## UNIVERSITY

#### **PECI 121**

CHUKA



# UNIVERSITY EXAMINATIONS

#### FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION (PRIMARY OPTION)

#### PECI 121: INTRODUCTION TO BASIC MATHMATICAL CONCEPTS

## STREAMS: BED (P)

### TIME: 2 HOURS

DAY/DATE: WEDNESDAY 15/04/2020 11.30 A.M. – 1.30 P.M.

# **INSTRUCTIONS:**

- Answer question ONE and any other TWO
- Do not write on the question paper

1.	(a)	Distinguish the following terms as used in mathematics	[10 marks]
		(i) Number and digit	
		(ii) Rote counting and rational counting	
		(iii) Number sense and number value	
		(iv) Mathematical symbol and mathematical formula	
		(v) Primary concepts and secondary concepts	
	(b)	Highlight reasons of teaching mathematics to learners at primary school level	
			[10 marks]
	(c)	Elaborate on the nature of mathematics	[10 marks]
2.	Discu	uss the four (4) ways of expressing fractions in mathematics	[20 marks]
3.	(a)	Explain the role of the teacher in mathematics lesson	[10 marks]
	(b)	Highlight on the prenumber activities	[10 marks]
4.	(a)	Discuss any ancient number system	[10 marks]
	(b)	Explain the contributions of Jerome Bruner theory in teaching and l	earning
		mathematics	[10 marks]