

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

END OF SEMESTER EXAMS-APRIL 2014

(KISII L.C)

SCS 103:PROGRAMMING IN PASCAL

BED ARTS/SNE Y1S2

(SCHOOL BASED)

INSTRUCTIONS

- 1. Answer question 1 (compulsory) and any other 2 Questions
- 2. Show all your workings where necessary
- 3. Candidates are advised not to write on the question paper

TIME: 2 HOURS

QUESTION 1 (30marks)

a) Write a simple Pascal program to perform arithmetic operations	(2marks)	
b) With examples discuss the operators used in Pascal programming	(7marks)	
c) Distinguish between a variable and a constant in structured programming (2marks)		
d) Discuss the simple and compound statements with examples	(4marks)	
e) Illustrate using example how switch statements are used in Pascal	(7 marks)	
f) Using block diagram and appropriate syntaxes explain if-else and while control structure		
	8marks	

QUESTION 2 (20marks)

a)	Describe the control structures with program examples	(8marks)
b)	Define the term loop structures	(2marks)
c)	Write a simple program to demonstrate the use of loops in programming	
		(6marks)
d)	Write a program in Pascal to demonstrate Fibonacci series	(4 mark)

QUESTION 3 (20marks)

a) What is an array? (2mark)

b) Arrays have played a vital role in industries and various organization/institution by handling large number of elements, with examples discuss the types of arrays and illustrate how they are used in Pascal programming (10marks)

c) Explain any four Pascal data types with examples (8marks)

QUESTION 4 (20marks)

a) Write a Pascal program to find the biggest of three numbers (8marks) b)Distinguish between procedures and functions with examples (8marks) c) State and Explain any 2 Pascal programming keyword (4marks)

QUESTION 5 (20marks)

a) Discuss the pointers and show how they perform their functionality in programming (5marks) Explain how to declare 3 dimensional array in pascal (6 marks)

(4 marks) Explain source code in pascal (5 marks)

b) Describe the Pascal statements and expressions with examples

c)