


National University of Computer and Emerging Sciences, Lahore Campus

	Course:	Professional Issue in IT	Course Code:	CS449
	Program:	BS(Computer Science)	Semester :	Spring-18
	Duration:	3 Hrs	Total Marks:	100
	Paper Date:		Weight	40 %
	Section:	D,E	Page(s):	4
	Exam Type:	Final		

Student: Name: _____ **Roll No.** _____
Section: _____

Instruction/Notes: Attempt all questions. Question paper should be attached with the answer sheet.

Question 1: Choose the best answer.
(20 marks)

1. A professional is someone who:
 - a. Requires advanced training and experience
 - b. Must exercise discretion and judgment in the course of his or her work
 - c. Does work that cannot be standardized
 - d. All of the above
2. A good team lead should spend most of his own energy in which time management quadrants:
 - a. 1st and 4th quadrant
 - b. 1st and 3rd quadrant
 - c. 2nd and 4th quadrant
 - d. 1st and 2nd quadrant
3. A set of programs that enables a hacker to gain administrative level access to a computer without the end user's consent or knowledge is called a(n):
 - a. Trojan horse
 - b. Logic bomb
 - c. Rootkit
 - d. Worm
4. Which of the following is NOT a part of the waterfall cycle of software development:
 - a. Designing the architecture of the code
 - b. Taking requirements from the client

- c. Making software secure against intrusion
 - d. Realization and execution of design
5. The power is kept at the top level management, the company is
- a. Bureaucratic
 - b. Centralized
 - c. Closely Structured
 - d. Decentralized
6. You read online that snake oil has benefits for arthritis patients. Which of the following, if you see, will make a convincing case for these benefits:
- a. A facebook post claiming these benefits
 - b. A study published in a journal showing its effects on a 1000 arthritis patients
 - c. A news item on CNN
 - d. An online article mentioning how using snake oil was an ancient Chinese practice
7. Which of these is NOT recommended in your resume`
- a. Desired and required skills you possess
 - b. Your past projects
 - c. Your picture
 - d. References
8. _____ is an effort by an employee to attract attention to a negligent, illegal, unethical, abusive, or dangerous act by a company that threatens the public interest.
- a. Reporting
 - b. Informing
 - c. Whistleblowing
 - d. Social Communication
9. _____ occurs when someone steals key pieces of personal information to impersonate a person
- a. Phishing
 - b. Identity theft
 - c. Fraud
 - d. Cyber squatting
10. Which of the following is NOT protected if a software is patented:
- a. A function of the software
 - b. A bug in the software
 - c. A feature of the software
 - d. A process embedded in the software

Question 2

10 Marks

You are the team lead of your project and you need to prioritize and manage team time for the following tasks:

Write 10 coding modules, reply to email from customer, run backup scripts for server maintenance, preparation for upcoming meeting, send team's resumes required by HR, track work hours for each team member.

Assign each of these tasks a score of importance (low, medium, high) and urgency.

Using this assignment, place these tasks in one of the four quadrants.

Question 3

10 Marks(5 +5)

- a) Describe three differences between a CV and resume`.
- b) Your LinkedIn bio is being viewed by many but they do not spend much time on it. What might be wrong and what can you do about it?

Question 4

10 Marks

You have just been made administrator of a website after a major data breach. What should be your 3 steps to ensure security in future? Please make sure each step is distinct.

Question 5

10 Marks(2.5x4)

You work for Teamviewer Inc. and your core team has developed the entire software. Your company is, at this stage, concerned about copyright infringements on different parts of your product. The team informs you that the software is a combination of:

Innovative video streaming algorithms,
P2P speed enhancement techniques already in use,
Programming hacks and implementation tricks your coders developed over the years,
General session maintenance tools and front-end graphics

For each of the parts above, you have the choice to file a patent, register a copyright, keep it as a trade secret, or make it public for usage. Which one will you choose keeping in mind the company's profitability and constraints of each part? Give reasons.

Question 6

10 Marks

Your software company is dealing with a service provider that has two options for payment: you can either buy 3 year license of their software for 1 million PKR or you can buy yearly subscription for 500,000 PKR (and then renew twice).

What is the NPV of the second proposal assuming an interest rate of 10%?
Which proposal will give you more value for your money?

Question 7

10 Marks(2.5 x 4)

Suppose your ride-hailing company (e.g Uber) is considering the proposal of launching bike service in Karachi. Analyze this business idea by discussing the following components of the business model:

Market size and target customers (by estimating total addressable market)

Revenue stream(s)

Value proposition

Backup plan

Question 8

10 Marks(2.5x3 +2.5)

Define the terms defensive publishing, non-disclosure agreement and cross-licensing agreement. Also distinguish between industrial espionage and competitive intelligence.

Question 9

10 Marks

Children's entertainment channel Nickelodeon developed an app for children(around 10 years of age) that was downloaded about 10,000 times in a month. But most of the downloaders did not sign up. The app testing team ran hundreds of A/B tests to confirm that the app's look was OK and it was easy to use.

How can you help identify the problem? Can you use the IDEAL method or problem reframing to help solve the problem?