



**National University**  
of Computer & Emerging Sciences

Serial No. 261053

Please Tick (✓) Campus:  CFD  ISB  KHI  LHR  PWR Semester:  SP  SU  FA 2024

**SESSIONAL EXAM ANSWER BOOK**

Course Code & Title: Professional Practices in IT

Roll No: 221-2990 Section: B Student's Signature: Absaal Date: 5th Nov 2024

Serial No. of continuation sheet if attached: \_\_\_\_\_ Total No. of Extra Sheets Used: \_\_\_\_\_ Invigilator's Signature: \_\_\_\_\_

(THIS ANSWER BOOK CONTAINS PAGE 1-8)

DO NOT OPEN THE ANSWER BOOKLET OR START UNTIL INSTRUCTED

**Instructions:**

1. Please ensure that the area in your threshold is free of any material classified as 'useful in the paper' or else there may a charge of cheating.
2. Read the question carefully to ensure clarity of context and understanding of meaning. Make assumptions whatever necessary, as neither the invigilator nor the teacher/examiner will address your queries or provide assistance in the examination hall.
3. Fit in all your answers in the answer booklet. You may use an extra sheet if required. If you do so, clearly mark question/part number on that page to avoid confusion.
4. Use only your own stationery and calculator. (If permitted by your teacher/examiner). If you do not have your own calculator, perform manual calculations.
5. Use only permanent ink pens. Only the questions attempted with permanent ink pen will be considered. Any part of paper done in lead pencil cannot be claimed for rechecking.
6. Ensure that you do not have any electronic gadget (like mobile phone, smart watch, ear buds etc.) with you.
7. Return your Question Paper along with the answer booklet (including extra sheets, if used) to the invigilator before leaving the exam venue.

Q./Part No.	Q-1	Q-2	Q-3	Q-4	Q-5	Q-6	Q-7	Q-8	Q-9	Q-10
Total Marks	25	10	15							
Obtained Marks	24	6	15							
CLO NO.										

Total Marks
50
45
Total Marks Obtained

Q/Part No.

Q2-

- a. Suppose an attacker in one country uses the internet to hack and commit crimes within another country. The jurisdiction under which the attacker will be tried depends on the laws of both countries. If both countries have the same laws for that specific ~~comitt~~ crime, then the attacker can be handed over the country he resides in over to the country where he committed the crime. If no such ~~agreement~~ exists between the two countries, then the attacker is tried under jurisdiction of the country he resides in.

- b. Fair use can be attributed for use of intellectual property in the fields of research, journalism, and education. When it comes to education ~~of~~ purposes, it is required the intellectual property be used without charging students and only be used by students of that particular class. For journalism such as book reviews part of the material can be used such as by ~~graft~~ taking quotes, however majority of the work must be original and include proper referencing. Similar case applies to research. To prepare any derivatives of the work though a license of some form is required. It is mandatory none of the

copyrighted work be ~~setar~~ displayed to the public such as public viewings of a movie etc.

It is especially IMPORTANT to seek legal advice on how to use copyrighted property under fair use. Lastly, we need contact the publisher and request permission to use the copyrighted product.

3-

- a. The company can decide to patent ~~their~~ product (assuming the country allows patent of software) to prevent competitors from working on similarly inspired solutions. In terms of the actual marketing it may be better to ~~high~~ highlight the higher level ~~&~~ abstract features of their product without referring to any specific technologies ~~and~~ techniques.

MOST IMPORTANTLY, when hiring this marketing expert, it is suggested to sign some sort of agreement (like NDA) that ensures the expert does not end ~~up~~ leaking the ~~&~~ complete details of the product to competitors.

- b. In some countries patents allow the protection of code. This can be sought after if the country allows it. If new algorithms are used they could potentially be protected under

Q/Part No.

copyright laws as well. As a last resort, the code for the product can be kept secret (it) and only the executables released to the public as a product. The artistic nature of custom templates suggests copyright laws is still a strong candidate for protection.

- c. In the country of the company Yes, patents can help with the safety of this product idea. The way patents work is they let companies register inventions including the documentation and specs and make you the sole owner and manufacturer of the product for a certain period of time (20 years in Pakistan). This can help the company by preventing competitors from coming up with similar products for the duration of the patent. The company would need to sign patents in each country they wish to release product in separately.

- d. They can use trademark as a means to ensure no one else can use the name and style for the product the company is offering. Trademark ensures no one else can represent their software as being linked to Howzat and company ABC Systems.

# Professional Practices in II (CS4001)

Course Instructor(s):

All Sections

## Sessional-II Exam

Total Time (Hrs): 1

Total Marks: 50

Total Questions: 3

Date: Nov 5, 2024

21i-2990

B

Roll No

Course Section

Do not write below this line.

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Student Signature

Attempt all the questions.

24

Q1: For the following MCQs, fill in the given table with the best option.

[25 Marks]

Q#	Correct Option								
1	c ✓	6	a ✓	11	a ✓	16	c ✓	21	c ✓
2	c ✓	7	a ✗	12	c ✓	17	a ✓	22	c ✓
3	a ✓	8	a ✓	13	b ✓	18	c ✓	23	b ✓
4	c ✓	9	b ✓	14	c ✓	19	a ✓	24	c ✓
5	a ✓	10	c ✓	15	b ✓	20	a ✓	25	c ✓

1. Legislature is primarily responsible for
  - a. Holding criminals accountable
  - b. Enforcing laws
  - c. Making laws
  - d. All of the above
2. Computer forensics is
  - a. A field meant to stop computer based attacks and hacking attempts like SQL injections
  - b. A field for improving adherence in computer professionals to recognized ethical standards
  - c. A field for performing analysis on digital devices and data in a legally admissible way
  - d. None of the above
3. Criminal Law
  - a. Characterizes certain wrongdoings as offences against the state
  - b. It governs the relationships between states.
  - c. Concerned with rights and duties of individuals towards each other
  - d. None of above
4. Civil Law:
  - a. Characterizes certain wrongdoings as offences against the state
  - b. Governs the relationships between states.
  - c. Is concerned with rights and duties of individuals towards each other
  - d. None of above

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5. In item-based collaborative filtering, the recommendation for a user is primarily based on which of the following?
- a. Items that are similar to each other in terms of user interactions or ratings.
  - b. A user's demographic information and item features.
  - c. The most popular items within the platform's overall user base.
  - d. The average rating of all items across the platform.
6. Common Law
- a. Developed on the basis of preceding rulings by judges.
  - b. Often referred to as legislation.
  - c. Also called written law
  - d. Laid down by the acts of Parliament.
7. \_\_\_\_\_ law automatically protects the source code and all documentation of the package from copying without your permission.
- a. Patent.
  - b. NDA.
  - c. Trademark.
  - d. None of the above
8. \_\_\_\_\_ is defined as bids placed by the seller or a confederate on her own items for the purpose of increasing the final selling price
- a. Shill Bidding
  - b. Bid Shielding
  - c. Bid Siphoning
  - d. All of above.
9. \_\_\_\_\_ is an illegitimate way to preserve a low bid in an online auction. It takes three people. The first places a low bid and the other two immediately bid high and keep bidding higher, which is intended to eliminate all other interested parties.
- a. Shill Bidding
  - b. Bid Shielding
  - c. Bid Siphoning
  - d. All of above.
10. \_\_\_\_\_ occurs when con artists lure bidders off legitimate auction sites by offering to sell the "same" item at a lower price. They intend to trick consumers into sending money without delivering the item
- a. Shill Bidding
  - b. Bid Shielding
  - c. Bid Siphoning
  - d. All of above.
11. \_\_\_\_\_ is registering, or using an Internet domain name with bad faith intent to profit from the goodwill of a trademark belonging to someone else.
- a. Cyber Squatting
  - b. Cyber-vandalism
  - c. Cyber Stalking
  - d. All of above.

12. \_\_\_\_\_ is the fraudulent attempt to obtain sensitive information such as usernames, passwords and credit card details by disguising as a trustworthy entity in an electronic communication.
- Identity/Data theft
  - Foot printing
  - Phishing
  - Spamming
13. \_\_\_\_\_ is sometimes stated as a harm stemming from privacy
- It provides freedom to be one's own self
  - It can be a cover for hiding illegal activities
  - It provides individual growth
  - None of the above
14. Crime is defined as
- Violation of an agreement with another citizen
  - An act of disobedience committed using computers
  - Breaking the law leading to possible punishment
  - A and B
15. Computer fraud entails
- Gaining unauthorized access to a computer
  - Manipulating a computer dishonestly in order to obtain some benefit
  - Altering or destroying data
  - Ransomware
16. Grudge attack means
- Military or national security related attack
  - An attack for intellectual satisfaction
  - An attack simply to cause damage
  - Religion driven attack
17. If a perpetrator obtains a credit card in someone else's name, this is an example of
- Identity theft
  - Hacking
  - Ponzi scheme
  - None of the above
18. This is a technique frequently used for password hacking
- SQL injection
  - Cross site scripting
  - Brute force dictionary
  - Session hacking
19. In what way does the four-step process support ongoing ethical improvement within an organization after the decision has been made?
- By documenting the process, so it can be used as a training example for future cases.
  - By ensuring that only top management has access to the decision's rationale to safeguard proprietary methods.
  - By limiting the number of alternatives considered, thus streamlining future decision-making processes.
  - By avoiding the need to revisit the decision, thereby solidifying the initial course of action.

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20. Which of the following best illustrates a challenge in the "Identify the Problem" step?
- a. Conflicting stakeholder interests make it difficult to identify which ethical principle to prioritize.
  - b. The available data is incomplete, making it challenging to analyze the full scope of the facts.
  - c. There are multiple plausible alternatives, leading to difficulty in deciding the best course of action.
  - d. After the decision is made, unforeseen consequences raise questions about its effectiveness.
21. How does the "Analyze the Facts" step help in mitigating biases that may affect ethical decision-making?
- a. It emphasizes personal experiences to ensure the decision-maker's comfort with the decision.
  - b. It requires that decision-makers consider only quantifiable facts to avoid subjective judgments.
  - c. It ensures a thorough examination of all perspectives, making it less likely that personal biases will dominate.
  - d. It allows decision-makers to discard information that complicates the decision-making process.
22. In the final step, "Make a Decision and Act," which action would best illustrate ethical accountability after the decision is implemented?
- a. Ensuring that only stakeholders directly affected by the decision are informed of its outcome.
  - b. Reflecting privately on the outcome of the decision to build personal ethical resilience.
  - c. Publicly acknowledging any unintended consequences and taking responsibility to address them.
  - d. Delegating responsibility to another department to handle potential fallout.
23. In the "Consider Alternatives" step, which of the following considerations is least relevant when evaluating potential solutions?
- a. The legal implications of each potential decision
  - b. The emotional comfort of the decision-maker in executing each alternative
  - c. The possible outcomes for each stakeholder group affected
  - d. The alignment of each alternative with the organization's ethical guidelines
24. Appellate Jurisdiction is
- a. The financial limitations on hearing a case.
  - b. The geographical area over which a court or government body has the power and right to exercise authority.
  - c. Hearing a case against the decision of a subordinate court / forum.
  - d. All of above
25. Universal declaration of human rights was first adopted by
- a. OIC
  - b. EU
  - c. UN
  - d. None of the above

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### Q2: Give short answers:

[10 Marks]

- a. Give an example of a jurisdiction issue arising due to a crime committed via the internet, and also clarify how it can be addressed by different countries? (2+2)
- b. Mention 3 factors which can help someone claim fair use of copyrighted work. (2+2+2)  
*r e j*

### Q3: Scenario:

[15 Marks]

*ABC Systems is a technology company specializing in innovative solutions. The company is planning to launch a new product that incorporates several unique features and technologies, with both software and engineering components. They want to ensure that their intellectual property rights are protected effectively.*

- a) The company wants to engage a marketing expert to promote the product, but they are worried that their whole idea might get leaked to their competitors through this person. What is the best way for them to proceed so they use the expert's services without compromising their idea? (4)
- b) The software XYZ has developed for this product has proprietary complex algorithms, a user-friendly interface, and customizable templates. What is the best way for them to protect this code under law? (4)
- c) Can a patent help XYZ for any aspect of this product? Describe briefly how patents work. (4)
- d) The marketing expert consulted by XYZ has suggested branding the product with the name 'Howzat', written in a special font. What intellectual property right protection can XYZ use to ensure no one else uses this name and style? (3)

**Best wishes for your success.**