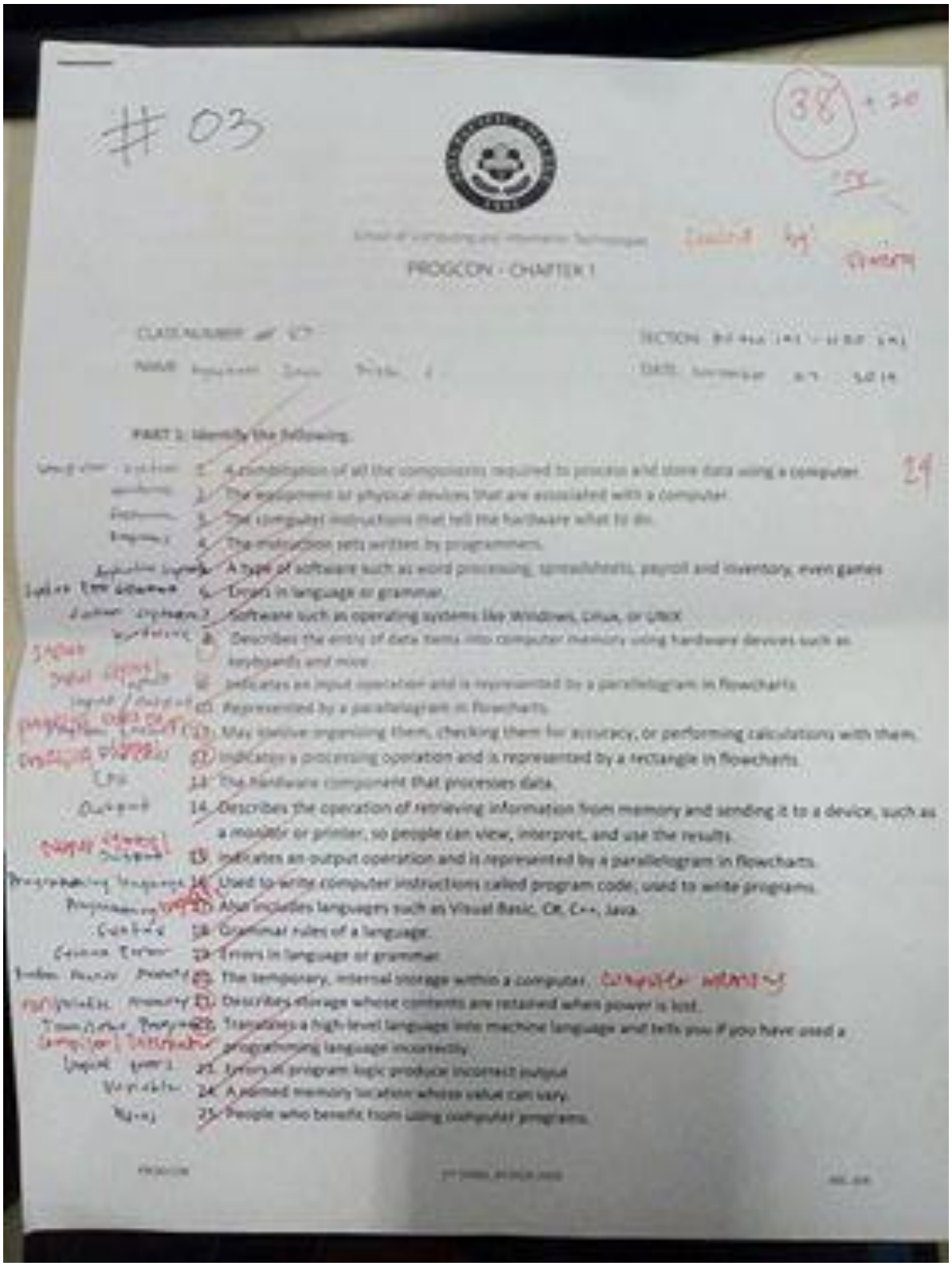
A5. Chapter 1 - Written Activity



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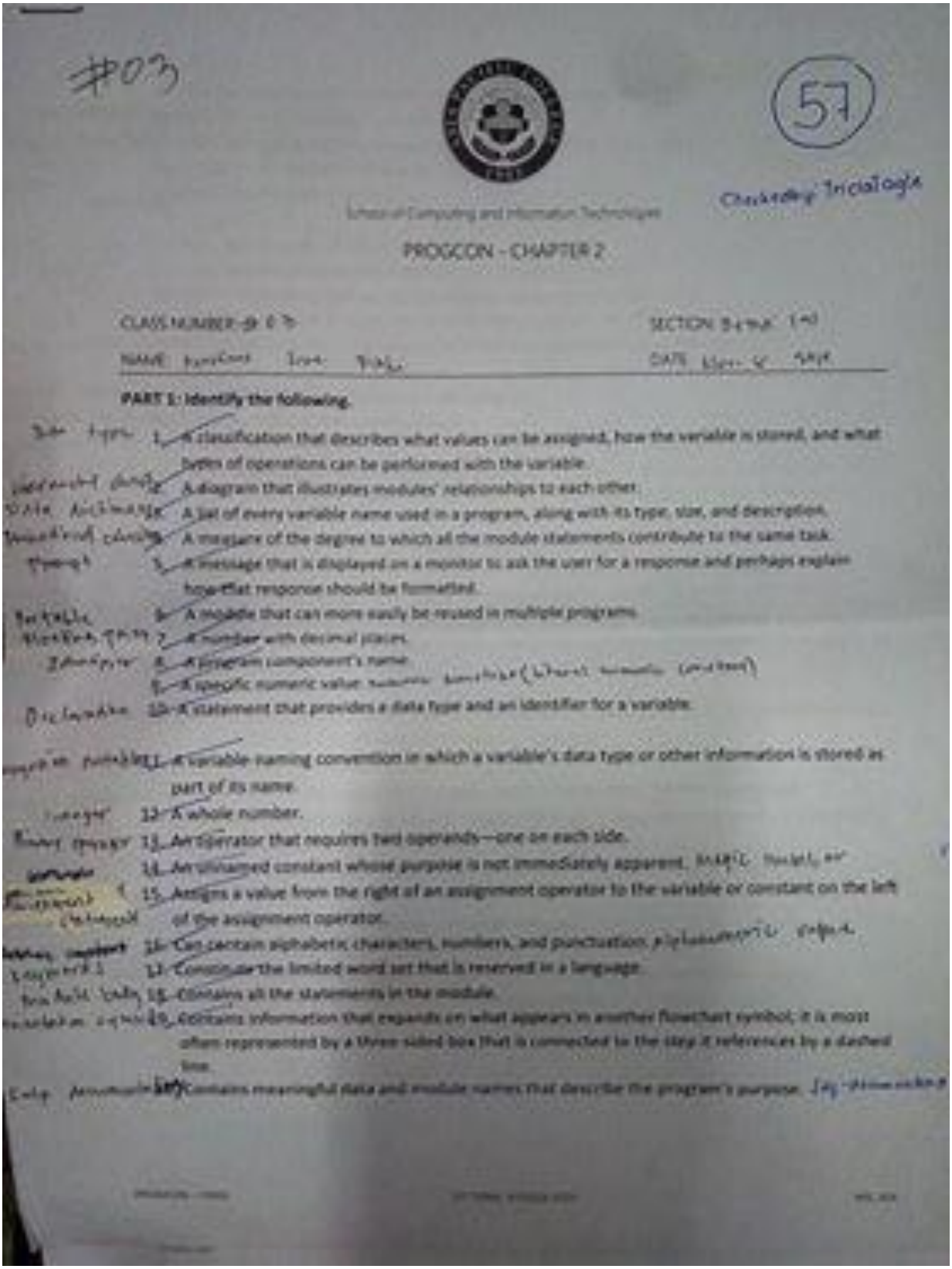
PROGCON - CHAPTER 1

PART 1: Identify the following.

1. A combination of all the components required to process and store data using a computer
2. The equipment or physical devices that are associated with a computer
3. The computer instructions that tell the hardware what to do.
4. The instruction sets written by programmers.
5. A type of software such as word processing, spreadsheets, payroll and inventory, even games
6. Errors in language or grammar.
7. Software such as operating systems like Windows, Linux, or UNIX
8. Describes the entry of data items into computer memory using hardware devices such as keyboards and mice
9. Indicates an input operation and is represented by a parallelogram in flowcharts.
10. Represented by a parallelogram in flowcharts.
11. May involve organizing them, checking them for accuracy, or performing calculations with them.
12. Indicates a processing operation and is represented by a rectangle in flowcharts.
13. The hardware component that processes data.
14. Describes the operation of retrieving information from memory and sending it to a device, such as a monitor or printer, so people can view, interpret, and use the results.
15. Indicates an output operation and is represented by a parallelogram in flowcharts.
16. Used to write computer instructions called program code; used to write programs.
17. Also includes languages such as Visual Basic, C#, C++, Java.
18. Grammar rules of a language.
19. Errors in language or grammar
20. The temporary, internal storage within a computer.
21. Describes storage whose contents are retained when power is lost.
22. Translates a high-level language into machine language and tells you if you have used a programming language incorrectly.
23. Syntactical program logic produce incorrect output
24. A named memory location whose value can vary.
25. People who benefit from using computer programs.

A6. Chapter 2 – Written Exercise



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College of Computing and Information Technologies

PROGCON - CHAPTER 2

CLASS NUMBER: [illegible]

SECTION: [illegible]

NAME: [illegible]

DATE: [illegible]

PART I: Identify the following.

1. A classification that describes what values can be assigned, how the variable is stored, and what types of operations can be performed with the variable.
2. A diagram that illustrates modules' relationships to each other.
3. A list of every variable name used in a program, along with its type, size, and description.
4. A measure of the degree to which all the module statements contribute to the same task.
5. A message that is displayed on a monitor to ask the user for a response and perhaps explain how that response should be formatted.
6. A module that can more easily be reused in multiple programs.
7. A number with decimal places.
8. A program component's name.
9. A specific numeric value.
10. A statement that provides a data type and an identifier for a variable.
11. A variable naming convention in which a variable's data type or other information is stored as part of its name.
12. A whole number.
13. An operator that requires two operands—one on each side.
14. An unnamed constant whose purpose is not immediately apparent.
15. Assigns a value from the right of an assignment operator to the variable or constant on the left of the assignment operator.
16. Can contain alphabetic characters, numbers, and punctuation.
17. Consists of the limited word set that is reserved in a language.
18. Contains all the statements in the module.
19. Contains information that expands on what appears in another flowchart symbol; it is most often represented by a three-sided box that is connected to the step it references by a dashed line.
20. Contains meaningful data and module names that describe the program's purpose.

A7. Flowcharts and Algorithm – Written Exercise

#03

School of Computing and Information Technologies

CLASS NUMBER: #07 SECTION: [illegible]

NAME: [illegible] DATE: [illegible]

General Rules for Flowcharting

1. All boxes of the flowchart are connected with Arrows. (Not lines)
2. Flowchart symbols have an entry point on the top of the symbol with no other entry points. The exit point for all flowchart symbols is on the bottom except for the Decision symbol.
3. The Decision symbol has two exit points;
   a. these can be on the sides or
   b. the bottom and one side.
4. *Generally, a flowchart will flow from top to bottom. However, an upward flow can be shown as long as it does not exceed 3 symbols.*
5. Connectors are used to connect breaks in the flowchart. Examples are:
   - From one page to another page.
   - From the bottom of the page to the top of the same page.
   - An upward flow of more than 3 symbols
6. Subroutines and Interrupt programs have their own and independent flowcharts.
7. All flow charts start with a Terminal or Predefined Process (for interrupt programs or subroutines) symbol.
8. All flowcharts end with a terminal or a continuous loop.

Flowcharting uses symbols that have been in use for a number of years to represent the type of operations and/or processes being performed. The standardized format provides a common method for people to visualize problems together in the same manner. The use of standardized symbols makes the flow charts easier to interpret, however, standardizing symbols is not as important as the sequence of activities that make up the process.

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