


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:	17-05-2018	Weight	40 %
	Section:	E	Page(s):	4
	Exam Type:	Final		

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

Instruction/Notes: Cutting and over writing will not be acceptable. 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. Within limits puts the interest of organization above of their own convenience
 - b. They can be relied on to carry out the work competently regardless of circumstances
 - c. They can be relied on to carry out the work conscientiously regardless of the circumstances
 - 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 major cause of poor software quality?
 - a. Many developers do not know how to design quality into software or do not take the time to do it.
 - b. Programmers make mistakes in turning design specifications into lines of code.
 - c. Software developers are under extreme pressure to reduce the time to market of their products.
 - d. Many organizations avoid buying the first release of a major software product.

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 peer-reviewed (work evaluation study by people of similar competence) study 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. Honours and Awards
 - 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
 - e.
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:

Writing 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. Explain following perpetrators of computer crime.
Industrial spy

Malicious Insider.
- b. State few SEO tips specifically for your LinkedIn Bio.

Question 4

10 Marks

You notice that the productivity of your team falls during summers in Pakistan – a period when your US-based client requires high performance. How would you apply the IDEAL method to work towards solving this problem?

10 Marks(2.5x4)

Question 5

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 (1,000,000) 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 (Transportation from an unlicensed **taxi** service such as Uber or Lyft.) company is considering to launch 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 (an innovation, service, or feature intended to make a company or product attractive to customers.)

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

Explain following social network advertisement strategies briefly. State benefits of each.

Viral marketing

Company-owned social networking Web site

Indirect advertising through groups

Advertising using an individual's network of friends

Direct advertising