F.2 Mid-Year Exam ICT Revision Worksheet

4.5 Google Forms – Adding Responses Validation

* Purposes of Response Validation
  + Increase the number of valid responses
    1. People will receive an error notification when they do not follow the rules.
* Different validation rules for Question types
  + Short answer
    1. Number (e.g. Age, Year, etc.)
    2. Text (Contains, Doesn't contain, Email, URL)
    3. Length (e.g. No more than 2000 characters)
    4. Regular expression (Regex, e.g. /wgvbhs/)
  + Paragraph
    1. Length
  + Checkboxes
    1. Select at least / exact / most

4.6 Google Forms – Adding Sections

* Purposes of Sections
  + Makes the Form easier to read
* Question types
  + Only Drop-down and Multiple choice could turn on “Go to section based on answer”.

4.8 Google Forms – Viewing and Managing Resources

* Ways to view responses
  + Summary - View responses by question
  + Individual - View responses by person
  + Google Sheets - View all responses in a spreadsheet.

4.9 Google Forms - Add-ons for Google Forms

* FormLimiter – Purposes
  + FormLimiter helps you stop accepting responses in Google Forms.
* FormLimiter – Rules for stop accepting responses
  + A certain number of responses are received or;
  + At a particular time automatically.

5.4 Google Sheets - Formulae and Functions

* Concepts
  + Purposes
    - A formula can help us perform different types of calculations.
  + Definitions of Functions
    - Functions are predefined formulae in Google Sheets.
  + You can add a formula by typing “=”and entering the formula.
* Examples of Functions (value is either Range/Number/Text)

|  |  |  |
| --- | --- | --- |
| Name | Examples/Description | Notes |
| SUM | =SUM(A1:A10) | Sum up value |
| COUNT | =COUNT(A1:A10, B2:B10) | Count no. of numeric values |
| COUNTIF | =COUNTIF(A1:A10, “2AF”) | Count no. of cells fit the criterion |
| IF | =IF(A1>= $C$1, “T”, “F") | IF criterion is true, return “if true”, else “if false” |
| AVERAGE | =AVERAGE(A1:A10) | Average Value |
| MAX | =MAX(A1:A10) | Maximum Value |
| MIN | =MIN(A1:A10) | Minimum value |
| RIGHT | =RIGHT(“Apple”, 2) | Starts from right and return the specified number of characters |
| MID | =MID(“Apple”, 2, 3) | Starts from the specified position and return the specified number of characters |
| LEFT | =LEFT(“Apple”, 2) | Starts from left and return the specified number of characters |
| SPLIT | =split(value, separator) | Split the “value” by “separator” |

5.5 Google Sheets - Linking to Other Google Docs Editors

* We can insert charts in Google Docs and Google Slides by linking them to Google Sheets.

6.4 Google Slides - Adding and Changing Animations and Transitions

* You can add animations to text, images, slides and other objects in Google Slides.
* Overusing animations and transitions distracts audience from listening to the presentation.

6.5 Google Slides - Presenting Slides

* Speaker Notes
  + Speaker notes are notes added to the slides as a reference for the presenter.
  + They will be hidden from the projector but shown on the computer.
  + You may use them as cue cards.
  + However, do not type the whole script in the speaker notes.
* Audience Q&A (Presenter view - Audience tools)
  + Audience Q&A allows you to generate a link where audiences can submit questions.
  + Speakers can receive and answer questions immediately.
  + The questions can also be shown on the projector.
  + You could also enable “Ask anonymously”

6.6 Google Slides - Laser Pointer

* A laser pointer is a presentation aid for highlighting a key point on your slide.
* You can use your mouse as a laser pointer in Google Slides.

6.7 Google Slides - Extensions for Google Slides: Poll Everywhere

* Poll Everywhere is an extension that helps you create instant polls in Google Slides.
* There are different types of polls, including
  + Multiple Choice, Open-ended questions, Ranking, Q&A polling and Clickable Image.
* Audiences can submit their live responses using smart devices.

7.1 Google Apps Script - Introduction to Google Apps Script

* Google Apps Script is a scripting language based on JavaScript.
* It allows users to add new features and functions to Google Docs, Sheets and Forms.
* For instance, you can add custom menus, dialogues and sidebars using Google Apps Script.

8.1 Binary number - The conversion of binary numbers to decimal numbers

* Step 1 | Multiply each digit by its corresponding value of the power of 2. (32 16 8 4 2 1)
* Step 2 | Add up the values.

8.2 Binary number - The conversion of decimal numbers to binary numbers

* Use short division to divide the decimal number by 2 and write down remainder in every step.
* Continue to divide until the quotient equals to 1.
* Write down the quotient of the final step together with the remainders from previous steps(s) in the direction of an Horizonal-flipped L.