

THE OPEN UNIVERSITY OF SRI LANKA
DIPLOMA IN EARLY CHILDHOOD AND PRIMARY EDUCATION
FINAL EXAMINATIONS – 2007
ESD 1232 -CURRICULUM STUDIES AND PRACTICUM -MATHEMATICS



DURATION: THREE (03) HOURS

Date : 09.12.2007

Time: 10.00 a.m. – 1.00 p.m.

Answer all the question in Part I and only three (03) questions from Part II.

PART 1

01. Write five (05) basic mathematical concept that developing in a child during his/her early years.
02. List the necessary three (03) steps that should be followed when providing experiences of numbers concept at pre school level.
03. Explain in brief why teaching mathematics at primary stage is important.
04. Write three (03) objectives of teaching mathematics at primary stage.
05. List five (05) basic competencies that should be developed in the primary stage stated in the 'first report' of the national education Commission. (NEC).
06. What are the topics included under the theme "measurement" in Primary Mathematics Curriculum.
07. List the pre-mathematical concepts included in the subject 'mathematics' in key stage I.
08. Match the following mathematical themes and topics.

Themes	Topics
Pre number concept	Length
Number	One to one correspondence
Mathematics Operation	Right angle
Measurement	Addition
Shape & Space	Decimal
	Division
	Solid and plane
	Weight
	Fraction

(5x8 = 40 marks)

PART II

09. i. Write four (04) Models used in assessing children in the primary classroom. (04 marks)
- ii. Describe briefly the main characteristics of each of these models. (16 marks)
10. i. Write five(05) challenges that a teacher would face when teaching mathematics at pre school level. (05 marks)
- ii. Explain why concept formation is very important in relation to mathematics at pre school level. (15 marks)
11. i. Explain with examples how the experiences in mathematics would help student in understanding the content in other subject areas in the primary grades. (20 marks)
12. Write short notes on any two (02) of the topics given below.
- i. Integrated curriculum
ii. Primary mathematics syllabus
iii. Competency based curriculum. (20 marks)
13. Describe the relationship between primary mathematics and secondary mathematics under the following headings.
- i. Objectives
ii. Content areas
iii. Teaching methods
iv. Assessment procedures. (20 marks)

14. These are errors made by a grade 2 student in addition.

$$\begin{array}{r} 3 \\ + 0 \\ \hline 0 \\ \hline \hline \end{array} \quad \begin{array}{r} 5 \\ + 0 \\ \hline 0 \\ \hline \hline \end{array} \quad \begin{array}{r} 70 \\ + 22 \\ \hline 90 \\ \hline \hline \end{array} \quad \begin{array}{r} 18 \\ + 60 \\ \hline 70 \\ \hline \hline \end{array}$$

Observe these carefully and answer the following questions.

- i. Explain the error pattern of the student. (04 marks)

- ii. If the same student is given the following sums how would he/she respond?

$$\begin{array}{r} 9 \\ + 0 \\ \hline \\ \hline \hline \end{array} \quad \begin{array}{r} 1 \\ + 0 \\ \hline \\ \hline \hline \end{array} \quad \begin{array}{r} 35 \\ + 20 \\ \hline \\ \hline \hline \end{array} \quad \begin{array}{r} 40 \\ + 18 \\ \hline \\ \hline \hline \end{array}$$

(04 marks)

- iii. Explain the procedures you would follow as the teacher of that student to correct the errors made by the student. (12 marks)