



**JARAMOGI OGINGA ODINGA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS**

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF
ADMINISTRATION SUPPLY CHAIN MANAGEMENT
SCS 3123: FUNDAMENTALS OF PROGRAMMING**

TIME: 2HOURS

Instructions:

- I. This paper contains **Five** questions
- II. Question one is compulsory
- III. Answer any other two questions

QUESTION ONE

- a) Critically examine the difference between machine language and assembly language (8 Marks)
- b) Explain why there was need to change from one programming language to another (12 Marks)
- c) Discuss why a firm may decide to use a tailor made software (10 Marks)

QUESTION TWO

- a) Define the functions of the following identifiers;
 - i. Char (2 Marks)
 - ii. Integer (2 Marks)
 - iii. Boolean (2 Marks)
 - iv. Writeln (2 Marks)
 - v. Read (2 Marks)

- b) State the functions of the following language translators;
 - i) Interpreter (3 Marks)
 - ii) Compiler (3 Marks)
 - iii) Assembler (3 Marks)

- c) What is procedural programming? (1 Mark)

QUESTION THREE

- a) Explain the following terms as used in programming;
 - i. Pointer (2 Marks)
 - ii. Function (2 Marks)
 - iii. Structure (2 Marks)
 - iv. Source code (2 Marks)
 - v. Object code (2 Marks)

vi. Compiler (2 Marks)

b) State the two types of software documentations (4 Marks)

c) Explain each line of command of Pascal program below;

```
Program Lesson1_Program1;
```

```
Begin
```

```
Write('Hello World. Prepare to learn PASCAL!!');
```

```
Readln;
```

```
End.
```

(4 Marks)

QUESTION FOUR

Write an algorithm and draw a flowchart that will read the two sides of a rectangle and calculate its area. (20 Marks)

QUESTION FIVE

Describe the stages of program development cycle (20 Marks)

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