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Ethics

TM260

Ethics, Law and the Governance in IT

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Question 1 MCQ



1. Living in communities brings benefits and costs. Which of the following is a cost?
 - a) Higher standard of living
 - b) Opportunity for relationships
 - c) Certain actions are prohibited
 - d) Economic specialization
2. Which term defines "a society's rules of conduct"?
 - a) **Morality**
 - b) Ethics
 - c) Justice
 - d) Virtue
3. According to Kant, the only thing that is good without qualification is _____.
 - a) happiness
 - b) pleasure
 - c) **good will**
 - d) moral luck
4. The first formulation of Kant's categorical imperative focuses on _____.
 - a) **universal moral laws**
 - b) maximizing pleasure
 - c) emotional responses
 - d) cultural values
5. The second formulation of Kant's categorical imperative requires us to _____.
 - a) seek happiness for all
 - b) **treat people as ends not means**
 - c) maximize utility
 - d) respect laws of government
6. According to act utilitarianism, an action is good if _____.
 - a) its intentions are pure
 - b) it follows tradition
 - c) it obeys a moral law
 - d) **it increases total happiness**
7. Virtue ethics was originally developed by _____.
 - a) Kant
 - b) **Aristotle**
 - c) Mill
 - d) Bentham
8. A virtue situated between two vices is an example of _____.
 - a) **the golden mean**
 - b) categorical imperative
 - c) relativism
 - d) utilitarian balance
9. Moral virtues are developed by _____.
 - a) reading philosophy
 - b) divine grace
 - c) **habitual practice of right actions**
 - d) legal training
10. Kantianism is criticized because _____.
 - a) it is too flexible
 - b) it allows exceptions to duties
 - c) it focuses only on happiness
 - d) **it cannot resolve rule conflicts**
11. According to act utilitarianism, if sum of happiness changes is negative, the action is _____.
 - a) good
 - b) neutral
 - c) **bad**
 - d) optional
12. Virtue ethics emphasizes _____.
 - a) laws and duties
 - b) outcomes only
 - c) **character and moral wisdom**
 - d) economic benefits
13. A vice is _____.
 - a) a temporary habit
 - b) **a trait preventing human flourishing**
 - c) a neutral feature
 - d) a positive tendency
14. "Spam" refers to what type of email?
 - a) Personal messages between friends
 - b) Encrypted corporate mail
 - c) **Unsolicited, email sent to many recipients**
 - d) Emails from verified news sources
15. Why is spam so profitable for spammers , Because?
 - a) postage fees are high
 - b) **messages cost almost nothing to send**
 - c) most countries reward spammers
 - d) recipients often pay per email
16. Which ethical virtues did Ann violate in the spam case?
 - a) **Respect and fairness**
 - b) Obedience and loyalty
 - c) Humility and patience
 - d) Generosity and justice

طريق الملايين - ملخص النسخة الأولى لـ الشارع



17. The World Wide Web is best defined as a _____.
a) Centralized database
c) Local file sharing tool
- b) Networked hypertext system
d) Secure government network
18. Two key attributes of the Web are _____.
a) Ownership and licensing
c) Censorship and security
- b) Filtering and control
d) Decentralize and unique addresses
19. Which of the following is a common Internet activity?
a) Socializing
c) Paying taxes
- b) Online shopping
d) All of the above
20. Censorship is defined as _____.
a) Block access to material deemed harmful
c) Government funding of media
- b) Publishing every idea freely
d) Promoting public debate
21. When a group chooses not to publish information to avoid conflict, this is called _____.
a) Direct censorship
c) Self-censorship
- b) Government monopoly
d) Public review
22. A Web filter is software that _____.
a) Speeds up downloads
c) Blocks specified web pages from display
- b) Analyzes search queries only
d) Encrypts internet traffic
23. Under utilitarian ethics, a filter is ethical if _____.
a) It increases total benefit over harm
c) It is mandated by law
- b) It serves authority alone
d) It is never ethical
24. Which is NOT a method used by identity thieves?
a) Dumpster diving
c) Phishing
- b) Cloud backups**
d) Shoulder surfing
25. Which term means gaining services or ideas from a large online group?
a) Crowdsourcing
c) Coercion
- b) Collaboration
d) Cybercrime
26. Google ranks pages higher when _____.
a) They contain more ads
c) They are new
- b) Many links point to them**
d) They use flashy graphics
27. Which is NOT a social factor in Internet addiction?
a) Peer pressure
c) High achievement
- b) Stress
d) Lack of social support
28. The main ethical problem with spreading false information online is _____.
a) It creates competition
c) It reduces profits
- b) It undermines public trust**
d) It improves debate
29. Intellectual Property refers to:
a) Tangible physical assets
c) Government-owned resources
- b) Creations of the human mind**
d) Natural raw materials
30. According to John Locke's theory, people gain ownership of property by:
a) Purchasing it from the government
c) Mixing their labor with natural resources
- b) Registering it with authorities
d) Inheriting it from ancestors
31. The main purpose of granting intellectual property rights is to:
a) Limit public access
c) Reduce global competition
- b) encourage innovation**
d) Increase government control
32. Which of the following is NOT considered intellectual property?
a) A novel written by an author
c) A house built by a company
- b) A patented machine
d) A trademarked logo



33. Trade secrets differ from patents because they:
- a) **Never expire if kept secret**
 - c) Must be publicly disclosed
 - b) Require registration
 - d) Are protected by international treaties
34. Which of the following is NOT appropriate to protect as a trade secret?
- a) A secret recipe
 - c) **Published source code**
 - b) A list of customers
 - d) A manufacturing process
35. Reverse engineering a trade secret is:
- a) Always illegal
 - c) Allowed only with government permission
 - b) **Allowed unless done through theft**
 - d) Punishable by imprisonment
36. A trademark identifies:
- a) **Goods or services of a specific company**
 - c) A government license
 - b) The inventor of a patent
 - d) A registered design only
37. A trademark can be lost if:
- a) It becomes too expensive
 - c) It is sold abroad
 - b) **It becomes a common noun**
 - d) It is used in advertisements
38. Patent protection grants exclusive rights for:
- a) 5 years
 - c) **20 years**
 - b) 10 years
 - d) Life of inventor
39. Which of the following is NOT a type of intellectual property protection?
- a) Trademark
 - c) Copyright
 - b) Patent
 - d) **License plate registration**
40. Copyright does NOT protect which of the following?
- a) The expression of an idea
 - c) Music and literature
 - b) **The functional idea itself**
 - d) Computer source code
41. Under copyright law, "fair use" refers to:
- a) Unlimited copying for education
 - c) **Limited use for criticism or research**
 - b) Using works after author's death
 - d) Selling works abroad
42. Which factor is NOT part of the fair use test?
- a) Purpose and character of use
 - c) Market effect
 - b) Amount copied
 - d) **Popularity of the work**
43. Peer-to-peer (P2P) networks allow users to:
- a) **Share files directly without a central server**
 - c) Send faxes online
 - b) Connect only through websites
 - d) Use government-controlled routers
44. Using P2P to share copyrighted movies without permission is:
- a) Ethical but illegal
 - c) **Copyright infringement**
 - b) Legal and fair
 - d) Trade secret disclosure
45. Software copyright protects:
- a) The function of the program
 - c) Any idea about computing
 - b) **The specific source code expression**
 - d) Business models
46. Software patents protect:
- a) Artistic layout of code
 - c) User interface colors
 - b) **process implemented by software**
 - d) Employee names
47. Companies that buy patents only to sue others are called:
- a) Patent brokers
 - c) **Patent trolls**
 - b) Patent protectors
 - d) Patent dealers
48. The GNU Project was created to develop:
- a) **A free Unix-like open-source OS**
 - c) An online marketplace
 - b) A proprietary Windows-like OS
 - d) File encryption tools

Question 2 True/False

1. Ethical relativism states that moral truth depends on cultural context. ✓
2. Subjective relativism means moral truth is determined individually. X
3. Subjective relativism is considered workable in all societies. X
4. Kant's categorical imperative focuses on universal moral laws. ✓
5. According to Kant, lying can be moral if it produces happiness. X
6. Utilitarianism evaluates actions by their consequences. ✓
7. Act utilitarianism focuses on individual acts, while rule utilitarianism emphasizes general rules. ✓
8. Ethical egoism encourages personal responsibility and self-reliance. ✓
9. Ethical egoism promotes moral equality and concern for others. X
10. Virtue ethics focuses more on moral rules than character. X
11. The "Golden Mean" is the balance between extremes of character. ✓
12. Good will, in Kantian ethics, is good without qualification. ✓
13. Ethics relies on emotion rather than logical reasoning. X
14. Act utilitarianism often struggles with predicting consequences accurately. ✓
15. Kantian ethics is a deontological theory, not a consequentialist one. ✓
16. Spam emails are personal communications between friends. X
17. Spam is profitable because sending emails costs very little. ✓
18. Botnets are controlled by hackers called "bot herders." ✓
19. The Web is a centralized database managed by governments. X
20. Each webpage on the Web has a unique URL. ✓
21. Mobile apps replaced browsers mainly for convenience on small screens. ✓
22. Self-censorship occurs when people voluntarily withhold information. ✓
23. Kant supported censorship to protect morality. X
24. Mill rejected censorship because free debate helps truth emerge. ✓
25. Identity theft involves using another person's personal data fraudulently. ✓
26. Cloud backup is a common identity theft method. X
27. Internet addiction includes symptoms such as withdrawal and tolerance. ✓
28. False information online undermines public trust. ✓
29. Most banks offer zero-liability fraud protection. ✓
30. Virtue ethics of online behavior focuses on honesty and fairness. ✓
31. Intellectual property refers to physical goods like machines. X
32. According to John Locke, property rights arise from labor. ✓
33. A trade secret loses protection once it becomes public. ✓
34. Trademarks identify the source of goods or services. ✓
35. Service marks protect tangible products only. X
36. A patent usually lasts for 20 years. ✓
37. Copyright protects expressions of ideas, not ideas themselves. ✓
38. Copyright begins automatically upon creation of a work. ✓
39. Fair use depends on four factors: purpose, nature, amount, and effect. ✓
40. Copying an entire movie for personal entertainment is fair use. X
41. Peer-to-peer networks share files directly between computers. ✓
42. BitTorrent speeds downloads by dividing files into smaller pieces. ✓
43. Open-source software allows free modification and redistribution. ✓
44. The GNU Project aimed to develop a free Unix-like OS. ✓
45. Patent trolls buy patents primarily to innovate. X

Question 2: Define



- **Spam:**
Unsolicited bulk email sent to many recipients for advertising or fraud.
- **Censorship:**
Attempt to suppress or regulate public access to material considered harmful or offensive
- **Censorship:**
Attempt to suppress or regulate public access to material considered harmful or offensive
- **Web Filter:**
Software that blocks access to selected websites or content types.
- **Identity Theft:**
When a person misuses another person's identity.
- **Instant messaging:**
software supporting real-time "chat" over the Internet like, Kik Messenger, Whisper
- **Cyberbullying:**
Use of the Internet or phone system to inflict psychological harm.
- **Intellectual Property (IP):**
Creations of the mind such as inventions, art, or designs.
- **Patent**
A public document that provides detailed description of invention
- **Fair Use:**
legal to reproduce copyrighted work without permission
- **Botnet:**
huge networks of compromised computers controlled by a hacker (bot herder).
- **Firewall:**
Hardware or software that filters and controls network traffic for security.
- **Internet Addiction:**
Excessive, uncontrolled Internet use that disrupts daily life.
- **Copyright:**
Legal protection for creative expressions like music, books, and software.
- **Trade Secret:**
Confidential information providing a competitive business advantage.
- **Time Shifting:**
videotaping television broadcasts for private viewing. (fair use).
- **Space Shifting:**
create copy for backup purposes or for use in a portable device(fair use).
- **Reverse Engineering:**
Legally analyzing a product to learn its design or process.
- **Patent Troll:**
Entity that buys patents only to file infringement lawsuits for profit.
- **P2P (Peer-to-Peer) Network:**
transient network that connects computers running the same program, allowing them to access files stored on each other's hard drives.
- **Open-Source Software:**
Software with accessible source code that anyone may modify or share.



- **Cyberlocker:**
file-hosting services or cloud storage services Online platform for storing and sharing large digital files.
- **GNU Project:**
Richard Stallman's initiative to create a free Unix-like operating system.

Essay / Short-Answer Questions

1. What are the benefits and harms of networked communications?

- Benefits (Conducting business - Connecting with friends and relatives)
- Harms : (Scams - Bullying and harassment)

2. List Two ways spammer can get email addresses:

- Web sites, chat - room conversations
- Computer viruses - Dictionary attacks
- Contests

3. Define we, and Write two of the web

- Web: networked hypertext system
- It is decentralized
- Every Web object has a unique address

4. Four list four uses of the Internet

- | | |
|--|--------------------------------|
| • Buying and selling | • Socializing (e.g., Facebook) |
| • Contributing content (e.g., wikis and blogs) | • Visiting secret Web sites |
| • Crowdsourcing | • Learning |
| • Controlling the Internet of Things | • Paying taxes |

5. Q: What are the main forms of direct censorship?

- Government monopolization: Government owns or controls all media.
- Prepublication review: All content checked and approved before publishing.
- Licensing and registration: Used to control limited media like radio and TV.

6. What is the most common form of censorship?

- The most common form of censorship is self-censorship, where a group decides not to publish information to:
 - Avoid persecution.
 - Maintain good relations with government officials (sources of information).

7. What is the main challenges Posed by the Internet

- Many-to-many communications
- Dynamic connections
- Huge number of Web sites
- Hard to distinguish between minors and adults

8. Why did Kant and Mill oppose censorship?

- Kant urged people to "use their own reason," while Mill argued that no one is infallible and truth emerges from the free clash of ideas.

9. What are two common methodologies used by web filters?

- maintain a blacklist of objectionable sites
- examine web content for objectionable words or phrases.

10. How identity thieves gain access

- Dumpster diving
- Shoulder surfing
- Phishing

خاص لطلاب محدث النسخ أو الشارع



11. List Two variants of Internet addiction

- Excessive gaming
- Sexual preoccupations
- Messaging

12. Write two characteristics of Internet addiction

- | | |
|-----------------|--------------------------------|
| • Excessive use | • Withdrawal symptoms |
| • Tolerance | • Negative social consequences |

13. Contributing Factors to Addiction

- Social factors: Peer groups
- Situational factors: Stress
- Individual factors: Lack of achievement

14. What are the benefits of protecting intellectual property?

- Encourages innovation and creativity.
- Provides financial reward for inventors.
- Promotes economic growth.
- Ensures public disclosure of useful inventions.

15. List four characteristics of a trade secret.

- Never expires.
- Reverse engineering is allowed.
- Gives competitive advantage.
- May be lost when employees leave.

16. What is the difference between Trademark and Service mark:

- Trademark: Identifies goods
- Service mark: Identifies services

17. List any five exclusive rights granted to creators under copyright.

- Reproduction, Distribution, Public display,
- Public performance, Derivative works

18. Explain Fair Use and the four factors courts consider.

- Purpose and character of use (commercial or educational).
- Nature of the work (creative vs factual).
- Amount copied.
- Effect on market value.

19. What is the purpose of the Audio Home Recording Act of 1992?

- It protects consumers' rights to make analog or digital copies for personal, noncommercial use, such as creating a backup or sharing with a family member.

20. How do peer-to-peer (P2P) networks facilitate data exchange?

- Give each user access to data stored in many other computers
- Support simultaneous file transfers among arbitrary pairs of computers
- Allow users to identify systems with faster file exchange speeds.

21. What is one advantage and one disadvantage of using cyberlockers?

- Advantage: Support workgroup collaboration online.
- Disadvantage: sharing copyrighted material illegally.

22. What does software copyright protect?

- The expression of an idea, not the idea itself.
- The object program, not the source program.



23. List three common violations of software copyrights.

- Copying a program to give or sell to someone else.
- Preloading a program onto the hard disk of a computer being sold.
- Distributing a program over the Internet.

24. Explain how the “clean room” software development strategy helps prevent copyright violations.

- Reverse engineering is allowed.
- The clean room strategy separates the analysis and coding teams.
- Team 1 analyzes the competitor’s program and writes detailed specifications.
- Team 2 develops new software using only that specification, avoiding direct copying.

25. Explain how BitTorrent works.

- BitTorrent speeds downloading
- Files broken into pieces
- Different pieces downloaded from different computers used for downloading large files
 - Computer programs
 - Television shows
 - Movies

26. List two criticisms of software patents.

- Too many patents are issued.
- Obvious inventions.

27. Define Ethical relativism and Subjective relativism and explain why the latter is not a workable theory.

- Ethical relativism holds that morality depends on cultural norms. Subjective relativism says each person decides right and wrong for themselves. It fails because it eliminates moral distinction and rational evaluation.

28. Compare Software Copyright and Software Patent in terms of what is protected. (2 marks)

- **Software Copyright:** Protects the **object program and screen displays** (the expression of the idea).
- **Software Patent:** Protects the **software process with practical utility** (the functional method).

29. What are two criticisms of proprietary software?

- Harsh measures are used to enforce copyrights.
- Copyrights are not serving their purpose of promoting progress.

30. According to critics, why is it wrong to allow someone to “own” a piece of intellectual property”?

- Because it limits innovation and contradicts the idea of shared knowledge.

31. Define Open-Source Software.

- Software distributed with its source code and no restrictions on selling, sharing, or modifying.

32. List four conditions from the Open-Source Definition.

- No restriction on selling or giving away software.
- Source code must be included.
- No restriction on modifying code.
- Same rights apply to everyone who redistributes it (copy left).

33. Mention three beneficial consequences of open-source software.

- Everyone can improve the program.
- New versions appear more frequently.
- Programs belong to the whole community.



34. Give two examples of open-source software.

- Apache, Android, Chrome, Firefox, OpenOffice, and Perl/Python/Ruby.

35. What is the goal of the GNU Project?

- To develop an open-source, Unix-like operating system.

36. Explain Kant's two formulations of the Categorical Imperative with examples.

- **First Formulation:** Act only from those moral rules that you can at the same time will to be universal laws.
- Example – Promise breaking: If everyone broke promises, promises would lose meaning → rule fails universality → wrong.
- **Second Formulation:** Treat humanity, both in yourself and others, always as an end and never merely as a means.
- Example – Lying to get money uses others as means → immoral.

37. Discuss three advantages and two criticisms of Ethical Egoism.

- Advantages:
 - Encourages personal responsibility and self-reliance.
 - May indirectly benefit society when individuals pursue their own success.
- Criticisms:
 - Ignores others' rights and moral equality.
 - Promotes conflict and justifies immoral acts for personal gain.

38. List and explain four core characteristics of Virtue Ethics.

- Focus on character rather than rules or consequences.
- Virtues develop through habit and moral education.
- Emotions and relationships are morally relevant.
- A virtuous person acts right naturally and consistently.

39. Define Peer-to-Peer Network and explain one ethical concern.

- Definition: Network where computers share files directly without a central server.
- Ethical concern: Enables illegal sharing of copyrighted works (piracy).

40. Explain two advantages and two disadvantages of open-source software.

- Advantages: Low cost, encourages collaboration.
- Disadvantages: Less commercial support, possible security risks from open code.

Case-Based Analysis

1. Ahmed loves Apple products and uses the Apple logo on his restaurant sign. Identify the type of intellectual property. Is this legal or illegal? Justify your reasoning.

- Type: Trademark.
- Legal Status: Illegal.
- Justification: Logos are protected indefinitely; using them misleads customers and violates trademark rights.

2. A company uses Apple's logo for its restaurant.

- Illegal
- Trademark infringement
- misleads customers; violates ownership rights.

3. Case: Employee takes company source code to create own startup.

- Illegal
- Violates Trade Secret and Copyright laws
- breach of duty and confidentiality.



4. A YouTuber downloads a popular song and uses it as background music in his video. Is this a copyright infringement or fair use? Justify.
- Type: Copyright infringement.
 - Justification: Using a full song in commercial or public content violates the owner's exclusive right to reproduction and performance. Fair use applies only for limited educational or critical use.
5. A student reverse-engineers a software to learn how it works and writes his own improved version for class use. Is this legal or illegal? Explain why.
- Legal under fair use.
 - Justification: Reverse engineering for educational or interoperability purposes is allowed as long as no contract or confidentiality agreement is breached.
6. A student copies an entire academic article and uploads it on a website . Is it copyright infringement or fair use?
- Copyright infringement.
 - Uploading full works online violates reproduction and distribution rights. Fair use applies only to limited educational or critical portions.
7. An employee discovers a company's secret recipe and shares it with a competitor. What type of violation is this? Explain legally and ethically.
- Trade Secret Violation. Sharing confidential business information breaches legal duty and loyalty. Ethically, it breaks trust and harms the employer's rights.
8. A student creates an online account pretending to be another person to insult classmates. What ethical principles are violated?
- Cyberbullying and identity fraud. Violates honesty, respect, and responsibility. The act causes emotional harm and destroys trust in digital communities.
9. A student downloads a movie using BitTorrent and shares it on a public forum. Is this fair use or copyright infringement? Explain.
- Copyright infringement. Sharing entire works online without permission violates the creator's exclusive rights of reproduction and distribution.
10. A programmer develops a software algorithm based on reverse engineering a competitor's product for interoperability. Is this legal and ethical? Why or why not?
- Legal if no confidential agreements were broken. Reverse engineering for compatibility and research is permitted under fair use and supports technological advancement.
11. A developer downloads paid software, modifies it, and sells it under a new name. Is this legal or illegal? Explain.
- Illegal and unethical. Violates software copyright (reproduction, modification, resale without permission). Ethical View: Breaks fairness and respect for creators' rights.
12. A small business installs a single licensed copy of a design software on 10 computers. Is this legal? Why or why not?
- Illegal and unethical. Violates software copyright by exceeding the license agreement.

13. A student records an online lecture and uploads it publicly. Is this ethical or unethical? Explain.



- Unethical and illegal. The recording contains copyrighted content; uploading without consent violates both privacy and intellectual property rights.

14. A graphic designer copies another company's logo design and changes only the color. Does this qualify as fair use? Why or why not?

- Copyright and trademark infringement. Minor modifications don't create a new original work; the logo remains a protected brand identifier.

15. Alexis used a borrowed password to access university computers and complete assignments. She earned a scholarship but violated policy.

1. Identify the ethical issue.
 2. Analyze her action under Kantianism and Utilitarianism.
 3. Decide if it was morally right or wrong with justification.
- Issue: Unauthorized access and deception.
 - Kantian view: Wrong because she used others as means and violated universal honesty duty. Utilitarian view: Her gain benefited one but harmed institution trust → net harm > benefit.
 - Conclusion: Morally wrong under both theories.

16. A student shares exam solutions to help friends pass.

1. Evaluate the action using Ethical Egoism, Kantianism, and Rule Utilitarianism.
 2. Decide if it's ethical or not and justify.
- Egoism: May seem good if it brings personal reputation benefit.
 - Kantianism: Unethical – violates honesty and fairness; rule cannot be universalized.
 - Rule Utilitarianism: Sharing answers undermines system integrity → long-term harm > good.
 - Conclusion: Unethical under any theory.