

National University of Computer and Emerging Sciences
Islamabad Campus

Professional Practices in IT (CS4001)

Date: November 7th 2025

Course Instructor(s)

Mr. Muhammad Aamir Gulzar

BSCS Sections: A, C, K

Sessional-II Exam

Total Time (Hrs): 1

Total Marks: 70

Total Questions: 2

Roll No

Section

Student Signature

Do not write below this line

Attempt all the questions.

INSTRUCTIONS:

1. Verify at the start of the exam that you have a total of Two (02) Questions printed on Twelve (12) pages including this title page.
2. Attempt all questions on the this questions paper.
3. The exam is closed books, closed notes. Please see 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.
4. Read the questions carefully for clarity of context and understanding of meaning and make assumptions wherever required, for neither the invigilator will address your queries, nor the teacher/examiner will come to the examination hall for any assistance.
5. Fit in all your answers in the provided space.
6. Use only permanent ink-pens. Only the questions attempted with permanent ink-pens will be considered. Any part of paper done in lead pencil cannot be claimed for checking/rechecking.
7. If you read instructions upto this, write any comment

	Question-1	Question-2	TOTAL
Total Marks	50	20	70
Marks Obtained			

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[CLO 8: Understand the Software Industry dynamics, different business and revenue models in IT industry, computer enabled products/services, virtual and change management, and technology trends and careers.]

Q1: Please fill the bubble sheet on the last page for (MCQs) answers.

[10 marks]

1. According to the definition provided, which of the following is the *least* essential characteristic of an "organization"?
 - a) A group of two or more people
 - b) A formal, hierarchical structure**
 - c) A common set of goals
 - d) A relatively continuous basis of functioning
2. An IT consultant in Pakistan registers with the FBR for an NTN. They are the sole owner, bear all risks personally, and have not registered with the SECP. This business is a:
 - a) Single Member Company (SMC)
 - b) Private Limited Company
 - c) Sole Proprietorship**
 - d) Limited Liability Company (LLC)
3. What is the primary legal consequence of a General Partnership (AOP) *not* being a "separate legal entity" in Pakistan?
 - a) The firm cannot be registered with the Registrar of Firms.
 - b) Partners' personal assets are protected from business debts.
 - c) Contracts and liabilities are in the names of the partners, who have unlimited liability.**
 - d) The firm pays tax separately, and partners also pay tax on their profits.
4. A key distinction between a non-corporate structure (like a Sole Proprietorship) and a corporate structure (like a Pvt. Ltd.) is:
 - a) Corporate structures are registered with the FBR; non-corporate ones are not.
 - b) Corporate structures provide limited liability, while non-corporate ones typically do not.**
 - c) Only non-corporate structures can be owned by a single person.
 - d) Non-corporate structures are only for NPOs, while corporate ones are for-profit.

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5. A freelance developer wants to formalize their business in Pakistan to gain credibility and limit their personal liability. He/She is the only owner. Which structure is *specifically* designed for this purpose?
 - a) Sole Proprietorship
 - b) Single Member Company (SMC Pvt. Ltd.)**
 - c) Private Limited Company
 - d) General Partnership (AOP)
6. A large, established corporation in Pakistan like Engro Corp, whose shares are traded on the stock exchange (PSX), is a:
 - a) Public Limited Company**
 - b) Private Limited Company
 - c) Limited Liability Partnership (LLP)
 - d) Public Sector Organization
7. What is the minimum number of directors required for a Public Limited Company in Pakistan, versus a Private Limited Company?
 - a) 7 for Public, 2 for Private
 - b) 3 for Public, 2 for Private**
 - c) 3 for Public, 1 for Private
 - d) 5 for Public, 2 for Private
8. A key procedural difference between starting a Public Ltd. and Private Ltd. company is:
 - a) Only a Private Ltd. company must register with the SECP.
 - b) A Public Ltd. company must issue a prospectus and receive a "certificate of commencement of business."**
 - c) A Private Ltd. company must hold a compulsory statutory meeting.
 - d) All of the above.
9. A Private Limited Company in Pakistan *can* be converted into a Single Member Company (SMC) if:
 - a) It increases its members to more than one.
 - b) It passes a special resolution and gets SECP approval.**

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- c) It lists its shares on the public stock exchange.
 - d) This conversion is not legally possible.
10. A Pakistani Private Limited Company (Pvt. Ltd.) functionally resembles which US entity, which offers limited liability and is not publicly traded?
- a) A General Partnership (GP)
 - b) A Limited Liability Company (LLC)**
 - c) A Publicly Traded Corporation
 - d) A 501(c)(3) Nonprofit
11. A foreign company, like Microsoft, operating its branch in Pakistan would register it as a "Branch Office" with which regulatory body?
- a) The Federal Board of Revenue (FBR)
 - b) The Securities & Exchange Commission of Pakistan (SECP)**
 - c) The Registrar of Firms
 - d) The State Bank of Pakistan (SBP)
12. An organization's "constitution," which includes its name, objectives, liability clauses, and authorized share capital, is a key feature of:
- a) A Sole Proprietorship
 - b) A General Partnership
 - c) A Limited Company (Corporate Structure)**
 - d) A Non-Profit Organization
13. In Pakistan, a General Partnership (AOP) is typically registered with the:
- a) Securities & Exchange Commission of Pakistan (SECP)
 - b) Federal Board of Revenue (FBR)
 - c) State Bank of Pakistan (SBP)
 - d) Registrar of Firms**
14. A Private Limited Company is "restricted" in its ability to:
- a) Transfer shares**
 - b) Start business after incorporation

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- c) Have more than one member
 - d) Register with the SECP
15. The concept of an SMC was introduced to facilitate sole proprietors in:
- a) Avoiding all taxes.
 - b) Hiring an unlimited number of employees.
 - c) Obtaining corporate status and limiting their liability.**
 - d) Converting their business into a public-sector organization.
16. Which of the following is *not* a legally recognized entity in Pakistan, but rather a *model* of operation?
- a) Trust / Foundation
 - b) Cooperative Society
 - c) Joint Venture (JV)**
 - d) Non-Profit Company (Section 42)
17. In a General Partnership (AOP), "Joint and several liability" means:
- a) All partners must agree jointly on all decisions.
 - b) Each partner is responsible both jointly and individually**
 - c) Liability is limited to the partner's individual share.
 - d) The firm, and only the firm, is liable for its debts.
18. If a foreigner wishes to incorporate a Single Member Company in Pakistan, what is the condition mentioned in the FAQ?
- a) They must be a resident of Pakistan.**
 - b) They must partner with a Pakistani national.
 - c) They must invest a minimum of \$1 million USD.
 - d) It is not legally possible for a foreigner.
19. DPL's "flat culture and 'no sir/bhai' rule" and how it shapes behavior is an example of OB analysis at the:
- a) Individual Level
 - b) Group Level

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c) Organizational Level

- d) None of the above
20. The question "To what degree are tasks subdivided into separate jobs?" relates to which key element of organizational structure?
- a) **Work Specialization**
- b) Chain of Command
- c) Centralization
- d) Formalization
21. The "Chain of Command" is an element of organizational structure that primarily addresses which question?
- a) How many individuals can a manager effectively direct?
- b) **To whom do individuals and groups report?**
- c) To what degree will there be rules and regulations?
- d) Both b and c
22. A "Tall" organization is characterized by a hierarchy, many levels, and a span of control.
- a) Flat / few / wide
- b) **Tall / many / narrow**
- c) Tall / few / wide
- d) Flat / many / narrow
23. A software company like DPL using agile, project-based teams, versus a manufacturing firm using strict process-based departments, shows how structure is influenced by:
- a) Geography
- b) **Technology**
- c) Legal Requirements
- d) Organization Size
24. Organizations in dynamic, changing environments (like tech startups) typically need , while those in stable environments (like government offices) can have.
- a) **flexibility / centralized structures**

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- b) centralized structures / flexibility
 - c) high formalization / low formalization
 - d) tall structures / flat structures
25. The Netflix organizational chart shows a "U-Form Hierarchy" (CEO, Legal, Talent, Finance) at the top, which then breaks into "Geographical Divisions" (Domestic, International) and "Product/Operations Divisions" (Original Programming, Other Content). This is an example of a:
- a) Functional Structure
 - b) Flat Structure
 - c) Divisional Structure
 - d) Hybrid Structure**
26. In a Functional Structure, jobs are grouped by , while in a Divisional Structure, they are grouped by.
- a) projects / functions
 - b) products or clients / departments (HR, Tech)
 - c) departments (HR, Tech) / products or clients**
 - d) hierarchy / teams
27. An employee in a **Matrix Structure** would likely:
- a) Report to only one central decision-maker.
 - b) Have minimal hierarchy and a wide span of control.
 - c) Report to both a functional manager and a project/product manager.**
 - d) Work in a traditional, tall hierarchy like a government department.
28. The "personality" of an organization, or the "invisible force that defines 'how things are done around here'," is known as:
- a) Organizational Structure
 - b) Organizational Culture**
 - c) Organizational Chart
 - d) Organizational Behavior

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29. In Edgar Schein's Levels of Culture, the visible elements like office layout, dress code, and company logos are called:

- a) Artefacts
- b) Espoused Values
- c) Underlying Assumptions
- d) Dominant Cultures

30. The "Core Values" listed for DPL, such as "Deliver value that blows away customer expectations", would fit into which of Schein's levels?

- a) Artefacts
- b) Espoused Values**
- c) Underlying Assumptions
- d) Subcultures

31. One of Zappos' core values is "Create Fun and A Little Weirdness". This is a cultural characteristic primarily related to:

- a) Stability
- b) Aggressiveness
- c) Innovation and People Orientation**
- d) Attention to Detail

32. A company that emphasizes "order and consistency" and has extensive "Corporate HR processes" has a culture high in:

- a) Innovation & Risk-taking
- b) Aggressiveness
- c) Stability**
- d) Outcome Orientation

33. A "Work Group" is primarily defined by the goal of and has synergy.

- a) Collective performance / positive
- b) Sharing information / neutral (sometimes negative)**
- c) Collective performance / neutral (sometimes negative)

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d) Sharing information / positive

34. A "Work Team" is defined by the goal of , has synergy, and features accountability.

a) Sharing information / neutral / individual

b) Collective performance / positive / individual and mutual

c) Collective performance / neutral / individual

d) Sharing information / positive / individual and mutual

35. According to Belbin, which role is "imaginative, original, and unorthodox"?

a) The Implementer

b) The Plant

c) The Completer Finisher

d) The Coordinator

36. A team is struggling because while they have many ideas (Plants) and lots of drive (Shapers), they are disorganized and fail to create practical plans. They are likely missing an:

a) Implementer

b) Resource Investigator

c) Teamworker

d) All of the above

37. What is a key weakness of the "Completer Finisher" role?

a) They are overly optimistic and unrealistic.

b) They are overly perfectionistic and have trouble with delegation.

c) They are confrontational and impatient.

d) They are overly focused and reluctant to step outside their comfort zone.

38. A team leader who helps people understand goals and how their work contributes is using communication for:

a) Control

b) Motivation

c) Emotional Expression

d) Information Exchange

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39. A developer from the "Web Team" coordinating with a developer from the "AI Team" on an integration is:
- a) Upward Communication
 - b) Downward Communication
 - c) Lateral Communication**
 - d) Diagonal Communication
40. The two most important messages conveyed by body language are the extent to which we like another person and:
- a) The perceived status between sender and receiver.**
 - b) The sender's financial position.
 - c) The sender's technical expertise.
 - d) The sender's formal title.
41. In the "Three Common Small-Group Networks" model , which network is the fastest for a central leader to send out information?
- a) Chain
 - b) Wheel**
 - c) All-channel
 - d) Grapevine
42. The informal communication network in an organization, which emerges in response to ambiguity and anxiety, is called:
- a) The Chain Network
 - b) The All-channel Network
 - c) The Grapevine**
 - d) Knowledge Management
43. What is the *best* defense for a manager to reduce the negative consequences of rumors (the grapevine)?
- a) Fire the person who started the rumor.
 - b) Provide information and maintain open communication channels.**
 - c) Ignore the rumors completely until they go away.

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- d) Respond to rumors angrily and disrespectfully.
44. A "process of organizing and distributing an organization's collective wisdom so the right information gets to the right people at the right time" is:
- a) The Grapevine
 - b) Knowledge Management (KM)**
 - c) A Chain Network
 - d) Downward Communication
45. According to the "Information Richness and Communication Channels" model, which of the following is the *richest* communication channel?
- a) Formal reports, bulletins
 - b) Electronic mail
 - c) Telephone conversations
 - d) Face-to-face conversations**
46. A manager manipulates information in an email to the CEO, making his team's performance look better than it is. This is an example of which communication barrier?
- a) Filtering**
 - b) Selective Perception
 - c) Information Overload
 - d) Jargon
47. An employee is upset about a personal problem and completely misinterprets a manager's constructive feedback as a personal attack. This is a barrier related to:
- a) Emotions**
 - b) Filtering
 - c) Language Differences
 - d) Status & Power Differences
48. What is a key weakness of the "Plant" role, according to Belbin?
- a) They can be overly critical or pessimistic.
 - b) They can be confrontational and impatient.
 - c) They may struggle with practicality and work in isolation.**

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- d) They are overly rigid and inflexible.
49. A manager who holds back information from their subordinates because they believe the subordinates "don't need to know" is creating a barrier based on:
- a) Filtering
 - b) Status & Power Differences
 - c) Selective Perception
 - d) Both a and b**
50. An employee who hears information "informally, usually by word-of-mouth" has received it through:
- a) The Grapevine**
 - b) Knowledge Management
 - c) A Wheel Network
 - d) Downward Communication

[CLO 8: Understand the Software Industry dynamics, different business and revenue models in IT industry, computer enabled products/services, virtual and change management, and technology trends and careers.

CLO 3: Understand the making and implementation of framework for ethical decision making.]

Q2: Case Study: ChatSphere AI – Voice-Driven Assistant

ChatSphere AI, a global company developing multilingual generative chatbots, deploys its latest voice-based assistant. The model continuously records short “context windows” to improve conversation accuracy. Engineers later learn that these clips include private phone calls, background voices, and sensitive health discussions—collected without explicit verbal consent in some regions.

Management argues that capturing raw voice data boosts personalization and user satisfaction. However, as a lead NLP scientist, you must decide whether to approve the next update that expands data collection to all global users without new consent banners. **[5+5+5+5 = 20 marks]**

Using the **Four-Step Ethical Framework**, analyze this case study “ChatSphere AI” through Consequentialist and Deontological perspectives to reach a defensible decision.

(Write your answers very neatly, concisely, and meaningfully. Think carefully before you respond.)