

SOUTH EASTERN UNIVERSITY OF SRI LANKA

FIRST EXAMINATION IN BACHELOR OF INFORMATION AND COMMUNICATION TECHNOLOGY – 2021/2022

SEMESTER - I, April / May 2024

CIS11042 - PRACTICAL FOR ESSENTIALS OF ICT AND PC APPLICATIONS

Answer all (03) Questions.

Time: 03 Hours.

IMPORTANT INSTRUCTIONS:

- Create a folder on the desktop with your **index number**. (Eg: *ICTxxx*). All answer files and related materials should be saved **within the folder** you created.
- All answer files should be **named as per the instructions** given on each question.
- The following files **must be submitted** as a single compressed file with your Index Number (E.g. *ICTxxx.zip*).
 - i. *Q01a_<IndexNo>.docx*
 - ii. *Q01b_list_<IndexNo>.xlsx*
 - iii. *Q01b_invitation_<IndexNo>.docx*
 - iv. *Q01b_merged_<IndexNo>.docx*
 - v. *Q01b_merged_<IndexNo>.pdf*
 - vi. *Q02_<IndexNo>.xlsx* (with two (02) worksheets namely *Q02a_sales* and *Q02b_marks*)
 - vii. *Q03_<IndexNo>.pptx*
- Save your files **FREQUENTLY**.

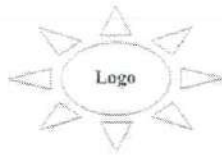
Question 01:

- a) Assume that you have been assigned the role of Secretary for an International Conference that will be held at your university. One of your tasks is to create a template for paper submissions for the conference. Design the **first page of the template** as shown on **page 03** using Microsoft Word according to the provided instructions. Save your document as *Q01a_<IndexNo>.docx*
- i. Page size - A4
 - ii. Margin
 - a. Top - 0.75inch
 - b. Bottom- 0.75inch
 - c. Left - 1 inch
 - d. Right - 1 inch

- iii. Content
 - a. Font style: Times New Roman
 - b. Single Line spacing
 - c. No space after/before the paragraph
- iv. For the **two (02) column area**,
 - a. Column width = 3.05"
 - b. Space between the columns = 0.16"
- v. The footer must contain the **page number** and a **conference name** as shown.
 - a. The footer from the bottom distance = 0.3"
 - b. Page number - left aligned
- vi. Font Size, Font style, and Text alignment

Filed	Font size	Bold	Italic	Alignment
Title of the paper	14	YES	NO	Centered
Name of author	11	NO	NO	Centered
Affiliation	10	NO	YES	Centered
Email	09	NO	NO	Centered
Running title	10	YES	YES	Left
1 st level heading	11	NO	NO	Left
2 nd level heading	11	NO	YES	Left
Abstract heading	11	YES	YES	Left
Abstract body	11	NO	YES	Justified
Keywords	10	YES	YES	Left
Main text	11	NO	NO	Justified
Caption	09	NO	YES	Centered

Template for Paper Submission, International Conference



First Author¹, and Second Author²

¹Affiliation of First Author, Country

²Affiliation of Second Author, Country

¹email address of First Author, ²email addresses of Second Author

Running Title (not more than 50 characters)

Abstract

This document provides guidelines for authors on how to format their papers for inclusion in the Proceedings of the International Conference. It can be used either as a set of instructions or as a template for directly entering your text. The template follows key best practices commonly used in scientific publications. The abstract should be no longer than 250 words.

Keywords: Add 3-6 keywords separated by comma. (E.g., ICT, AI, cybersecurity)

I. INTRODUCTION

This document serves as a template and incorporates standard practices commonly utilized by researchers in both the hard and soft sciences.

A. Text Font styles

The entire document should be formatted in **Times New Roman** with **single-line spacing**. The recommended font format is detailed in Table 1.

II. LAYOUT

The simplest way to meet the conference paper formatting requirements is to use this document as a template and directly enter your text into it.

A. Page Format

The paper should be formatted on **A4-sized (8.27" x 11.69")**. For the **two-column layout**, set the column width to **3.05"** and the **spacing between columns to 0.16"**. The margins should be configured as follows:

- Top = Bottom = 0.75"
- Left = Right = 1"

III. TABLE AND FIGURE

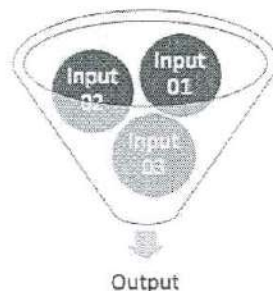


Figure 1: Process diagram

Figures and Tables should be centered in the column of the page. The recommended way to include an image/ diagram is shown in Figure 1.

Table 1: Font format

Filed	Font size	Bold	Italic	Alignment
Title of the paper	14	YES	NO	Centered
Name of author	11	NO	NO	Centered
Affiliation	10	NO	YES	Centered
Email	09	NO	NO	Centered
Running title	10	YES	YES	Left
Abstract heading	11	YES	YES	Left
Abstract body	11	NO	YES	Justified
Keywords	10	YES	YES	Left
1 st level heading	11	NO	NO	Left
2 nd level heading	11	NO	YES	Left
Main text	11	NO	NO	Justified
Caption	09	NO	YES	Centered

B. Heading Levels and Footer

A maximum of two (2) levels of section headings should be utilized. Level 1 headings should be used to categorize the primary sections of the main body, while Level 2 headings can be used for further categorization within each section.

The footer must contain the page number and a conference name as shown. The footer from the bottom is **0.3"**.

- b) You have been tasked with creating personalized invitations for the International conference. The invitations need to be addressed to individual participants by their **first** and **last names** and include their **country of origin**, **university**, and **area of expertise**.

- i. Create an Excel spreadsheet named *Q01b_list_<IndexNo>.xlsx* with the following details:

First Name	Last Name	Country	University	Expertise
Emma	Johnson	USA	Harvard	AI
Ravi	Patel	India	IIT	Cybersecurity
Sofia	Garcia	Spain	Barcelona	Networking
Li	Wang	China	Tsinghua	Quantum Computing
Amira	El-Sayed	Egypt	Cairo	ML

- ii. Draft the invitation letter, including **placeholders** for the participant's **first name**, **last name**, **country**, **university**, and **area of expertise** as given below. Save this original letter as *Q01b_invitation_<IndexNo>.docx*

Dear *[First Name] [Last Name]*,

We are delighted to invite you to the upcoming International Conference on **Science and Technology** which will be held in SEUSL, Sri Lanka

As a distinguished expert in *[Expertise]* from *[University]*, *[Country]*, your participation will greatly enhance the global exchange of knowledge at this event.

We look forward to welcoming you to this important gathering of international experts.

Best regards,
International Conference Committee.

- iii. **Perform the Mail Merge** and preview the results to ensure each invitation is correctly personalized.
- iv. **Complete the mail merge** process and save your output invitations in a single document with the name *Q01b_merged_<IndexNo>.docx*.
- v. Convert your output as **PDF** file name as *Q01b_merged_<IndexNo>.pdf*

[Total 35 marks]

Question 02:

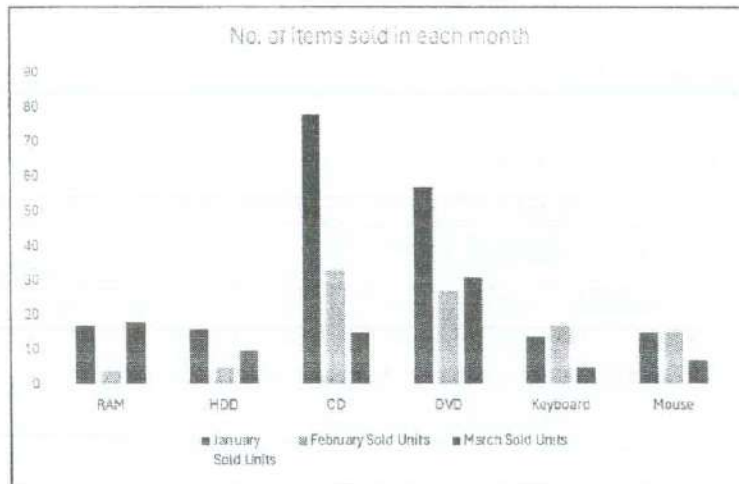
Important Instruction:

- Use a single MS Excel Workbook to answer all the sub-parts [a), b)] of Question 02 with separate Worksheets.
- Create an MS Excel Workbook and save it as Q02_<IndexNo>.xlsx
- Use two (02) separate worksheets in the same Workbook and rename them as Q02a_sales and Q02b_marks to answer parts a) and b) respectively

- a) The items sold out for the first three months in a computer shop 'xTech' is shown below. Prepare a worksheet Q02a_sales in the same workbook as given below using the same data and format.

	A	B	C	D	E	F	G	H	I
	Item	Unit Price (Rs.)	January Sold Units	January Sold Amount	February Sold Units	February Sold Amount	March Sold Units	March Sold Amount	Total Income
1									
2	RAM	5,500.00	17		4		18		
3	HDD	3,500.00	16		5		10		
4	CD	50.00	78		33		15		
5	DVD	75.00	57		27		31		
6	Keyboard	2,000.00	14		17		5		
7	Mouse	1,000.00	15		15		7		
8	Income (Each Month)								
9	Satisfaction Level								
10									
11	Total sale for three (03) Months								
12	Average sale for three (03) Months								
13	Highest Income per month								
14	Lowest Income per month								

- Highlight the sold items on each month that are **less than 15** with the **Light Red fill and dark Red text** using conditional formatting.
- Calculate the **monthly sale amount of each item** on appropriate cells using the Excel formula on **columns D, F and H**.
- Write the formula to get the **Total income of each item** for the first three months on appropriate cells in **column I** using the Excel formula.
- Calculate the **Total Income (each month)** for January, February and March in cells **D8, F8** and **H8** respectively.
- Create a single bar chart to show the **number of items sold in each month** as shown below.



- vi. By considering the **Total Income (Each month)**, evaluate the satisfactory level for each month according to the following criteria using the nested **If** function, (*Label them in the respective cell below their Income (Each month)*)

Income (Each Month)	Satisfaction Level
200,000 or above	High
less than 100,000	Poor
the range between above condition	Medium

- vii. Using the suitable **Excel function** calculate the following in allocated cells,
- Total sales for three (03) Months
 - Average sales for three (03) Months
 - Highest Income per month
 - Lowest Income per month
- b) You have been asked to create a worksheet to prepare a mark sheet for a subject on the **same workbook** as given below **on page 07** with the same data and format. Name the worksheet as **Q02b_marks**.
- Create an Excel formula to calculate **60% of final marks for grading** in **E2** and expand it for all students.
 - Create an Excel formula to calculate **40% of CA marks for grading** in **F2** and expand it for all students.
 - Calculate the **Total marks for Grading** for each student by adding their respective marks of **60% of the final marks for grading** with **40% of CA marks for grading**.

	A	B	C	D	E	F	G	H
1	Student ID	Name	Final marks for 100	CA marks for 100	Final (60%) for Grading	CA (40%) for Grading	Total marks for Grading	Rank
2	IT001	Name01	92	73				
3	IT002	Name02	46	32				
4	IT003	Name03	55	60				
5	IT004	Name04	78	52				
6	IT005	Name05	60	28				
7	IT006	Name06	88	74				
8	IT007	Name07	94	85				
9	IT008	Name08	32	38				
10	IT009	Name09	75	45				
11	IT010	Name10	27	42				
12								
13								
14	Student ID	IT002		Student ID	IT005		Student ID	IT010
15	Name			Name			Name	
16	Total Marks			Total Marks			Total Marks	
17	Rank			Rank			Rank	
18	Pass/ Fail			Pass/ Fail			Pass/ Fail	

- iv. **Rank** the students according to the **Total marks for grading** earned.
- v. Add another new column at the end after the *column Rank* and title as **Pass/Fail**.
- vi. "A student will be considered a '**Pass**' if the student earns *more than or equal to 30 marks in both Final marks for 100 and CA marks for 100*, otherwise '**Fail**'."

Fill in the *column Pass/Fail* using an appropriate formula.
- vii. Using the **VLOOKUP** function in Excel, do the following:
 - a. Extract the **Name**, **Total Marks**, **Rank**, and **Pass/Fail** status for three (03) students **IT002**, **IT005**, and **IT010**.
 - b. Display the extracted information in the **specified locations** on your worksheet.
 - c. Ensure that the VLOOKUP formulas you created for one student can be easily copied and pasted to retrieve the details for the other students **without needing any manual adjustments**.

[Total 40 marks]

Question 03:

You have been requested to create the first **four (04) slides** of a PowerPoint presentation on the topic "*Essentials of ICT and PC Applications*". Follow the detailed instructions below for each slide to create your presentation. Save your presentation as **Q03_<IndexNo>.pptx**

a) Customize the following on the **Title and Content layout** using **Slide Master** to ensure consistency across the presentation:

- i. **Slide Background color:**
 - a. Use a Light blue gradient.
- ii. **Font Style and Size:**
 - a. **Title Text:** Georgia, 40pt, Dark Blue
 - b. **Content Text:** Arial, 28pt, Dark Gray
- iii. **Logo:**
 - a. Insert a '**sun**' shape as the logo on the Slide Master so that it appears on every slide.
 - b. Position it in the **top-right corner**.
 - c. Ensure the logo is visible as per the Slide Master settings.
- iv. **Footer:**
 - a. Add a footer that includes the **slide number**.
 - b. Ensure it applies to **all pages**.

b) Slide 1: Title Slide

- i. Slide Layout: **"Title Slide"** layout
- ii. Main Title:
 - a. **Text:** Enter "Essentials of ICT and PC Applications"
 - b. **Text Style:** Georgia, 48pt, Dark Blue
 - c. **Alignment:** Centered both horizontally and vertically
- iii. Subtitle:
 - a. **Text:** Enter your **Index Number** and the **Course code** in separate lines.
 - b. **Text Style:** Arial, 24pt, Dark Gray
 - c. **Alignment:** Right

c) Slide 2: Introduction

- i. Slide Layout: **"Title and Content"** layout
- ii. Title:
 - a. **Text:** Enter "Introduction"
- iii. Content:
 - a. **Text:** Include the following bullet points:
 - Definition of ICT (Information and Communication Technology)
 - Overview of basic PC applications
 - Importance of ICT in the modern world
 - b. **Bullet Style:** Filled square
 - c. **Spacing:** Double line spacing between bullet points.

d) Slide 3: Key Components of ICT

- i. Slide Layout: *"Title and Content"* layout
- ii. Title:
 - a. **Text:** Enter "Key Components of ICT"
- iii. Content:
 - a. **Text:** Include the following points:
 - Hardware components
 - Software applications
 - Network Infrastructure
 - Data management
 - b. **Bullet Style:** Filled square
 - c. **Spacing:** 1.5 line spacing between bullet points.

e) Slide 4: Common PC Applications

- i. Slide Layout: *"Title and Content"* layout
- ii. Title:
 - a. **Text:** Enter "Common PC Applications"
- iii. Content:
 - b. **Paragraph Text:**

PC applications play a vital role in both personal and professional settings. Word processing, spreadsheets, presentations, and communication tools are essential for organizing, analyzing, and sharing information efficiently. Mastering these applications enables users to enhance productivity and improve their technological proficiency.
 - **Font Style:** Arial, 20pt, Dark Gray
 - c. **Insert an Image:**
 - Insert a **screenshot of your desktop** to visually complement the paragraph.
 - Position the image on the **right side of the slide**.
 - Resize the image to ensure it fits well **without overlapping** the text.
 - Add an animation **Wheel** to the image.

f) Add a transition **Wipe** for all the slides of the presentation starting from the title slide.

[Total 25 marks]

[Total 100 marks]

***** END *****