

This exam focuses on your abilities to read and write effectively in technical English. It consists of two parts.

1 Correct the following sentences by choosing the suitable words

Please write the number and the correct choice only.

- He knows the material very (**1: good, well**).
- (**2: Coming, Come, Comes**) late to the lecture, I (**3: enter, entered**) quickly and sat in the last available spot.
- Your (**4: neice, niece**) took a (**5: peice, piece**) of the cake.
- The student (**6: prove, proof, proved**) all the theorems of this paper using elementary calculus techniques.
- The (**7: freight, frieght, fright**) train woke the (**8: nieghbors, neighbors**).
- Can you (**9: belive, beleive, believe**) that he (**10: received, recieved, re-ceves**) a (**11: breif, brief, brievie**) letter from the (**12: chief, chef**) editor of the (**13: magazine, magasin**) accusing him of (**14: deceiving, decieving**) the readers by presenting plagiarized material and naming him a (**15: theif, seif, thief**)?
- I saw (**16: eight, eihgt, eite, ate**) of your (**17: frinds, freinds, friends**) at the meeting.
- We must (**18: acheive, achieve**) a higher (**19: yield, yeeld**) on this micro-processor (**20: chip, ship**). Otherwise, we will (**21: loose, lose**) our market (**22: chair, share**).
- I'll use my cellular phone when I'm (**23: at, on**) the bus, but never while I'm (**24: at, in, on**) the car.
- Passengers are not allowed to use electronic devices (**25: at, on**) airplanes (**26: while, during, when**) takeoff and landing.
- It is difficult for me to (**27: here, hear**) anything she (**28: says, said**) in this (**29: noisy, noise**) environment because she speaks so (**30: soft, softly**).

2 Academic writing

Please read the following articles then write *a single article* about plagiarism. I hope that this effort will help you in your future research careers. In your writing, please remember the following issues.

- Your work should be a coherent article with an introduction, body, and conclusion not just a list of unrelated points!
- If your article is divided into sections and subsections then those divisions should have informative titles and be numbered in sequence.
- Your article must not plagiarize! Clearly credit the ideas to their original authors and cite the provided articles as your references. You may cite other references as well obviously.
- The reference list should appear at the end of your article ordered alphabetically by the last name of the first author.
- Your article must address at least the following points and is expected to discuss other ideas either from the provided articles or from your own background information:
 1. Explain at least six behaviors from the “ethically problematic behaviors in science” written by Dr. Robert E. McGinn and give concise examples depicting how they might happen.
 2. Discuss the definitions and levels of plagiarism according to the IEEE and according to the article of Mr. Scott McLemee?
 3. What does the editor in chief of *Science* magazine mean by “awarding authorship”? What is the proposed test for that?
 4. Is “awarding authorship” considered plagiarism? What about “appropriating” ideas from a paper under review?
 5. What are the various forms of punishment for plagiarism that publishers might use?
 6. Explain the legal doctrine of “reverse palming off” indicating how it may apply in the case of plagiarism.
 7. According to your understanding of the Egyptian legal system and its base in the Islamic shari‘ah, argue for or against the possibility that the victim of plagiarism claims the loss as a “thing of value” and sues the plagiarist under the doctrine of theft.
- Your article should have neither spelling nor grammar mistakes.

2.1 Avoiding Misconduct in Your Scientific Research

By Richard M. Reis in *The Chronicle of Higher Education's Career Network*. Friday 20 July 2001.

Most beginning scientists set out to follow the highest ethical standards in their work and, in most cases, doing so is not a problem. Yet, as every experienced researcher knows, there will be times when knowing and doing the “right thing” are not as easy as they sound.

What are these ethically problematic situations where a clear right or wrong is not possible? And how can you find guidance in making the correct calls?

Robert E. McGinn, a professor of management science and engineering at Stanford University, has taught a number of courses on technology and society and on ethical issues in science and engineering. He has generated a list of 15 “ethically problematic behaviors in science.”

A few of these are easy to call: plagiarism; falsifying (e.g., “cooking” or “trimming”) data obtained from a genuine experiment; fabricating experiments to “obtain” or “generate” data; deliberately misleading research competitors to improve one’s chances of getting there first.

But most of the behaviors on Mr. McGinn’s list fall into a gray zone, such as: hyperbole on grant requests regarding previous accomplishments or the future value of research; giving undue credit or failing to give due credit regarding the authorship of research work; failure to secure bona fide “informed consent” from research subjects; publishing one’s work in L.P.U.’s (Least Publishable Units) to increase the number of one’s publications; and failure to conduct a fair-minded and scrupulous review of a scientific paper for which one is a referee.

Donald Kennedy, editor in chief of *Science*, says some of the most problematic areas of misconduct are not the ones that make the headlines. “Faking data or fabricating experiments are in a sense easy to deal with because they are so obviously wrong,” says Mr. Kennedy. But in many other areas, he says, there are huge variances in what is commonly regarded as the right thing, and this creates “zones of difficulty” not always easy to negotiate.

One such area is co-authorship. Multiple authorship of scholarly papers is now the norm in all areas of science and engineering. This raises important questions about the allocation of credit, since determining where our ideas come from is not always easy.

As Mr. Kennedy puts it, “The consequence of people working together is that ideas are in the air. To a certain extent we all ‘steal’ from each other, and figuring out who thought what and when, who gets credit, and in what order, is a nontrivial problem.”

When it comes to authorship, different norms exist within institutions as well as among various disciplines. In some cases the laboratory director’s name goes on every paper. In genetics and microbiology, for example, credit tends to be “shared,” and the director of the laboratory is almost always on the list of authors even if he or she did no direct work on the project. In population biology it is the people who actually did the work, usually graduate students, whose names are the only ones on the paper.

Mr. Kennedy believes that “complementary authorships” —in which a student’s name is put on a paper as a career boost even if he or she did little or no work on it—

is a form of fraud. He calls it “a case of authorship being awarded, not earned.”

For many experienced researchers there is a simple test: Can every one of the co-authors give a talk on the paper at a scientific meeting and defend it publicly in a question-and-answer session? If not, then some attribution other than co-authorship, for example, “with technical assistance of,” should be used.

The other side of credit is blame. What if someone fakes the data? Are all the authors responsible? If everyone gets credit for success, should everyone take the blame for failure? It is very important that senior researchers make clear to junior colleagues what is expected in their laboratories. If these expectations are explicit in the beginning, then a lot of problems will be avoided in the future.

Another area providing plenty of ethical challenges these days is the reviewing of scholarly papers and proposals. Since reviewers see a paper before it is published, there is a risk that some of them may “appropriate” the ideas of the author. Indeed, in some areas it is now possible for authors to list people they want excluded from reviews of their submissions to journals and granting agencies.

A related matter has to do with who signs off on the reviews of papers, proposals, and grant applications. It makes sense for a professor to ask his or her graduate students and postdocs to review such material since this kind of activity can be an important part of their education. But should that be a substitute for the faculty member also reviewing the application?

These are just a few of the many problem areas that researchers are likely to encounter in their scientific practice. The first step in dealing with these problematic behaviors is to acknowledge their existence and bring them out into the open for discussion.

It is encouraging to see the increased attention paid to ethical issues in courses, books, journals discussions at professional society meetings, and on the Internet. Such attention also makes it easier for young faculty members to seek out additional advice and guidance.

One helpful approach is to identify senior scholars who share your values and who have experience in the particularly difficult and challenging gray areas. These people can be found in your department, your institution, at other colleges and universities, and in your professional societies. There are also a number of electronic mailing lists and discussion forums on the Web that can be useful. The best source for such information and for links to additional Web sites can be found at the On-Line Science Ethics Resources. <http://www.chem.vt.edu/chem-ed/ethics/>

2.2 The Plagiarism Problem: Now You Can Help

BY Anna Bogdanowicz in *The Institute (IEEE)*. Wednesday 07 March 2007.

Plagiarism is a growing concern for many organizations, including the IEEE. The number of instances reported in IEEE publications has been rising steadily, with 14 in 2004, 26 in 2005, and 47 in 2006.

The Internet is largely to blame for the increase, according to Bill Hagen, the IEEE’s intellectual property rights (IPR) manager, in Piscataway, N.J. Digital search engines

have made plagiarizing easier because finding information is simpler, and it takes only the swipe of a mouse and a couple of keystrokes to highlight text and paste it into a new document.

AUTHORS TAKE NOTE Plagiarism is defined by the IEEE as the “reuse of someone else’s prior ideas, processes, results, or words without explicitly acknowledging the original author and source.” To deal with the problem, the IEEE is encouraging members, authors, and publication editors to report cases of plagiarism when they find them. And the IEEE has developed two new online tools that make identifying and reporting plagiarism easier. “Plagiarism can be a bit daunting, so we tried with the new tools to explain it in an engaging way,” Hagen says.

The first tool is an animated PowerPoint tutorial that explains the fundamentals of plagiarism, why it is a serious offense, how to avoid it, and how to report it. The second is a flowchart that illustrates the process used to investigate a plagiarism complaint.

So why is plagiarism so serious? Besides being a form of copyright infringement and therefore illegal, it constitutes, according to the PowerPoint presentation, a “serious breach of professional and ethical conduct” by denying original authors credit for their contributions. Plagiarism also can apply to materials besides publications, including conference proceedings, photographs, and charts.

Cases of plagiarism vary in severity. Accordingly, the IEEE has established five levels. The most extreme, Level 1, is the “uncredited [to the original author] verbatim copying of a full paper” or at least half of an article. The least severe, Level 5, is the “credited verbatim copying of a major portion of a paper without clear delineation,” such as quotes or indents.

Punishment varies according to severity. Authors guilty of the most severe plagiarism can be prohibited from contributing work to IEEE-copyrighted publications for up to five years. Those guilty of the least severe level are required merely to write a letter of apology to the original author.

If you suspect plagiarism, or if you’re an author who finds your work plagiarized, send your complaint to the IEEE IPR Office (visit the URL at the end of the article for contact information), along with copies of the original work and the work of the alleged plagiarist, much as a lawyer would submit evidence in a case. The IPR Office records the complaint and sends it to the editor in chief of the publication where the suspected plagiarism appeared.

The second tool is the flowchart. “The motivation behind putting up the flowchart is that authors, members, and editors will now know how the process of investigating plagiarism works,” says Saifur Rahman, former chair of the IEEE Publication Services & Products Board (PSPB), and the person instrumental in developing the flowchart.

The IPR Office is important to the process because it can provide a journal editor with advice on the IEEE’s plagiarism policies and procedures, Hagen says. The editor also forms an ad hoc committee of experts from the technical field of the material allegedly plagiarized. Experts can identify what might simply be wording commonly used to describe a technical concept—which is not plagiarism. The committee’s job is to decide whether plagiarism occurred and to recommend the appropriate corrective action, if necessary.

SEVERITY LEVEL From that point it’s up to the editor to decide just how

severe the plagiarism is. If it's serious —Level 1 or 2— the editor sends the ad hoc committee's recommendations to the PSPB chair for action. If it's less severe, the IPR Office and the plagiarizing author are notified of the decision and the corrective action to be taken.

If the process does move to the PSPB chair, the chair reviews the editor's decision and gets advice from the newly established Publishing Conduct Committee. Rahman appointed the committee in June to assist in handling misconduct cases involving publishing, including plagiarism.

If the conduct committee agrees with the editor's decision on punishment, the PSPB chair notifies the author and Hagen's IPR Office. But if the committee disagrees, the editor receives its recommendations and the cycle repeats until a course of action is agreed upon.

Besides informing members of how to avoid and report plagiarism, the IEEE is considering steps for detecting it more easily, Hagen notes. For example, the institute is considering using plagiarism-detection software that would check submitted manuscripts against those in the IEEE Xplore digital library. And it might also engage a plagiarism-detection service to check submissions against a large database of manuscripts from other science and technology publishers.

The two plagiarism tools developed by the IEEE's IPR Office can be found on the recently developed plagiarism guidelines page, at http://www.ieee.org/web/publications/rights/Plagiarism_Guidelines_Intro.html.

2.3 What Is Plagiarism?

By Scott McLemee in *The Chronicle of Higher Education*. Friday 17 December 2004.

So just what is plagiarism, anyway? The Oxford English Dictionary defines plagiarism as “the wrongful appropriation or purloining, and publication as one's own, of the ideas, or the expression of the ideas ... of another.” It is derived from the Latin *plagiarius*, meaning “one who abducts the child or slave of another.” The word was first used in its current sense by the Roman poet Martial, in the first century AD, as a sarcastic put-down of another writer who had cribbed some of Martial's verse.

Outright copying of someone else's writing is only the most clear-cut form of plagiarism. The Modern Language Association provides a succinct but sweeping catalog of varieties of plagiarism in its *MLA Handbook for Writers of Research Papers*: “A writer who fails to give appropriate acknowledgment when repeating another's wording or particularly apt term, paraphrasing another's argument, or presenting another's line of thinking is guilty of plagiarism.”

The term “plagiarism” applies to “the imitation of structure, research, and organization,” notes Laurie Stearns, a copyright lawyer in “Copy Wrong: Plagiarism, Process, Property, and the Law,” an essay appearing in the *California Law Review* in 1992. “Even facts or quotations can be plagiarized,” writes Ms. Stearns, “through the trick of citing to a quotation from a primary source rather than to the secondary source in which the plagiarist found it in order to conceal reliance on the secondary source.” In the sciences, “accusations of plagiarism may center on the content of discoveries or

the interpretation of data rather than on specific phraseology.”

Defining just where influence ends and plagiarism begins can be a difficult question. Ralph Waldo Emerson, who wanted the American scholar to live in a state of radical originality, ended up conceding that “all my best ideas were stolen by the ancients.”

Even when an offender is caught red-handed, plagiarism itself is not a matter for the courts. Strictly speaking, plagiarism, as such, is not illegal – although copyright infringement is. Some forms of plagiarism also count as copyright infringement. Yet the terms are far from identical.

The OED defines plagiarism as the expropriation of either “the ideas, or the expression of the ideas ... of another.” As Ms. Stearns notes in her law-review article, copyright statutes make a clear distinction “between ‘expression,’ which the law protects against copying, and ‘ideas,’ which it does not.”

If Smith copies a chapter from a book by Jones without permission, then the rights of the copyright holder have been violated. But suppose Smith paraphrases the chapter, argument by argument. In that case, Smith will have copied the ideas, but not the expression, of a copyrighted work. If no credit is given, then Jones has every reason to complain about being plagiarized. Still, assuming that Smith has been careful not to borrow any of the language of the original, it will not be an infringement of copyright.

In his essay “Plagiarism, Norms, and the Limits of Theft Law: Some Observations on the Use of Criminal Sanctions in Enforcing Intellectual Property Rights,” appearing in the *Hastings Law Review* in 2002, Stuart P. Green, a professor of law at Louisiana State University at Baton Rouge, writes that copyright law “protects a primarily economic interest that a copyright holder has in her work ... whereas the rule against plagiarism protects a personal, or moral, interest.”

Mr. Green provides an extensive survey of the cultural history and legal implications of the concept of plagiarism. Perhaps the most intriguing, if puzzling, of his citations comes from the Talmud. There, an ancient scholar wrote that the person “who reports something in the name of the one who said it brings redemption into the world.”

In a footnote, Mr. Green quotes a contemporary rabbi, Joseph Telushkin, who explains the reasoning: “If a person presents as her own an intelligent observation that she learned from another, then it would seem that she did so only to impress everyone with how ‘bright’ she is. But if she cites the source from whom she learned this information, then it would seem that her motive was to deepen everyone’s understanding. And a world in which people share information and insights to advance understanding, and not just to advance themselves, is one well on its way to redemption.”

2.4 The Price of Plagiarism

By David Glenn in *The Chronicle of Higher Education*. Friday 17 December 2004.

Plagiarism can arouse deep-seated anger and moral passion. William J. Cronon, a historian at the University of Wisconsin at Madison, casually uses the phrase “sixth circle of hell” when describing his feelings about how one particular species of plagiarist (the faculty mentor who pilfers ideas from graduate students) should be punished.

In Dante’s schema, residents of the sixth circle are confined in burning tombs—but

universities might run afoul of environmental laws if they set up such things on their quads. So what are some more-plausible punishments for convicted plagiarists?

- Colleges and universities can, of course, deny tenure to, or terminate the employment of, a faculty member for egregious violations of ethical standards. There are also the lesser penalties of demotion, salary reduction, and prohibitions on serving as a principal investigator. (One caution: Each of those potential sanctions should be clearly spelled out in the faculty handbook, lest the institution find itself on the wrong side of a breach-of-contract lawsuit.)
- Journals and presses can refuse to consider a plagiarist's future submissions for a certain period of time, or for a lifetime. When serious plagiarism is detected in a published work, most scholarly journals will also remove the offending article from electronic databases.
- Scholarly associations can publicize an offender's wrongdoing or kick him or her out of the organization. If the perpetrator is a lawyer, psychologist, or some other sort of professional, he or she might also face a loss of licensure. (It appears that state bar associations have never censured or disbarred a law professor for purely scholarly plagiarism, but they could, in theory, since plagiarism violates the lawyer's ethical pledge to avoid even the appearance of impropriety.)
- Lawsuits might be filed against accused plagiarists on a variety of grounds. In a 2002 law-review article, Stuart P. Green of Louisiana State University at Baton Rouge described a number of civil actions that might successfully be filed against scholarly plagiarists. (Mr. Green hopes no one will ever actually attempt these arguments; he strongly prefers that plagiarism be dealt with out of court.)

In certain situations, perpetrators can be sued for copyright infringement. It is also plausible, Mr. Green says, that plagiarists could be sued on grounds of unfair competition, under the legal doctrine known as "reverse palming off." If a local diner bought a boxful of McDonald's hamburgers and then resold them as if they were the diner's own product, it could be sued for reverse palming off. Mr. Green believes that plagiarists are in similar legal jeopardy.

- Prosecution under criminal laws is a farfetched possibility, but not impossible. Such a prosecution could take either of two forms: In a case of verbatim plagiarism, a district attorney could bring a charge of copyright violation.

And —more remotely— it is possible that a court might permit a plagiarist to be prosecuted for theft. One key question here, Mr. Green argues, is whether the victim's loss (that is, the loss of reputation that stems from not receiving proper credit for one's ideas) constitutes a "thing of value" under the doctrine of theft.