


National University of Computer and Emerging Sciences, Lahore Campus

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	Exam Type:	Final		

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

Instruction/Notes: Attempt all questions in the space given below. Write to the point.

Question 1: Use the following list of terminologies to answer the following questions: [16]

-Exploit	-Patch	-Trojan horse	-Cracker
-Zero Day Attack	-Worm	-Rootkit	-Industrial spy
-Virus	-Distributed denial of	-Hacker	-Hacktivist
-Spam	service (DDOS)	-Cybercriminal	-Cyberterrorist
-Firewall	-Phishing	-Malicious insider	-Intrusion detection
-Intrusion prevention	-Vishing	-Competitive	system
system	-Security policy	intelligence	-Honeypot
-Risk assessment	-Botnet	-Risk assessment	-Security policy

- A) A virus does not spread itself from computer to computer but must be spread through infected e-mail document attachments, infected programs, or infected Web sites. **True** or False?
- B) An attack on an information system that takes advantage of a vulnerability is called a(n) **Exploit**
- C) A group of computers controlled centrally from one or more remote locations by hackers without the knowledge of their owners is called a(n) **Botnet**
- D) 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): **Rootkit**

- E) **Spam** 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.
- F) A person who attacks computers and information systems in order to capture trade secrets and gain a competitive advantage is called a cyberterrorist. True or **False**?
- G) To date, there are no documented cases of cyberterrorism. True or **False**?
- H) 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) **Malicious Insider**
- I) Concern over potential cyberterrorism began well before the attacks of 9/11. **True** or False?
- J) **Trojan horse** involves the deployment of malware that secretly steals data in the computer systems.
- K) The process of assessing security-related risks from both internal and external threats to an organization's computers and networks is called a(n) **Risk assessment**.
- L) The written statement that defines an organization's security requirements as well as the controls and sanctions used to meet those requirements is known as: **Security Policy**
- M) Implementation of a strong firewall provides adequate security for almost any network. True or **False**?
- N) A device that works to prevent an attack by blocking viruses, malformed packets, and other threats from getting into the company network is called a(n): **Intrusion prevention system**
- O) **Phishing** is the act of fraudulently using email to try to get the recipient to reveal personal data.
- P) Andrew, a writer, noticed that his blog was filled with repetitive advertisements and surveys that prevented him from accessing his blog and editing an article.
_____ caused this problem

Question 2: Identify and briefly discuss two ways that the use of an effective software development methodology can protect software manufacturers from legal liability for defective software. [4 Points]

Reduces the number of software errors

If an organization follows widely accepted development methods, negligence on its part is harder to prove

Question 3: Your company is considering using N-version programming with two software development firms and two hardware devices for the navigation system of a guided missile. Briefly describe what this means, and outline several advantages and disadvantages of this approach.[4 Points]

Adv: Quality, Reliability, Fault tolerant.

Disadv: Cost

Question 4: Outline a scenario in which you might be acting ethically but might still want to remain anonymous while using the Internet. [2]

Depends on the answer.

Seeking help in online support groups

OR

Reporting defects in manufacturer product

OR

Taking part in sensitive discussion

Question 5: 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? [4 Points]

The use of a subpoena to identify a person, such as John Doe, is a matter of legal interpretation and can depend on the specific circumstances of the case.

Allowed only if the company can convince courts about defamation.

Question 6: 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 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 match a 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 todo list looks like (in no particular order): [9 Points]

Important / Urgent 1	Important / Not Urgent 2
Not Important / Urgent 3	Not Important / Not Urgent 4

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

Question 7: Identify at least two short comings of utilitarianism theory. [4 Points]

It might be difficult or impossible to determine all the consequences of an act.

How to quantify utility ?

Question 8: 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:

[8 Points]

Innovative video streaming algorithms **Patent / Copyright**

P2P speed enhancement techniques already in use, **Public Use**

Programming hacks and implementation tricks your coders developed over the years, **Trade Secret**

General session maintenance tools and front-end graphics **Trade/Company Secret.**

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?

Question: Encircle option(s) that apply [39 Points]

- 1) You have Rs. 9,000 to deposit. ABC Bank offers 12 percent per year compounded monthly, while King Bank offers 12 percent but will only compound annually. In which bank will your investment be worth more in 10 years?

a) **ABC bank** c) Both are equal
b) King bank

- 2) Successful companies decide to issue more shares; these are often sold at more than their par value. The extra is known as the -----?

a) Called up share capital c) Working capital
b) **Share premium** d) Share Profit

- 3) What is the future value of Rs. 26 invested for 32 years at an average rate of return of 7%?

a) **226.60** c) 2.549
b) 832.0 d) 268.6

- 4) You need two security guards for your company, what will be the preferred way to recruit :

a) One to one interviews c) **Outsource from agencies**
b) Psychometric tests d) Interview with panel

- 5) Which of the following is not a potential reason of Takeover:

a) Expanding the customer base c) Expanding its range of offerings
b) Acquiring new staff d) **To compete with the competitor**

- 6) Contracts serve the following purpose except:
- a) Agreement b/w parties
 - b) Solution of patent infringement**
 - c) matters arising while the contract is running
 - d) Ways of termination of contract
- 7) If a person uses someone's song as background music in his/her music video then could be an act a person is an example of:
- a) Copyright Infringement**
 - b) Trade secret
 - c) Patent infringement
 - d) Trademark infringement
- 8) It is common practice for contracts to include a statement that, in the event of a dispute that cannot be resolved by the parties themselves, they agree to accept the decision of an
- a) Court of law
 - b) Independent arbitrator**
 - c) Lawyer who wrote the contract
 - d) Settlement courts
- 9) According to straight line method of providing depreciation, the value of fixed asset
- a) Remains constant
 - b) Increase each year.
 - c) Decrease each year**
 - d) None of them.
- 10) Your wife is currently working as a sales manager at XYZ Company that deals with Imported IT equipment's; you need to purchase some laptops for newly hired employees at your company. Therefore, you decided to give her a contract for high quality laptops. This is an example of ----.
- a) Nepotism
 - b) Cronyism
 - c) Conflict of interest**
 - d) Fair deal
- 11) A consulting firm responds to customer issues as they come up, and those issues change with the business environment. Consulting firms want to respond quickly to the customers. Which of the following model would be suited to the consulting firm.
- a) Bureaucratic Model
 - b) Organic Model**
 - c) Matrix
 - d) None of the above
- 12) An office secretary will now also welcome the occasional guests who visit the office. This gives her a welcome break in her daily work, as she likes to make people feel at home and chat with new people. Which of following job category would be applicable.
- a) Job rotation
 - b) Job enlargement**
 - c) Job enrichment
 - d) All of the above
- 13) Suppose ABC Limited has Current Assets of \$10, 00,000 and Current Liabilities of \$15, 00,000. Next, calculate the Working Capital of the Company.
- a) -\$5,00,000**
 - b) \$5,00,000
 - c) \$25,00,000
 - d) \$15,00,000
- 14) Build employer's skills to enable them to take on new duties is called.

- a) Training
- b) Development
- c) Both a & b
- d) None of the above

15) The system which is followed in organizations to distribute some portion from profits to all/some employees in organization is classified as

- a) profit sharing
- b) gain sharing
- c) broad banding
- d) draw sharing

16) If you write an original story, what type of intellectual property gives you the right to decide who can make and sell copies of your work?

- a) Copyright
- b) Trade secret
- c) Patents
- d) Trademarks

17) Imagine a sports team sets up a company to sell its own range of clothes. What type of intellectual property can the team use to show that the clothes are made by them?

- a) Copyright
- b) Patents
- c) Registered designs
- d) Trademarks

18) Human resource management is concerned with _____?

- a) Employees
- b) Employer
- c) Law
- d) None of the above

19) The professional bodies usually start by a group of people that have similar interests in the same type of activity. Which of the following features, professional bodies should have:

A) Establishing a code of conduct to regulate the way members of the body behave in their professional lives and a disciplinary procedure to discipline members who breach this code;

B) Establishing mechanisms for disseminating knowledge of good practice and new developments to its members, typically through publications and conferences but increasingly also with the World Wide Web.

C) Setting standards of education and experience that must be met by people wishing to become members of the body.

D) Advising government and regulatory bodies about matters within its area of expertise.

- a) Both (A) and (D)
- b) All of the Above
- c) None of the above

20) Consider a case: Trevor is an employee in a software company. Trevor wants to start his own software business, and for that, he discusses his plans with his friends, so he can get a kick-start. During this phase, he accidentally reveals confidential information of his company where he is working as an employee, without the permission of his boss. Which section of BCS (British Computer Society) code of conduct has Trevor violated?

- a) The public interest
- b) Duty to relevant authority
- c) Duty of the profession
- d) Professional Competence and Integrity
- e) Status of professional code and conduct

21) In companies, the stakeholders can be directors, where the business is usually not working on a large scale.

a) True

c) The statement above is invalid.

b) False

22) Companies, where the owners are personally liable for all the company's debts are which types of companies?

a) Public

c) Private

b) Limited

d) Sole traders

23) Employee in a company carry out job depends on several factors:

1. how well they understand what is required of them

2. their ability

3. the quality of the facilities provided for doing the job

4. their motivation, that is how well they want to do the job

5. the attitude of their colleagues

Consider a case:

Specifications of individual modules are unclear, ambiguous or incomplete. Anyone who asks for clarification is told "Do the best you can with the spec you've got". Because of the habit of measuring effort in man months, there is an assumption that people are all the same. The result is that the programmer with a degree in Mathematics is writing the report generation module while the programmer with a degree in Business Studies is struggling with a module to calculate the eigenvalues of a matrix. There are five terminals, connected to an overloaded mainframe, shared between the 25 staff; the semicolon key on one of the terminals works only intermittently. The staff are housed in a single large room in a converted aircraft hangar. A formal "flexitime" system is in use and employees pay great attention to it, in order to maximize their time off. The main subject of conversation at coffee breaks is the appointments pages of Computer Weekly. Although the company pays competitive salaries, at least once a month there is a leaving party for a member of the team. No one shows any interest in what the software is for. The company has tried hard to recruit good programmers and, when they first join the project, new recruits seem to perform very well but, after three months, they are indistinguishable from their colleagues.

If poor quality of software coming from the team, which factors mentioned above, can be the reason(s):

a) Both (1) and (2)

d) (3), (1) and (2)

b) (4), (3) and (1)

e) (3), (5) and (4)

c) (5) only

24) Copyright and related rights protection is an essential component in fostering human creativity and innovation

a) TRUE

b) FALSE

25) General guidelines of computer ethics are needed for ____

- a) Computer crime
- b) Protection of personal data
- c) Cracking
- d) All of these

26) Plagiarism is _____?

- a) Turning in someone else's work as your own
- b) Copying words or ideas from someone else without giving credit
- c) Failing to put a quotation in quotation marks
- d) All of these

27) Software can be protected by

- a) Trade Mark
- b) Design Registry
- c) Copyright
- d) Patent

28) The look of the product may be registered in the

- a) Copyright
- b) Trademark
- c) Patent
- d) Designs Registry

29) The name under which a product is sold may be registered as a

- a) Copyright
- b) Designs Registry
- c) Trademark
- d) Patent

30) _____ is defined as a group of people working together to created profit

- a) Rout line
- b) Organization
- c) System
- d) Military

31) The quest to maximize the profitability should be constrained by:

- a) Ethical Obligations
- b) Unethical Obligations
- c) Stakeholders
- d) Lack of social responsibility

32) Vesting decision-making authority in lower-level managers or other employees is called:

- a) Decentralization
- b) Centralization
- c) Localization
- d) Distributed authority

33) The business plan is a document that explains the plans to the potential investors. Which of the following features should be included in a business plan?

1. Technical feasibility
2. Time period to return the money
3. Assessment of competition
4. Grants/loans
5. Sale of equity

- a) Both (1) and (3)
- b) (1), (2) and (4)
- c) (3), (2) and (5)
- d) Both (1) and (3)

e) All of the above

34) To ask the users who visit your website for consent to store cookies on their device. Which of the following option is applicable

a) Opt-in

c) Both a & b

b) Opt-Out

35) A company has decided to invest in outer shape design of bottle in which they would fill the perfume produced by them, which is distinctive, and they wish to ensure that they have sole use.

a) Copyrights

c) Patent

b) Trade mark

d) Industrial designs

36) The unauthorized copying of personal computer software for use in the office or at home or sharing of software among friends comes under

a) Piracy

c) Trade secret

b) Copyright

37) Currently, XYZ Corporation has \$2,000,000 of equity; so the debt-to-equity (D/E) ratio is 5x—[\$10,000,000 (total liabilities) divided by \$2,000,000 (shareholders' equity) equals 5x]. XYZ Corporation definitely would be considered as

a) Highly geared.

b) Low geared

38) Which of the following model has the characteristics of “Emphasize on expertise rather than authority”

a) Organic Model

c) Matrix Model

b) Mechanistic Model

d) Bureaucratic Model

39) Ali deposited Rs. 2,500 in an account that pays 6% simple interest. How much money will he have at the end of 3 years?

a) 2,950

c) 3220

b) 2860

d) 3950