration and energy during the exam. In order to help build concentration and endurance, some reading passages in this booklet are longer than most exam questions would actually be.

Some tips on handling reading comprehension questions can be found in the explanations to the questions in the back of this booklet. We suggest you do the questions three to five at a time, looking up the answers and explanations as you complete each set. Please don't peek at the answers. We also recommend that you use the Diagnostic Worksheet on the next page to analyze any questions you may have answered incorrectly.

Good luck!

DIAGNOSTIC WORKSHEET

This is designed to give you more insight into why you answered a problem incorrectly. Analyze each question you missed in terms of the checklist below. Put the number of the question missed next to each trait that you feel contributed to the error. This will make it obvious which areas you need to work on. By working to improve your abilities in these areas, your scores should improve.

Question Number(s)	Trait Exhibited
	1. I jumped to an incorrect conclusion
	I misinterpreted what the question was asking
	3. I had little confidence I could solve the problem
	 I didn't break the reading passage down into more easily understood parts
	 I knew I couldn't solve the problem, so I gave up and guessed
	6. I made a careless error
	7. I "followed a hunch" without checking it through
	8. I didn't step back and evaluate the reasonableness of my solution
	 I worked mechanically because I knew it was hopeless
	10. I didn't check my work
	11. I became bored or frustrated, and took a guess
·	12. I was inconsistent in my interpreta- tion of parts of the reading passage
	13. I didn't try to visualize the problem
·	14. I misinterpreted part of the reading passage
	15. I tried to answer the question with- out realizing that my understanding of a section of the reading passage was vague

For each of the following questions, select the letter that represents the best of the four possible answers.

1. Any encounter that a customer has with an organization gives that customer the opportunity to form an impression of the organization. A Swedish airline executive termed these encounters "moments of truth," and claimed that his organization had "50,000 moments of truth out there every day." For any organization, poor management of the "moments of truth" can have widespread and unforeseen consequences. A study done for the White House Office of Consumer Affairs produced the following information. The average business never hears from the majority of its unhappy customers. For every complaint an organization receives, there are an average of twenty-six unhappy customers with problems, six of which are "serious." Those who complain are more likely to do business again with the organization that upset them, even if the problem isn't resolved to their satisfaction. Of those who complain, ninety-five percent will do business with the organization again if their complaint is resolved quickly, and fifty-four to seventy percent will do business again if their complaint is resolved. People whose complaints are resolved to their satisfaction will tell an average of five people about their experience. The average customer who has a problem with an organization tells nine or ten people about the problem. Thirteen percent tell more than twenty people.

Which of the following statements is best supported by the above paragraph?

- a. most customers who complain are unlikely to do business again with the organization that upset them
- b. an organization never hears from over ninety percent of its unhappy customers
- c. most customer complaints involve serious problems
- d. the average customer whose complaint has been resolved tells nine or ten people about the problem

2. A convincing body of behavioral research points to the validity of the self-fulfilling prophecy. Once an expectation is set, even if it's not accurate, we tend to act in ways that are consistent with that expectation. In one experiment, for example, a Harvard professor told a group of students that he had developed a strain of extremely intelligent rats that could run through mazes quickly. He then distributed perfectly normal rats at random,

telling half the students they had the "super maze" rats, and the other half that they had "maze dull" rats. The super rats improved daily in running through the maze, and by the end of the experiment were far superior in speed to the "dull" rats. He also found that students "who believed they were working with intelligent animals liked them better and found them more pleasant. Thev felt more relaxed with them, treated them more gently and were more enthusiastic about the experiment than students who thought they had dull rats to work with." This type of experiment has been done many times. In one instance, teachers were given the locker numbers of students and told that these numbers were the students' IQ's. The students with higher "IQ's" did much better than those with the lower "IQ's." Studies have also found that the expectations supervisors and managers have of their employees can play a critical role in how well the employees perform. dramatic illustration of this occurred in the 1960's, when a professor at Tulane University believed he could teach a university custodian with no computer experience to become a computer operator. The university initially refused to cooperate because the employee had failed the test miserably. The professor threatened to quit unless given the opportunity. The employee not only became a successful computer operator, but he also ended up running the main computer room and being responsible for the training of new employees. Managers should not underestimate the extent to which their expectations can influence the performance of their employees.

Which statement is best supported by the above passage?

- a. one's expectations can have a significant effect on another's expectations
- b. students with high IQ's will usually perform better than those with low IQ's
- c. a new strain of super rats has been developed at a major university
- d. anyone can succeed, if only given a chance

3. During the one second that blood is running through the capillaries of the lungs, the single atom of zinc that is set in the center of the enzyme carbonic anhydrase comes into contact with 600,000 of its target molecules, carbonic acid. As a result, each is broken down into one carbon dioxide and one water molecule. Only because the enzyme acts so quickly is it possible for the carbon dioxide to be freed fast enough from its components to leave the blood during that moment in the alveolus when it is separated from air only by a very thin membrane. So our ability to rid our bodies of CO_2 is totally dependent on these critically located atoms of zinc. Yet, up until a few years ago, zinc was considered to be of little significance in the body's functioning.

The author's main point is

- a. zinc helps metabolize carbohydrates
- b. zinc is less important than it was previously thought to be
- c. the enzyme carbonic acid has one atom of zinc in its center
- d. zinc is essential to the human body's ability to exhale CO_2

4. Unless managers involved in planning are able to separate the "how's" from the "what's," and can reserve discussion on the "how to's" until they actively define what needs to be done, they are going to end up with ineffective, ego-centered, incomplete planning that will inevitably lead to future problems. Once what experts can go to work on how to do it.

Which statement is best supported by the above paragraph?

- a. it is best for organizations to have large planning departments
- b. it is important for managers to define objectives
- c. it is important for organizations to have technological experts
- d. poor planning is usually the result of a manager's overlarge ego

5. A recent study examined how management and employees rated eight job conditions. About 3,000 employees were asked, "What do you want most from your job?" and "How would you rate these wants in order of importance?" Later, their managers and supervisors were asked to rank these items in the order that they thought would be important to their employees. The results:

	PLOYEES' RATING BY IMPORTANCE	MANAGERS' RATING BY IMPORTANCE
Credit for the work they do	1	7
Interest in work	2	3
Fair pay with salary increases	3	1
Understanding and appreciation		5
Promotion on merits	5	4
Counseling on personal problem	s 6	8
Physical work conditions	7	6
Job security	8	2

Which statement about the study is best supported by the above passage?

- a. promotion on merits was more important to the managers' own careers than physical working conditions
- b. the employees felt fair pay was more important than receiving credit for the work they do
- c. managers thought their employees were more interested in getting credit for the work they do than with their physical working conditions
- d. managers felt that job security was more important to employees than employees' interest in the work they do

The use of quality circles in the United States has been 6. inténsely debated for a number of years now. Only recently, however, has research begun to be published on the actual effectiveness of these programs. One professor at the University of Pennsylvania has studied why employees chose to join Quality Circle programs in their manufacturing corporations, and how their participation affected their job satisfaction. He found that those who join QC's want greater involvement at work and believe the QC process can really improve their jobs and the overall organization. Factors such as their age, length of employment and their desire to have a break from work were not important. The workers were satisfied with their QC if they were able to see a direct link between QC activities and organizational change, and if their QC consisted of capable and productive people. The biggest disappointment to workers occurred on the occasions when the organization was unwilling to accept the solutions offered by the OC. Also, workers were usually unhappy with the training they received before the program began because it was overly detailed and often irrelevant.

Which statement about the study is best supported by the above passage?

- a. quality circles have been extremely effective in this country
- b. capable and productive people usually run quality circles
- c. those who join quality circles are optimistic about the effects QC's can have
- d. quality circles have been a large disappointment since their inception in this country

In 1965, the Harvard Business Review conducted a survey of 7. its readership and found that eighty-six percent of the men who responded felt men were uncomfortable working with women managers, and forty-one percent of the men surveyed looked on women holding management positions with disfavor. The same survey was distributed twenty years later. While parts of the survey reflected marked progress, over half the men surveyed indicated they would not feel comfortable working for a woman. There was also a small increase in the number of women who said they would not work for The 1985 survey still found very large salary discrea woman. pancies between men and women managers. For example, women in the same experience bracket as men were more than ten times as likely to earn less than \$30,000 a year. The number of men who said that "the business community will never wholly accept women executives" dropped from sixty-one percent to twenty percent by 1985, but dropped for women surveyed by only seven percent, from forty-seven percent to forty percent.

Which statement about the two surveys is best supported by the above paragraph?

- eighty-six percent of the men who responded to the 1985 survey felt men were uncomfortable working with women managers
- b. the women in the surveys were more pessimistic about the business community's total acceptance of women executives than the men in these surveys
- c. women managers would prefer to work for male managers
- d. in 1985, the women surveyed were more pessimistic about the business community's total acceptance of women executives than the men surveyed

8. Most often, leadership qualities are learned. Contrary to popular opinion, leaders are usually made, not born. Studies have found no significant relationship between the ability to lead and characteristics such as age, height, weight, sex, race, and other physical characteristics. Successful leaders have most often worked hard at learning how to work well with others and how to communicate clearly with them. In the beginning of a new manager's career, however, he or she may experience some difficulty in developing leadership qualities. As a result, a high percentage of new managers (thirty to forty-five percent, depending on the study), very often are not adequately prepared for their promotion or perform at a substandard level. Because of this, harmful patterns may develop that limit the manager's leadership ability, and the result may be the inability to advance any further. Poor leadership can also lead to a great deal of stress on the job for the manager and for those he or she supervises. Having to work for a poor supervisor, for example, has been found by one study to significantly increase one's risk of heart disease. Training seminars to help new managers get off to a good start and avoid harmful patterns that can hurt both themselves and those they supervise have often been found to be quite effective.

The author of the passage would most likely agree with all of the following EXCEPT:

- a. leaders are more likely to be made, not born
- b. the majority of new managers perform at a substandard level, or they are not adequately prepared for promotion
- c. it is common for new managers to experience some stress related to the new job
- d. it is important for new managers to know how to work well and communicate well with others

9. Robert J. Sternberg's triarchic theory of intelligence emphasizes adaption. The tacit-knowledge test is a measure of how well people adapt to their environments. "What you need to know to be practically intelligent, to get on in an environment," Sternberg says, "is tacit knowledge. It is implied or indicated but not always expressed or taught." Sternberg and Wagner constructed a test of such knowledge and gave it to senior and junior business executives and to senior and junior psychology professors. The results suggest that tacit knowledge is a result of learning from experience. It is not related to IQ but is related to success in the real world. Psychologists who had done well on the test, compared with those who had done poorly, had published more research and presented more papers at conventions. They also tended to be at the better universities. Business executives who scored high

had better salaries, more merit raises and better performance ratings than those who scored low.

Which statement is best supported by the above paragraph?

- a. psychologists and business executives surpass others in tests of tacit knowledge
- b. the triarchic theory includes adaption, IQ and common sense
- c. applied experience is a key to success in the real world
- d. successful business executives and psychology professors tend to have high IQ's

10. If a car breaks down on a busy highway, hundreds of drivers may go by before anyone stops to help. If a car breaks down on a nearly deserted country road, however, there is a good chance that the first car to come along will stop to offer assistance. The difference is the personal responsibility that a passerby feels. A driver on a little-traveled road knows that if he or she does not stop, the odds are good that the stranded person will not get help. On a busy highway, that same driver will probably feel that he or she is no more personally responsible than any of the many other drivers. Even though the event is an emergency, people in a group will usually feel less reponsible than a witness who is alone. In a group, each bystander may feel that all the others are equally responsible for helping.

The main idea of the passage above is:

- a. you are more likely to get help on a lonely country road
- b. people who live in cities are less helpful
- c. the personal responsibility a passerby feels decreases the smaller the number of people witnessing the event
- d. the personal responsibility a passerby feels increases the smaller the number of people witnessing the event

11. The idea of the sexual division of labor is a changeable concept, subject to the particular needs of segments of society which frequently change. For example, in 1917 the banking community was faced with a shortage of labor. They attracted women

into clerical and lower-level managerial jobs by arguing that women "are exceptionally fitted for work of this character -their neatness, deft handling of money and papers, tact and a certain intuitive judgment all being qualifications that count in their favor." In the early 1930's, there was a very large supply of male workers available because of the Depression. The banking industry changed its mind, and said it could not hire women, even as tellers, because they were poor at figures, and because the public would not accept the notion of handing over their money to women. A few years later, faced with a shortage of male labor due to the second world war, banks once again hired women as tellers. Industry journals argued then that women would make ideal tellers because they were so good at dealing with the public.

Which statement is best supported by the above passage?

- a. female bank tellers are more likely to be better at dealing with the public than male bank tellers
- b. the kinds of work women are encouraged and expected to perform may depend upon the particular needs of an industry
- c. the banking industry promotes few women into higher management positions
- d. women are best suited for lower- and mid-level management positions

12. Plutarch, writing of a great battle that occurred in 102 BC, believed that noise produced rain. Since nature's rain was accompanied by thunder, people might get the same results in the same way. This association of ideas eventually came to link weather control with concussion. In the 16th Century, Benvenuto Cellini wrote that he had brought on rain by artillery fire. Church bells have been rung in France and Italy to jar the air and so wring precipitation from the skies; and a modern scholar, Clark C. Spence, a professor of American history at the University of Illinois, has noted that "shooting with cannon, handguns, and rockets, was common in the Beaujolais wine districts almost to the 20th Century."

Which statement is best supported by the above passage?

- a. Benvenuto Cellini proved the skies will give up their moisture after sufficient noise
- Beaujolais wine was improved with shooting cannon, handguns, and rockets

- c. studies have never been able to disprove the theory that noise produces rain
- d. in some cultures people believe noise and rain are related

13. An earthquake can be measured qualitatively or quantitatively. The qualitative scale most commonly used is the Modified Mercalli Intensity Scale. This scale rates quakes from "1" (least intense) to "12" (most intense) based on the reactions of both animate and inanimate objects, including people. A quake rated "1" on this scale would be barely detectable by people, but it would cause doors and chandeliers to swing slowly. Quakes rated "12" are those which produce general panic and near total destruction. The quantitative Richter Scale, on the other hand, measures quakes based on the logarithm of the height of the seismic wave. Each number represents a quake ten times greater than the number before it. A quake of 2.5, for example, can scarcely be felt by local witnesses, while a quake of 3.5 can cause structural damage to buildings.

According to the author, an earthquake rated 6 on the Richter Scale is how many times greater than a quake rated 3?

- a. twice as great
- b. 3 times greater
- c. 100 times greater
- d. 1,000 times greater

14. The primary reason for the development of a separate administrative division for the direction of human relations is a growing recognition that people are endowed with characteristics different from those of machinery or of raw material. If people are to be affected in ways which give best results, that direction must be specialized just as direction in the other major fields of management has been specialized.

Which statement is best supported by the above passage?

- a. workers need supervision
- b. it would be best if some organizations established a separate office of human resources

- c. workers are more important than machinery or raw materials
- d. workers perform best when they have received on-the-job training
- 15. The instructions for a drain opener read as follows:

For a clogged drain there is no need to remove standing water. Use half of the bottle. Allow to work 30 minutes. Flush with hot water. Repeat application if necessary and let stand one hour, then flush with hot water. For severely clogged drains let stand overnight before flushing with cold water. For slow running drains use one-third of the bottle. Let stand 15 minutes. Repeat application two more times. Flush with hot water after the third application.

Listed below are four statements:

- I. For a slow running drain, it's suggested that you use three applications.
- II. It's recommended that you flush a clogged drain with cold water after the drain opener has stayed in it for one hour.
- III. It's recommended that you let a severely clogged drain stand overnight before flushing with hot water.
 - IV. According to the instructions, there's no need to remove standing water before using the drain opener.

Of the above,

- a. only statements I, III and IV are correct
- b. only statements I and III are correct
- c. only statements I and IV are correct
- d. only statements I, II and IV are correct

16. In the early 1970's, some management theorists applied the idea of relativism to the workplace. Relativism is defined as the philosophy of guiding one's actions in the light of many values and goals, objective as well as subjective. For organizations,

relativism means that traditional goals (such as profit, productivity, and costs) are but one set of goals to attain. Such things as individual satisfaction, group norms, and the needs of society should also be considered. Some critics charge that if organizations had followed the basic principles of this theory, the U.S. economy and its people would be substantially better off today.

Which statement is best supported by the above paragraph?

- a. the theory of relativism focuses on merit
- the theory of relativism encourages the meeting of a variety of goals and objectives
- c. the theory of relativism had its major application in the workplace
- d. the theory of relativism is outdated

17. Novel or dangerous situations or disturbing thoughts that cause a person to feel frightened, angry, anxious, grief-stricken or depressed can set the body pinging like a pinball machine with a dozen balls in play. The chemicals that trigger the uproar can affect the entire body almost simultaneously. Electrochemical activity in the brain causes the hypothalamus to trigger the release of adrenocorticotropin (ACTH) from the pituitary gland. ACTH, a hormone, travels in the bloodstream. Reaching the kidneys, ACTH prompts the adrenal glands to release hormones like cortisol and epinephrine, which can affect virtually every organ in the body. Epinephrine signals the heart to beat faster, speeding up the response to a crisis. The stomach starts producing the hormone gastrin as part of a general acceleration of metabolism. The kidneys begin to produce renin, provoking the constriction of blood vessels. High cortisol levels may harm organs vital to the production of white blood cells. The spleen and thymus may shrink, weakening the immune system.

According to the passage, the reaction to stress is carried out in which of the following orders?

- I. The adrenal glands release hormones like cortisol
- II. The heart beats faster because of epinephrine
- III. The hypothalamus triggers the release of adrenocorticotropin from the pituitary gland
- IV. Adrenocorticotropin travels in the bloodstream

a. I, II, III, IV
b. IV, I, III, II
c. IV, III, I, II
d. III, IV, I, II

18. Charles Perrow uses a more limited frame of reference in describing the emergence of administrative discourse. He believes the main trends in organizational theory originated in Chester Barnard's classic book, The Function of the Executive. Barnard emphasized cooperation as the critical component of the organization. He assumed that organizations are functional for all their members. Barnard's book fathered three schools of organizational theory: The decision-making school, which examines individuals, rationally calculating their costs and benefits within the context of organizational controls; the institutional school, which looks at the whole organization instead of its parts and emphasizes the harmonious interpenetration of the organization and the community; and the human relations school. Other variations on these established theories have been environmental theory and contingency theory.

Which statement is best supported by the above passage?

- a. Charles Perrow's theories of organizational behavior are very limited
- b. Chester Barnard felt the human relations school was the most important of the three schools of organizational theory
- c. Chester Barnard felt cooperation was extremely important for organizations
- d. Charles Perrow assumed that organizations are functional for all of their members

19. There are many ways status manifests in this country, depending upon the subculture and the individual's perceptions. One example is our fascination with and elevation of royalty, celebrities and the rich. Inherent in the taunt, "If you're so smart, why ain't you rich?" is the idea that there is something lacking in those who do not have a lot of money. There is an especially strong tendency to classify people according to the work they perform, and then to accept or dismiss them on this basis. At parties often the first question asked is, "What do you do?" (meaning, "Where do you work, and what do you do there?"). The answer one gives may determine how long the conversation will continue. When people are identified only with the work they do, the other aspects of their existence lose importance, and they are transformed into one-dimensional beings. This can have very negative effects on their self-concepts.

Which statement is best supported by the above passage?

- a. the success of the television show, <u>Lifestyles</u> of the <u>Rich</u> and <u>Famous</u>, is a reflection of our fascination with royalty
- b. most Americans would prefer to have a British-style monarchy
- c. the tendency to classify people solely according to the work they do can have harmful consequences
- d. most people want to perform meaningful work

20. After years of trying, the antiproton has been trapped, caught and stored for several minutes in a bottle at CERN, a highenergy physics lab near Geneva. In 1928 physicist Paul Divee invented a mathematical theory that described the properties of the electron, which, along with the proton and the neutron, is one of the fundamental particles out of which our world is made. He also predicted that there would have to be a particle identical to the electron in every way, except its electrical charge would be positive instead of negative. While many people scoffed at the idea, "antielectrons" were found in 1932 among the debris that resulted when intense cosmic rays from space collided with atoms in the Earth's atmosphere. If antielectrons exist, then why not antiprotons? These were discovered in 1952, when antiprotons were produced by a giant particle-accelerating machine at the University of California. Why aren't antielectrons and antiprotons more common? If a particle and its antiparticle meet, they annihilate They disappear in a puff of pure energy. Matter and each other. antimatter can't coexist. If an antiproton, for example, is created in the laboratory, it finds itself in a world of protons, with no place to hide. The researchers at CERN, however, were able to "bottle" the antiprotons, and keep them in existence for several minutes. The key was not letting the antiprotons come into contact with ordinary matter. The physicists used a bottlelike trap made of electric and magnetic fields. A powerful magnetic field kept the particles confined along the axis of a cylinder. Electric fields on the endcaps of the bottle kept the antiprotons shuttling back and forth from end to end. Still, after ten minutes, only five antiprotons survived from the several

hundred captured originally. The antiprotons collided with molecules of residual air still in the trap. There is a potential dark side to this story. Antimatter would be the ultimate weapon. If a chunk of antimatter the size of a pea was suddenly released into our world, it would disappear with a blast of energy that could level a large city. Fortunately, it's a long way from trapping a few hundred antiprotons in a leaky bottle to accumulating, storing and moving the one septillion antiprotons necessary to make a deadly pea.

Which statement is best supported by the above passage?

- a. the discovery at CERN is a deadly one
- b. a particle of matter and a particle of antimatter produce an antiproton
- c. the antielectron has a positive electrical charge
- d. the antielectron was discovered in 1952

21. The most astounding and developed symbolic device humanity has evolved is language. By means of language we can conceive the intangible, incorporeal things we call our ideas, and the equally inostensible elements of our perceptual world that we call facts. It is by virtue of language that we can think, remember, imagine, and finally conceive a universe of facts. We can describe things and represent their relations, express rules of their interactions, speculate and predict, and carry on a long symbolizing process known as reasoning.

According to the above paragraph, all of the following are true EXCEPT:

- a. language allows us to think and to imagine
- b. although humanity has evolved language, reasoning is still a process that is frequently ignored
- c. language gives us the means to describe relationships between things
- d. facts and ideas are intangible things we conceive of through language

"It was never assumed in the U.S. that the citizen of a free 22. country has a right to do whatever he pleases; on the contrary, more social obligations were there imposed upon him than anywhere else. No idea was ever entertained of attacking the principle or contesting the rights of society; but the exercise of its authority was divided, in order that the office might be powerful and the officer insignificant, and that the community should be at once regulated and free. In no country in the world does the law hold so absolute a language as in America, and in no country is the right of applying it vested in so many hands. The administrative power in the U.S. presents nothing either centralized or hierarchical in its constitution; this accounts for its passing unperceived. The power exists, but its representative is nowhere to be seen."

The author refers to which of the following in the passage?

- a. the generosity of Americans
- b. the American system of checks and balances in government
- c. American idealism
- d. the greed of the American people

23. Government regulation served as a convenient rhetorical scapegoat to explain the ailing American economy during the 1980 presidential election, but it offers no real explanation. It is true that environmental laws required firms to invest in new equipment, but those costs have been modest. In the last decade, the steel industry in this country spent an average of \$365 million annually to improve worker safety and reduce pollution. This was about seventeen percent of its annual capital investment during this period. Of this cost, forty-eight percent was subsidized through industrial-development bonds by state and local governments. Spending by European steelmakers was on the same scale, while Japanese steel manufacturers spent substantially more. Regulations for safety also added some costs to operating budgets, but the reduction in accidents has meant savings in time and expense that far outweigh the extra money spent.

Which statement is best supported by the above passage?

- a. government regulation is the primary reason for the economic woes of the U.S.
- b. U.S. steelmakers spent more for pollution control in the last decade than the Europeans did

- c. in the last decade, the U.S. steel industry spent \$365 million to improve worker safety and reduce pollution
- d. taxpayers helped to pay for pollution controls implemented by steelmakers in the last decade

24. It has been found that babies as young as three months are afraid of strangers and are able to distinguish between familiar and unfamiliar objects. At six months, babies demonstrate that they recognize the relationship between a person's height and face, and they are less frightened by children than they are by adults. A study was conducted in an attempt to discover how babies distinguished children from adults and, in particular, if it was height or facial features that tipped the babies off. The researchers decided to use midgets. If the babies were afraid, the researchers could conclude that the babies distinguished children from adults by looking at facial features. If the babies were happy and not afraid, the researchers would be able to conclude that the babies used height to distinguish children from The experiment did not turn out as planned. adults. To the researchers amazement, the babies were not frightened or happy; they were surprised. Their eyebrows rose, their eyes opened, and their little mouths formed O's. The midget features were not what the babies expected; the wrong face was on the wrong body.

Which of the following would most directly question the validity of the above paragraph?

- a. most of the babies who participated in the study had parents that were midgets
- b. the researchers forgot to record the reactions of two babies out of three hundred
- c. only three hundred babies were used in the study
- d. the babies used in the study were not midgets

25. All personal or home computers are microcomputers. The microcomputer is a relative newcomer to the field, and consequently the market is bursting with competitive models and the attendant confusion. No one really knows all that the microcomputer is capable of doing. New possibilities are being explored constantly. Right now, microcomputers are best known for their personal qualities. Used by only one person at a time, a micro always allows you to do all your work or pleasure activities on a computer without having to share your information with anyone

else. Your files are kept on a disk or tape or in the memory of your machine, and no one has access to those files unless you agree. Micros have also made it feasible for individuals to own computers. Until the micro was developed, all computers were so expensive that only businesses or the very rich could justify the expense. It's the combination of price and personal control that makes microcomputers so attractive.

According to the above passage, all of the following are true EXCEPT:

- a. microcomputers are affordable
- b. home computers have a limited capability
- c. microcomputers may be used for work or pleasure
- d. the microcomputer's memory cannot be available to others without your OK

The equal opportunity laws that have been in existence for 26. a generation have brought large numbers of minorities into the managerial ranks. According to the Bureau of Labor Statistics, between 1977 and 1982, the proportion of minority managers rose from 3.6% to 5.2%. Data for 1982 found that of all "officials and managers", 4.3% were blacks, (this includes 1.6% black females), and 20.4% were white females. While this indicates a great deal of progress over the last twenty years, it appears that most of the progress has been made at the middle levels. A 1979 survey of 1,708 senior executives at America's "Fortune 1000" companies found three blacks, two Asians, two Hispanics, and eight females. A 1985 survey of 1,362 senior executives at the same companies found four blacks, two Asians, three Hispanics, and twenty-nine women. A 1983 survey of 785 business opinion leaders ranked affirmative action for women and minorities twenty-third out of twenty-five human resource priorities. While many top executives are committed to fairness and promoting qualified candidates regardless of race or sex, it seems a major problem may be the influence of unconscious, unthinking criteria in promoting managers. Prejudice can be very subtle in practice, but very obvious in its consequences.

Which statement is best supported by the above passage?

- a. affirmative action is still a major concern of business opinion leaders in the U.S.
- b. true affirmative action means that the most qualified person for the job will get the job

- c. progress in hiring minorities and women at the senior level of this country's major business firms has been slow
- d. prejudice is usually subtle

27. It is important to connect the peace of society with the progress of wealth. In fact, every man who acquires anything by his industry gives by that a hostage to order. He becomes interested in possessing tranquility in proportion to his acquisition. His savings are generally put out to interest. He relies, therefore, on the future. He depends on production hereafter. He is a creditor of society, and his advances can only be repaid by peace and success. Theoretically, the matter is perfectly plain. Those who are destitute must be ready for every change. Those who are industrious, provident and wealthy are desirous of peace and enjoyment. But what is true of individuals seems, by writers against wealth, to be considered as not true of society, and the men who are assiduous in their respective callings, who look closely after their ledgers, and who endeavor to win much and waste nothing, are satirized and vilified as publicly injurious.

-- The Economist, July 17, 1849

Which statement is best supported by the above passage?

- a. the more money one has, the more likely one is to spend it
- b. the less money one has, the more likely one is to want peace
- c. some writers unfairly criticize those with wealth, not realizing how necessary and desirable wealth is if peace is to be kept
- d. it is best for writers and workers to be unselfish in order to avoid war

28. A balloon filled with water reacts differently than a balloon filled with air. If both are dropped on the ground, the one filled with water will probably burst while the one filled with air will bounce. In the water balloon, the force produced when striking the ground breaks the balloon. It is transmitted to all surfaces of the balloon. However, the air balloon bounces because it absorbs the force. The air inside the balloon quickly compresses and then expands again. Pressure on a gas, such as air, causes the volume of the gas to decrease. This is not so with a liquid. Increased pressure does not compress a liquid any significant amount. Car tires are filled with air instead of liquid because

- a. pressure on a gas causes the volume of the gas to increase
- b. air can absorb the force of the bouncing tire
- c. liquid would freeze in the winter and evaporate in the summer
- d. air is cheaper to use

Worldwide use of ozone-destroying gases is growing steadily 29. almost a decade after the U.S. banned Freon in aerosol cans in an effort to prevent damage to the Earth's protective ozone layer. The recent discovery of a mysterious "hole" in the ozone layer over the Antarctic has many scientists concerned. Atmospheric scientists calculate that gases known to destroy ozone are building up in the atmosphere at a rate of five percent a year. These gases are gradually drifting upward until they reach the stratosphere, setting off chemical reactions that eat away at the ozone layer. The blanket of ozone, a form of oxygen, screens out most of the ultraviolet B-radiation that is hazardous to all forms of life on earth. While ozone-depleting chemicals have been banned from aerosal cans in the U.S., Canada and Scandinavia, they continue to be used for that and other purposes throughout the world. In this country, dozens of familiar products rely on the eight chemicals thought to present a threat to the ozone layer. These products are as diverse as the boxes that keep fast foods warm, the air conditioning systems in cars, the foam cushions in many office chairs, and the components of computers, refrigerators and fire extinguishers. In 1985, the U.S. used more than 924 tons of ozone-depleting chemicals, roughly a third of the worldwide total. Faced with these new findings, representatives from twenty-seven countries gathered for a United Nations workshop to resume laying groundwork for an international ozone protection treaty. Analysts have said, however, it is unrealistic to expect the dynamic reductions that environmentalists have been pushing for.

Which statement is best supported by the above passage:

- a. the concern about the depletion of the ozone layer is overstated
- b. the U.S. is the country most concerned about ozone protection
- c. a "Big Mac" container may be contributing to the depletion of the ozone layer

d. the U.S. uses more ozone-depleting chemicals than other countries

30. Consumer spending was weak in October, but it was not for lack of income growth. Personal income advanced a healthy 0.6% in the month to an annual rate of \$3,085.5 billion, seasonally adjusted. The \$17.6 billion increase in October was close to the \$19.8 billion average monthly gain since June. Income growth has slowed from the exceptionally strong pace in the first half, when incomes advanced \$24 billion per month. The slowing is primarily attributable to a moderation in the rate of gain of factory jobs. Because of a dip in hours worked in October, income from wages and salaries -- about 60% of all income -- rose only \$4.2 billion in October, compared with a \$12.3 billion gain in September. But continued strength in interest income -- only about 15% of the total -- added \$6.8 billion in October. Personal outlays, holding at \$2,469.2 billion, were virtually unchanged in October. But what consumers did not spend they saved: savings as a percentage of after-tax income rose to 6.5% in October, compared with the 6.3% rate in the third quarter and 5.7% in the second. That puts consumers in good shape to boost their spending during the holiday selling season.

According to the passage

- a. income from wages and salaries rose \$12.3 billion in October
- b. consumer savings resulted in an increase in the number of hours worked in October
- c. savings as a percentage of after-tax income was 6.3% in the second quarter
- d. income from wages, salaries and interest comprised about 75% of all income in October

ANSWER KEY

1.	b	16.	b
2.	а	17.	đ
3.	d	18.	с
4.	b	19.	с
5.	d	20.	с
6.	С	21.	b
7.	d	22.	b
8.	b	23.	d
9.	с	24.	а
10.	đ	25.	b
11.	b	26.	С
12.	d	27.	C
13.	d	28.	b
14.	b	29.	С
15.	с	30.	d

ANSWERS AND EXPLANATIONS

The answer is choice b. We're sorry to start with such a 1. sneaky question. Choice a is incorrect because the passage states that most people who complain are more likely to do business again with the organization that upset them. Choice c is incorrect because it is not stated in the passage. In fact, it seems to be contradicted by the sentence which says that for every complaint received, "there are an average of twenty-six unhappy customers with problems, six of which are serious." Choice d is incorrect because the passage states that people whose complaints are resolved will tell an average of five people about the problem. The average customer who has a problem with an organization tells nine or ten people about the problem. The key here is "whose com-plaint has been resolved." You may have been thrown off by this, perhaps because of the word average. Or, you may have read the passage too quickly. Choice b is correct because the passage states that "for every complaint received, there are an average of twenty-six unhappy customers." The one complaint received represents 1/27 of the total complaints received (the one complaint plus the twenty-six who didn't complain). If you divided it out, you would see that this represents 3.7% of the total. So, 100% - 3.7% equals 96.3% of unhappy customers who don't complain. Don't despair if our math confuses you. You didn't need to be this exact, you could have estimated. More importantly, you could have answered this question successfully by eliminating all of the other choices.

2. The answer is choice a. Choice b is incorrect because it is an overgeneralization not supported by the passage. This question asks, "Which statement is best supported by the above passage?" The passage does not talk about how well students in general perform, and the IQ's that are mentioned in the passage aren't really IQ's -- they're locker numbers. Choice c is incorrect because the rats weren't a super strain at all; the students were just told they were. Choice d is incorrect because it is another unsupported generalization. Choice a takes the passage to its logical conclusion. If one's expectations can affect another's behavior, then surely they can affect another's expectations. You may not have liked choice a, perhaps thinking that it assumes a little too much, but it is by far the best of the four possible choices.

3. The answer is choice d. Choice a is incorrect because the author talks about the action on carbonic acid and the release of carbon dioxide, not about metabolizing carbohydrates. Choice b is contradicted by the last sentence. Choice c is incorrect because the enzyme which contains zinc is carbonic anhydrase; carbonic acid is what is coming into contact with the enzyme. Choice d is supported by the next to the last sentence which acts as a summary of the passage.

4. The answer is choice b. Choice a is incorrect because it is an overgeneralization. When answering these questions, it's important to analyze the information contained in each passage and to be careful not to assume too much. In this case, you don't know for sure if the author thinks organizations should have large planning departments, small planning departments, or any kind of separate planning department whatsoever. Choice c is incorrect because it too is an overgeneralization. Nowhere does the passage state that it's important for organizations to have technological experts. It is simply saying that, after the planning has been done, the way is open for the next step. Then technological experts, or whoever might be responsible, would be free to figure out how to do what has been decided upon. Choice d is incorrect because it is too strong. There could be many other reasons for poor planning. When the passage talks about "ego-centered" planning, it does not necessarily mean that it's large egos that are at fault. It could just mean that when managers make choices based on their own personal preferences, specialties or immediate concerns, as opposed to taking the "long view," problems can occur. Even if you didn't know this, however, you could still have gotten the right answer because choice b is a much better The passage states that managers need to "actively answer. define what needs to be done." This is defining objectives.

5. The answer is choice d. This question requires careful reading, as well as an understanding of the table. Choice a is incorrect because the study examined what managers thought employees wanted, not what managers felt was most important for their own careers. Choice b is incorrect because employees considered receiving credit for the work they do most important, and ranked fair pay third in importance. Choice c is incorrect because managers rated employees getting credit for the work they do seventh, while they rated physical working conditions sixth in importance, not vice versa. Choice d is correct because managers rated employees' job security second and credit for the work they do seventh.

6. The answer is choice c. Choice a is incorrect because it is not stated anywhere in the passage. The same is true of choices b and d. Choice c is supported by sentence 4. Choice c is another one of those answers that you might not have felt totally happy with. But the passage says that those who join QC's believe the "QC process can really improve their jobs and the overall organization." Since this shows that they have positive feelings about the effect of QC's, you could say they were optimistic.

7. The answer is choice d. Choice a is incorrect because it was in the 1965 survey that 86% of the men felt this way, not in the 1985 survey. Choice b is incorrect because it says <u>surveys</u>. The last line tells us that, in the first survey, 61% of the men and 47% of the women felt that "the business community will never

wholly accept women executives." So, in 1965, the men surveyed were more pessimistic than the women. Choice c is incorrect because it's not stated anywhere in the passage. The passage just says that there was a small increase in the number of women who said they would not work for a woman. We have no way of knowing how many women this is or if they are managers. Choice d is correct because the last sentence tells us that 20% of the men and 40% of the women in the 1985 survey felt that the "business community will never wholly accept women executives." The women were definitely more pessimistic than the men.

8. The answer is choice b. It's important to look closely at the stem of each question. The first seven questions asked you to find the one correct answer; this question asks you to find the one incorrect answer. If you read it quickly, you might have missed this. This is one of the reasons we suggest you read all of the choices. Another reason to read them all is that you're always being asked to select the best answer. Obviously, you can't know what the best answer is if you haven't read all of the choices. In this case, if you hadn't read all of the choices, you might have been tricked into immediately selecting choice a because it was stated in the second sentence. But, since the author said it, he or she would agree with it, and this makes the choice incorrect. Choice c is incorrect because it is implied by sentences 5, 6, and 8. These sentences indicate that leadership qualities are often not present in the beginning and that poor leadership can lead to stress. You may have thought that the passage wasn't strong enough to say that stress was common, and it's true that this vagueness could make choice c a possible answer. Choice b is a much better answer, however, because the passage states that 30% to 45% of new managers have these problems. Since it would take more than 50% to represent a majority, choice b is false and the correct answer. Choice d is incorrect because it is stated in the fourth sentence.

The answer is choice c. Choice a is incorrect because it is 9. not mentioned anywhere in the passage. Psychologists and professors were just two groups the researchers chose to study in order to develop their theory. Choice b is incorrect because, while it sounds good, it also is not mentioned anywhere in the passage. Choice d is incorrect because it too is not mentioned anywhere in the passage. Even though choice c may seem like a generalization, and perhaps isn't worded exactly the way you might like, it's the best answer of the four possible choices. Sentences 6 and 7 support this choice because they contain the idea of learning from experience and of relating this to success in the real world. The term "applied experience" which is used in choice c means using (applying) what one has learned from past experience. It's very important to become comfortable with selecting the best of four choices in those situations when you might not be crazy about any of them.

10. The answer is choice d. Choices a and b are generalizations that cannot be proven from the passage. Choice a, for example, states that "you are more likely to get help on a lonely country road." While the passage states that an individual driver is less likely to stop on a crowded highway than on a lonely road, this does not necessarily mean that you would be less likely to get help. If 250 cars pass you on a city highway in ten minutes and picks you up, you'd be able to say that you were more likely to get help than if you were on a country road and the second car that passed in an hour helped you. Choice b plays on one's tendency to think that if something is true it means that a related idea is also true. It is too much to assume that people in a city are less helpful (choice b) simply because cars on a crowded highway are less likely to stop. Choice c is incorrect because it contradicts the passage. The author says that when there are many people who see an emergency, each person feels less responsible than if he or she were the only one who saw it. This is what choice d says, so choice d is correct.

11. The answer is choice b. Choice a is incorrect because it is not actually stated anywhere in the passage, although you might be tempted to infer it. The last sentence of the article does say, "women were so good at dealing with the public." And this does imply that they are better than the most likely other group -men. But, the author is quoting industrial journals, not necessarily giving his or her opinion or saying that this is true. He or she is just using this as another example of the different rationales industries have used to back up their policies. Choice c is incorrect because it too is not stated anywhere in the passage. Again, you may have been tempted to infer that choice c was true since the paragraph only mentions clerical, teller and lower-management positions. If there weren't a better answer, you might have had to select it. Choice d is incorrect because it too is not found in the passage. Choice b is stated in the first sentence since industry is a "segment of society."

12. The answer is choice d. Choice b is incorrect because it is not stated anywhere in the passage. The same is true of choice c. Choice a is incorrect because of the key word, "proved." The passage states that "Cellini wrote he had brought on rain by artillery fire." This is not the same as proving it. You may not have been sure about this, but that shouldn't have been a problem because choice d is a much stronger and much safer answer. The entire paragraph is about people relating noise and rain. Again, you needed to choose the <u>best</u> of the four choices.

13. The answer is choice d. The seventh sentence says that each number on the Richter Scale represents a quake ten times greater than the previous number. This means that a quake measuring "4" would be ten times worse than a quake measuring "3." Likewise, a "5" quake would be ten times worse than a "4", or one hundred

times (10 x 10) worse than a "3", and a "6" would be ten times worse than a "5", one hundred times worse than a "4", and one thousand times (10 x 10 x 10) worse than a "3." Choice a might have looked attractive if you read it quickly and noticed only that 6 is "twice as great" as 3. Otherwise, careful reading and multiplying should have led you to the right answer.

14. The answer is choice b. Choice a is incorrect because it is not stated anywhere in the passage. The same is true of choices c and d. You may have liked choice c, but the passage doesn't say that people are more important, only that they have different characteristics. Although this passage was rather difficult to read, you could probably have answered correctly by the process of elimination. Incidentally, the point of this passage is that, since humans are a special case, the management of human resources should be specialized to meet their needs.

15. The answer is c. This type of question is called a permutation question. It looks intimidating, but can be solved with persistence and logic. It's often best to take the statements one at a time and go back to the paragraph to see which are true. Statement I is correct and can be found in the last two sentences. Statement II is incorrect because the passage states a clogged drain should be flushed with <u>hot</u> water after an hour, not cold water. Cold water is for severely clogged drains in which the liquid has been left standing overnight, not an hour. Statement III is incorrect because the sixth sentence says severely clogged drains should be flushed with <u>cold</u> water. Statement IV is correct and is stated in the first sentence. Choice c is correct because it states that only I and IV are correct.

16. The answer is choice b. Choice a is incorrect because it is not stated in the passage, and it's also not clear what "merit" is being talked about. (Is it the merit of the goals, of the values, of the organizations, or what?) Choice c is incorrect because it assumes too much. The fact that it is being discussed in relation to the workplace in this passage is not enough to allow us to assume that it has primarily been applied there. Choice d is incorrect because it is not stated anywhere in the passage. Support for choice b is given in the second sentence, which says that relativism is the "philosophy of guiding one's actions in the light of many values and goals." Goals and objectives are very similar, so it is not too much to assume that choice b is true.

17. The answer is choice d. An ordering question like this one requires very careful reading. If you break the passage down and take the statements one at a time, you'll find that the order is as follows: First, the hypothalamus triggers the release of adrenocorticotropin from the pituitary gland (III). Then, adrenocorticotropin travels in the bloodstream (IV). Then, the

adrenal glands release hormones like cortisol (I). And finally the heart beats faster because of epinephrine (II). The order is III, IV, I, II.

18. The answer is choice c. Choice a is incorrect because it is not stated in the passage. According to the first sentence, Perrow's "frame of reference" is more limited than something else; it's not that his theories are limited. Choice b is incorrect because it is mentioned nowhere in the passage. The human relations school is just one of three schools of organizational thought that Barnard fathered. Choice d is incorrect because it was Barnard, not Perrow, who assumed that organizations are functional for all of their members. Choice c is correct and is stated in the third sentence.

19. The answer is choice c. Choice a is incorrect because it is not stated in the passage, and because it assumes too much. The same is true of choice b. Choice d is also not stated anywhere in the passage. Choice c is supported by the last two sentences of the passage.

20. The answer is choice c. Because this passage concerns physics, it may seem intimidating to you. But if you go carefully go through it and eliminate each incorrect choice, you'll see it's not as difficult as it appears. Choice a is incorrect because the last sentence shows how remote the author thinks the danger is. Since there is a <u>potential</u> dark side, choice a could be the answer, but not if there is a better one. Choice b is incorrect because it is not stated anywhere in the passage. Choice d is incorrect because the passage states that the antielectron was discovered in 1932, not 1952. Choice c is true and is supported by the third and fourth sentences.

21. The answer is choice b. Again, you need to find the one statement that is <u>untrue</u>. Choices a, c and d are all supported by the passage. Choice a can be found in the third sentence, choice c in the fourth, and choice d in the second. Choice b is unsupported by the passage, which does not state anywhere that reasoning is still frequently ignored.

22. The answer is choice b. The passage is difficult to read because it was written by Alexis de Tocqueville, a Frenchman, in 1835. However, you don't need to understand all of it. You can just go through the choices and eliminate them. The passage does not say that Americans are generous (a), idealistic (c), or greedy (d). But, it does refer to the system of checks and balances (b) which was built into the American system of government. ("The exercise of its authority was divided", and "in no country is the

right of applying it vested in so many hands"). Again, you did not need to know this to answer correctly -- you just had to be willing to pick the one choice that you could not rule out.

23. The answer is choice d. Choice a is incorrect and is contradicted by the first sentence. Choice b is contradicted by the sixth sentence. Choice c is incorrect because the steel industry spent \$365 million <u>annually</u>. They did not spend \$365 million for the entire decade; they spent ten times that amount. Choice d is supported by the fifth sentence which says that 48% was subsidized by state and local governments. Taxpayers support the governments which help support the steelmakers.

The answer is choice a. The researchers felt that the babies 24. expressed surprise because they did not expect to see an adult's head on a child-sized body. They felt it wasn't something the babies were used to. If the majority of the babies had midgets as parents, however, they would be used to seeing an adult's head on a smaller body. The results of the study would be invalidated because the infants would not have been surprised by something they were used to. Choice b is incorrect because forgetting to record the reactions of two babies out of three hundred would not significantly affect the outcome of the study. It is too small a number to have an effect on the results. Choice c is incorrect because three hundred babies is a large enough sample to be useful. If it were ten or fifteen babies, one might not want to draw conclusions. Choice d is incorrect because the fact that the babies weren't midgets would not affect the validity of the study.

25. The answer is choice b. Again, this question requires you to select the one incorrect choice. Choices a, c and d are all supported by the passage.

26. The answer is choice c. Choice a is incorrect because the passage states that business opinion leaders ranked affirmative action twenty-third out of twenty-five priorities. Choice b is incorrect because it is not stated anywhere in the passage. You might have considered it as a choice, even though it does not fit the classic definition of affirmative action, because of the next to last sentence. Still, it's best to read all of the choices because you need to find the best answer. Choice d is incorrect because the passage does not state that prejudice is usually subtle. The key is the word "usually." All the passage states is that "prejudice can be very subtle"; there is no mention of frequency. Choice c is correct and is supported by sentences four, five and six.

27. The answer is choice c. Choice a is incorrect because it is not stated anywhere in the passage. Choice b is contradicted by

the passage, which implies the opposite. Choice d is not stated anywhere in the passage. You may not have been fond of choice c, but it is correct and is supported by sentence 3 and the last two sentences.

28. The answer is choice b. The passage describes why balloons that are filled with water are more likely to burst when dropped than balloons that are filled with air. Sentence 5 states that "the air balloon bounces because it absorbs the force." You can infer that tires would be filled with air for a similar reason. Choice a is incorrect because the paragraph states that pressure on a gas such as air causes the volume of the gas to decrease, not increase. It's also incorrect because if choice a were true, tires would be more inclined to burst as the air expanded. This would make air a poor substance for tire-filling. Choice c is incorrect primarily because choice b is a much better answer, and because not all liquids will freeze and evaporate according to the climate. Antifreeze, for instance, could perhaps be put into the liquid. Choice c is also incorrect because the passage explains that water balloons burst because the force of the impact is transmitted to the entire surface of the balloon when it is filled with water. Gases absorb the force of the impact because they compress and then expand again. The passage states that liquids do not compress when under pressure, and thus do not absorb the pressure. It is transmitted to the rest of the surface. This would make liquids a poor choice to fill car tires with. Choice d is incorrect because it is not implied or supported anywhere in the passage.

29. The answer is choice c. Choice a is incorrect because nowhere does the passage state that the concern is overstated. Choice b is incorrect because the passage does not state that the U.S. is the country most concerned about depletion of the ozone layer. Choice d is incorrect because, while the passage states that the U.S. is responsible for the use of one-third of the chemicals, it does not state that the U.S. uses more of the chemicals than any other country. Choice c is correct, and is supported by information in the eighth sentence.

30. The answer is choice d. A tricky question. Choice a is incorrect because the increase was in September, not October. Choice b is incorrect because the sixth sentence states that there was a "dip in hours worked in October," and no connection between savings and hours worked in October was established. Choice c is incorrect because savings as a percentage of after-tax income was 6.3% in the <u>third</u> quarter, not the second. While on first reading choice d may appear to be incorrect, closer study will show that combining the income from wages and the salaries mentioned in the sixth sentence (60%) with interest income (15%) will total 75% of all income. You also could have selected choice d by the process of elimination. If you have any comments, or suggestions as to how to improve this booklet, please write to:

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Thank you and good luck!

