



National University of Computer & Emerging Sciences, Karachi
Fall-2023 FAST School of Computing
Final Examination
13th December 2023, 08:30 am – 10:30 am



Course Code: CL1000	Course Name: Introduction to Information and Communication Technology
Instructor Name: Mr. AliHasnain Ladhani, Mr. Syed Muhammad Ali Rizvi , Mr. Faaiz	
Student Roll No:	Section:

Instructions:

- Return the question paper and make sure to keep it inside your answer sheet.
- Read each question completely before answering it. There are **six questions and four pages (front plus back)**.
- The first five questions are to be attempted on paper; there is no need to open the computers. The last question, Question 6, will be attempted on the PC, so PCs should only be opened at 9:50 and onwards.
- Please submit Question 6 on Google Classroom under "Final Submission." Ensure that you attach both the code and a screenshot of the form in the Google Classroom submission.
- The first 80 minutes are allocated for the theory part, covering Questions 1 to 5. The subsequent 40 minutes are dedicated to the lab part, followed by a 5-minute period for opening the PCs, an additional 30 minutes allotted for attempting Question 6 on the PC, and The final 5 minutes are reserved for the submission process on Google Classroom.
- In case of any ambiguity, you may make assumptions. However, your assumption should not contradict any statement in the question paper.
- Do not write anything on the question paper (except your ID and group).

Total Time: 2 Hours

Max Points: 50

Question#1: SQL Queries [10 marks, 15 mins] [On paper]

PART A [5 points,5 mins]:

Scenario: A company's HR department wants to know the total salary expenditure for each department.

Question: Which table or tables would you use to find the total salary expenditure for each department?

PART B [5 points,10 mins]:

Employee Table

EmployeeID	FirstName	LastName	Salary	DepartmentID
1	John	Doe	50000	2
2	Jane	Smith	60000	2
3	Bob	Jhonson	55000	1

Departments Table

DepartmentID	DepartmentName
1	HR
2	IT
3	SALES

Orders Table

OrderID	EmployeeID	OrderDate	TotalAmount
1	1	2023-01-15	500.00
2	1	2023-02-20	700.00
3	2	2023-03-10	800.00

1. Write an SQL query to retrieve the first and last names of all employees along with their respective salaries.[1 points]

2. Write an SQL query to display each department's name along with the employees name

OR Retrieve sum of all salaries [2 points]

3. Retrieve all order records.[1 points]

4. Retrieve the OrderID, OrderDate where the TotalAmount is greater than and equal to 500. [1 points]

Question#2: Draw FlowChart [10 marks, 20 mins] [on paper]

a) Login Page of FLEX portal [4]



Sign In

Roll No.

Roll Number i.e (17I-1234)

Password

☐ I'm not a robot

reCAPTCHA
Privacy - Terms

☐ Remember me

[Forget Password ?](#)

Sign In

b) Assignment submission on google classroom [6]

Your work
Assigned

+ Add or create

Mark as done

Private comments

Add private comment...

Note: Make sure to keep in mind all edge cases (eg: if you're submitting an assignment but the date has passed etc)

Question#3: Networks [10 marks, 20 mins] [On paper]

- a) Draw the following topologies
 - 1) Star [2.5]
 - 2) Ring [2.5]
- b) Define the following terms: [5]
 - 1) IP Address
 - 2) Subnet
 - 3) Router
 - 4) Switch
 - 5) packet

Question#4: HTML CSS JS: [5 marks, 15 mins] [On Paper]

1. How can you embed a YouTube video on a webpage? Provide an example.
2. Explain the difference between inline, internal, and external in CSS. Provide examples of each.
3. How do you create a hyperlink that opens in a new tab/window in HTML?
4. What is the purpose of the `console.log()` function in JavaScript?

OR

Find Maximum of Three Numbers in JavaScript

Question#5: Prompt-Engineering: [5 marks, 10 mins] [On Paper]

Scenario: A leading e-commerce platform aims to enhance customer service efficiency by implementing an AI-powered chatbot. The chatbot, based on a language model similar to ChatGPT, is designed to handle customer queries, provide product information, and assist with common issues.

Question: What objectives, implementation strategies, and results can be attained through the integration of a chatbot?

Question#6: HTML CSS: [10 marks, 30 mins] [VS code]

HTML:

Create a form with fields for a user's name, email, and a submit button. Ensure proper labels and input types are used.

CSS:

Write a CSS rule to set the background color of all fields to light gray, and button color to green

BEST OF LUCK!