


National University of Computer and Emerging Sciences, Lahore Campus

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

Instruction/ Notes: Cutting and over writing will not be acceptable. Attempt all questions. Write under the space given after each question. Please write to the point.

Question 1: Choose the best answer. (25 marks)

1. A written statement that is false and that harms another person is called:

- a. a lie
- b. slander
- c. libel
- d. freedom of expression

2. In the United States, speech that is merely annoying, critical, demeaning, or offensive enjoys protection under the First Amendment. Legal recourse is possible only when hate speech turns into clear threats and intimidation against specific citizens.

- a. True
- b. False

3. _____ forces unwanted and often objectionable materials into e-mail boxes, detracts from the ability of Internet users to communicate effectively, and costs Internet users and service providers millions of dollars annually.

- a. Phishing
- b. Spam
- c. Denial of service
- d. Trojan horse

4. A type of attacker that is extremely difficult to detect or stop because he or she is often authorized to access the very systems being abused is called a(n) _____.

- a. Hacker
- b. Cyber-terrorist
- c. Malicious insider
- d. Cracker

5. Hotmail employed a _____ campaign when it first launched its service, with each e-mail sent by a Hotmail user containing a short message that promoted Hotmail's free e-mail service.

- a. Direct marketing
- b. Viral marketing
- c. Indirect advertisement through friends
- d. Company owned social networking website

6. Which of the following measures is employed by social networking Web sites to avoid the posting of objectionable material?

- a. The terms of use agreement for most social networking Web sites states that the Web site reserves the right to delete material or terminate user accounts that violate the site's policies.
- b. The Web sites employ people to review material submitted.
- c. Other users sometimes report objectionable material.
- d. All of the above.

7. Which of the following is an example of intellectual property?

- a. business process for the efficient handling of medical insurance claims
- b. a computer program
- c. the design for a computer wafer
- d. all of the above

8. A _____ is a logo, package design, phrase, sound, or word that enables a consumer to differentiate one company's products from another's.

- a. Patent
- b. Copyright
- c. Trademark
- d. Trade Secret

9. Many large software companies have cross-licensing agreements in which each agrees not to sue the other over _____.

- a. Patent infringements
- b. Copyright infringements
- c. Trademark infringements

d. Trade Secret infringements

10. A _____ is a form of protection for intellectual property that does not require any disclosures or filing of an application.

- a. copyright
- b. patent
- c. trade secret
- d. trademark

11. In time management four quadrants, an individual is tempted to go with _____ quadrants in sequence.

- a. 4th, 1st, 3rd, 2nd
- b. 1st, 4th, 3rd, 2nd
- c. 1st, 3rd, 2nd, 4th
- d. 1st, 2nd, 3rd, 4th

12. For resume writing, which of the following can be used/included?

- a. pronouns such as I, me, my, etc
- b. references
- c. personal information (age, SSN, gender, height, weight, marital status, photograph)
- d. #, %, \$ for amounts

13. Which of the following SEO tip(s) will work for a website?

- a. Include one primary keyword in a page URL
- b. Use hyphens (-) instead of underscore (_) in URLs
- c. Use static URL instead of a dynamic one
- d. Link to other quality websites
- e. All of the above

14. If someone refuses to give an institution the right to collect and share personal data about oneself, he or she is said to _____.

- a. opt-out
- b. opt-in
- c. none of the above

15. A set of standards requiring organizations to develop formal quality management systems that focus on identifying and meeting the needs, desires, and expectations of their customers are the standards.

- a. ISO 9000
- b. FMEA

- c. CMMI
- d. DO-178B

16. _____ involves providing money, property, or favors to someone in business or government to obtain a business advantage.

- a. Gift
- b. Bribery
- c. Fraud
- d. Misrepresentation

17. A profession is in which:

- a. substantial education and training are required in order to practise the profession;
- b. the members of the profession themselves decide the nature of this training and, more generally, control entry to the profession;
- c. the profession is organized into one or more professional bodies;
- d. the profession lays down standards of conduct with which its members must comply, and where necessary, enforces these through disciplinary procedures.
- e. All of the above

18. Employer no longer requires people to do a particular category of job (or fewer people) is_____.

- a. Constructive dismissal
- b. Fair dismissal
- c. Redundancy
- d. Dismissal of whistle blower

19. DCF tool is used for_____.

- a. Share price of a company
- b. Purchase or lease it
- c. Most financially appealing proposals
- d. A proposed project is worthwhile
- e. All of the above

20. From which of the following, a bank can withdraw from its services

- a. Soft loans
- b. Overdraft loans
- c. long-term loans
- d. None of the above

21. _____ can hamper achievements of results in time.

- a. Organic model
- b. Bureaucratic model
- c. Matrix management

22. From which of the following, changing ownership is difficult

a. limited company

b. sole trader

c. partnership

23. Avoiding conflict of interest falls into which of the following BCS code of conduct sections?

a. Public interest

b. Duty to relevant authority

c. Duty to profession

d. Professional competence and integrity

24. The ____ law is essentially traditional law that is not written down, but which depends on the judgment of judges over the centuries.

a. Statute law

b. Common law

25. Which of the following does not involve break-in at the target computer?

a. virus

b. worm

c. rootkit

d. denial of service attack

Question 2

[9X1 +1] Marks

Let's imagine for a moment that you work as a loan officer in a big corporation with thousands of employees. You help people get financing for their dream homes. You've been with the company for over 5 years now and you have a couple of team members that report to you. You're making good money but you want to get more out of life. Not only do you want to move up at the company, you also want to spend more time with your family and maybe even start a business on the side.

As you walk into your office, you grab a cup of matcha tea (what every AE aficionado should have of course) and you're about to review what you're going to do that day. This is what your to do list looks like (in no particular order):

Draw four quadrants of time management and place each task in appropriate quadrant (by placing the number of each).

1. Call client Marissa re: mortgage options
2. Re-arrange my schedule and work hours for Johnny's (your son) soccer games
3. Watch NBA playoff game of LA Lakers vs Golden State Warriors
4. Show my new assistant Dawn how to research and book flights
5. Upload photos of my recent vacation with the wife on Facebook
6. Research options for coaching on my productivity
7. Put a proposal together for client Joe
8. Call back your friend Sally, who has been requesting to give her some loan related expert advice
9. Send HR the credentials of the staff working under you (requested by HR).

1, 7	2, 4, 6
8, 9	3, 5

Question 3

[10] Marks(2x5)

Mark each in the following box. Also provide reason for each.

1. Disney's System for Robotic Mimicking of Human Action

Patent	Copyright	Trade secret
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Reason:

2. Google's Emergency Medical Response Drone

Patent	Copyright	Trade secret
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Reason:

3. Dog training methods (written material and video lessons)

Patent	Copyright	Trade secret
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Reason:

4. R&D strategies and plans, Manuals, Designs, Formulae and know-how for producing products

Patent	Copyright	Trade secret
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Reason:

5. Manufacturing or repair processes, techniques and raw materials and specifications

Patent	Copyright	Trade secret
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Reason:

Question 4

[25] Marks

- a. Identify two significant advantages that social network advertising has over other forms of advertising. [2]

Opportunity for conversation between advertiser and viewer

Can be targeted to reach people with desired demography

- b. Criminal acts in virtual world can be illegal and maybe not be a crime in real world. Give one example of each such crime in virtual worlds. [2]
- Can be clearly illegal, such as trafficking in actual drugs or stolen credit cards
 - May not be real-life crime, such as virtual muggings
- c. What is the difference between executive director and non-executive director? [2]

An executive director is a member of the board of a firm (or non-profit) who also has management responsibilities. A non-executive director (NED) is a board member without responsibilities for daily management or operations of the company/organization

- d. Briefly explain the meaning of the term profession and give examples of TWO professions.[3]

substantial education and training are required in order to practise the profession;

the members of the profession themselves decide the nature of this training and, more generally, control entry to the profession;

the profession is organized into one or more professional bodies;

the profession lays down standards of conduct with which its members must comply, and where necessary, enforces these through disciplinary procedures.

- e. The matrix management structure enables an employee to be assigned to different projects over time. i) Identify TWO advantages of the matrix management structure for the employee .ii) Identify TWO advantages of the matrix management structure for the organisation. [4]

Organization:

- **Highly skilled and capable resources can be shared between the functional units and projects, allowing more open communication lines which help in sharing the valuable knowledge within the organization.**
- **The matrix structure is more dynamic than the functional structure because it allows employees to communicate more readily across the boundaries, creating a good, cooperative, work environment which helps to integrate the organization.**
- **In functional departments, employees are very skilled, and project teams can get these highly-skilled employees whenever their services are needed.**

Employee:

- **Since there is a sense of job security, employees tend to be loyal to the organization and perform well, and therefore, the efficiency of a matrix organization is higher**
- **Employees can broaden their skills and knowledge areas by participating in different kinds of projects. The matrix structure provides a good environment for professionals to learn and grow their careers.**

- f. Job enlargement, job enrichment and job rotation are techniques used in the process of job design. Describe how a large IT company can use each of these techniques. [5]

Depends upon scenario and how students applied these tools within that scenario.

- g. Differentiate between non-compete agreement and non-disclosure agreements. Why organizations make these agreements? [3].

Because organizations can risk losing trade secrets when key employees leave, they often try to prohibit employees from revealing secrets by adding nondisclosure clauses to employment contracts.

Employers can also use non-compete agreements to protect intellectual property from being used by competitors when key employees leave. A non-compete agreement prohibits an employee from working for any competitors for a period of time, often one to two years.

h. State at least four SEO tips specifically to improve your LinkedIn profile. [4]

1. Completely Fill Out Your Profile

2. Claim Your Custom URL

3. Use Keyword Rich Job Titles

4. Expand Your Network

5. Join Relevant Groups - And Participate

6. Upload A Picture

7. Optimize Your Job Descriptions

8. Get Recommendations & Endorsements and Give Them Too

Question 5

[5] Marks

A firm invests \$200,000 in machinery that yields net after-tax cash flows of \$90,000 at the end of each of the next three years. The discount/interest rate is 12%. What is the net present value of the project (to the nearest thousand dollars)?

SOLUTION: The net present value is $-\$200,000 + \$90,000 / 1.12 + \$90,000 / 1.12^2 + \$90,000 / 1.12^3$

The net present value is $-\$200,000 + \$90,000 * .8928 + \$90,000 * .7971 + \$90,000 * .71179$

The net present value is $-\$200,000 + \$80,352 + \$71,739 + \$64,061$

= \$16,165

Question 6:

[5]

Marks

What is a John Doe lawsuit? Do you think that a corporation should be allowed to use a subpoena to identify a John Doe before proving that the person has defamed the company? Why or why not?

John Doe lawsuit is a lawsuit in which the true identity of the defendant is temporarily unknown. Such suits are common in Internet libel cases, where the defendant communicates anonymously. Corporations often file these lawsuits because they are upset by anonymous e-mails messages that criticize the company or reveal company secrets.

- Free speech advocates that if someone charges libel, their identity should be hidden until proved

- stock price manipulators can use chat rooms to affect the share price of stocks
- competitors of an organization might try to create the feeling that organization is a miserable place to work

**Question: 7: Briefly explain each
Marks**

[2x5]

Virus.	Worm	Trojan horse	Distributed denial of service	Rootkit
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VIRUS:

- Pieces of programming code
- Usually disguised as something else
- Cause unexpected and undesirable behavior
- Often attached to files
- Deliver a “payload”
- Spread by actions of the “infected” computer user

Infected e-mail document attachments

Downloads of infected programs

Visits to infected Web sites

WORM:

- Harmful programs

Reside in active memory of a computer

Duplicate themselves

- Can propagate without human intervention
- Negative impact of worm attack

Lost data and programs

Lost productivity

Additional effort for IT workers

TROJAN HORSE:

- Malicious code hidden inside seemingly harmless programs
- Users are tricked into installing them
- Delivered via email attachment, downloaded from a Web site, or contracted via a removable media device

Some pirated copies of this software contain a Trojan horse

- Logic bomb

Executes when triggered by certain event

D-DOS ATTACK:

- Malicious hacker takes over computers on the Internet and causes them to flood a target site with demands for data and other small tasks

The computers that are taken over are called zombies

Botnet is a very large group of such computers

- Does not involve a break-in at the target computer

Target machine is busy responding to a stream of automated requests

Legitimate users cannot access target machine

ROOTKITS:

- Set of programs that enables its user to gain administrator-level access to a computer without the end user's consent or knowledge
- Attacker can gain full control of the system and even obscure the presence of the rootkit
- Fundamental problem in detecting a rootkit is that the operating system currently running cannot be trusted to provide valid test results

