Computer Literacy ICT program 20192

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1 How to calculate the score of the test

- Compiled to pdf file (0.5 points)
- Title (0.75 points): each line 0.25 points. It is necessary to have your correct full name and your correct student number.
- Format the text correctly (0.25 points)
- Sectioning (1.5 points)
- Math (2 points): each equation 0.5 points
- Table (1.5 point): first table 0.5 points, second table 1 point.
- Figure (1 point): first figure 0.5 points, second figure 0.5 points.
- Create itemize and enumerate (1 point)
- Cross Ref (0.5 points)
- Create table of content 0.5 points
- Create list of tables 0.25 points
- Create list of figures 0.25 points

2 Instructions

2.1 How to do

Students need to create this document using latex and follow **these below rules:**

1. Need to use ”article” for document class.
2. Write your full name and date using commands \author and \date.

3. Use sectioning commands to split the sections inside the document.
4. Use cross-referencing commands \ref.
5. Use commands to create table of contents, list of figures, list of tables.
6. Put the image file and Latex source file (.tex) in the same folder
7. Change text "*your_ student_ number*" to correct student number. Example: 20192019

3 Submission

Time: 90 minutes.
When submission, student need to send to the email address: linhtd@soict.hust.edu.vn
Template for email title: [CL] - Your Full name - Your student number.
Example: [CL] - Nguyen Van A - 20202020.
The email needs to have:

1. Latex source (.tex file).
2. All images inside the document.
3. Output pdf file.

Note: if the Latex file is not compiled, you will be penalized. If the email title is not correct, you will be also penalized.

4 Equations

A $k-$combination of a set S is a subset of k distinct elements of S. If the set has n elements, the number of $k-$combinations is equal to the binomial coefficient in Equation **??**:

$$\begin{aligned}\left(\begin{array}{c} x \\ y \end{array} \right) &= \frac{n(n-1)\dots(n-k+1)}{k(k-1)\dots 1} \\ &= \frac{n!}{k!(n-k)!} \end{aligned} \tag{1}$$

Function $f(x, y)$ is represent by Eq. **??**. Function y_2 is represented by Eq. **??**

$$f(x,y) = \begin{cases} a_1^x + a_2^y & \text{if} \quad x < 0 \\ \cos n\varphi + i \sin n\varphi & \text{if} \quad 0 \leqslant x < 10 \\ \sqrt[3]{your\_ student\_ number} & \text{if} \quad 20 \leqslant x < 30 \\ 1 - \log_2 x^y & \text{if} \quad 50 \leqslant x \end{cases} \tag{2}$$

Calculate:

$$\lim_{x \to your\_ student\_ number} \prod_{i=1}^{n} f(x,i) \tag{3}$$

5 Tables and tabulars

Create two tables. Note: when creating the table, start from the basic table and then use the alignment methods. Check the ... for the alignment in left, right, or center.
Please fill the tables with your information. You need to fill one line into Table ??. One line in "General courses" section and one line in "IT courses" section of Table ??.

Bảng 1: Identity information

Information of student in ICT-64		
Full name	**Student number**	**Gender**
...	...	...

Bảng 2: Class timetable

#	**Course name**	**Start time**	**room**
General courses			
...	...	...	...
IT courses			
...	...	...	...

6 Figures

Download the image from this address: `https://users.soict.hust.edu.vn/linhdt/rectangle.pdf`

Insert the image into the document so that the figure occupies 60% of the width of the page. To do that, use width=0.6\textwidth when insert the figure.

Use shapes.pdf and rotate method. The angle of the rotation is last two number of your student number. For example, if your student number is 20192019, the angle will be 19 degrees.

7 Cross references

See Table 1 for an example of a table. Observe Eq.(2) and Eq.(3) for examples of equations.

Mục lục

Danh sách bảng