**THE OPEN UNIVERSITY OF SRI LANKA**

**FACULTY OF EDUCATION**

**DIPLOMA IN EARLY CHILDHOOD AND PRIMARY EDUCATION – LEVEL 3**

**FINAL EXAMINATION     2019**

**ESD1232/EPD3532 – CURRICULUM STUDIES AND PRACTICUM – MATHEMATICS**

**DURATION – THREE (03) HOURS**

| | |
|---|---|
| Date: 02ⁿᵈ March 2019 | Time: 9.30 a.m. – 12.30 p.m. |

**Answer All Questions in Part I and any three (03) questions from Part II.**

## PART - I

01.    Discuss in brief the Chinese contribution towards the development of Mathematics.

02.    The 'First Report' (1992) of the NEC (National Education Commission) has defined a set of competencies.   List out those competencies.

03.    What are the seven (07) major themes included in the Primary Mathematics curriculum in Sri Lanka.

04.    Briefly discuss the relationship between the subjects Language and Mathematics.

05.    *'Teaching Mathematics in the primary school in difficult'*
Do you agree above statement? Give the reasons for your answer.

06.    "Piaget's stages of development has had powerful impact on Mathematics Education"
Tableate Jean Piaget's development stages and age groups.

07.    What do you meant by the term 'spirals of learning'?. Explain with diagram.

08.    Explain in brief about Attribute blocks.

(5 x 8  = 40 marks)

## PART - II

09.    i.    Explain the term "Assessment" in your own words.

                                                  (05 marks)

      ii.    *'Assessment of student progress in an important component of the classroom teaching-learning process'*

            Do you agree above statement? Explain the reasons for your answer.

                                                  (07 marks)

     iii.    a)    List out four (04) different models of assessment of students' learning out comes.

                                                  (02 marks)

            b)    Why is the criteria referenced assessment is better the norm referenced assessment during the assessments of pre-school children.

                                                  (06 marks)

10.    'Use of teaching aids for teaching mathematics is helpful to the development of mathematical concepts in primary level'

      i.    Draw and name the set of 'Dines blocked Dines Apparatus.

                                                  (05 marks)

      ii.    Draw and explain, how can you indicate place values of following numbers using Dines block.

            a) 5            b) 19           c) 70

            d) 301        e) 210        f) 600

                                                  (06 marks)

     iii.    Draw and explain how can you use the Dines blocks to introduce following mathematical operations.

            a)     3 + 5           b)     8 − 4

            c)     34 + 45       d)     68 − 24

            e)     59 + 23       f)     46 − 38

11.    i.    What are the three 'r' s [3 'R']s in the Primary Education.

                                                  (06 marks)

      ii.    Draw the curriculum frame work introduced in 1997 Primary Education reforms and explain it. Your explanation should cover key stages, teaching modes and subjects.

                                                  (14 marks)

12.    i.    What do you mean by the term Dyslexia.

                                                  (04 marks)

      ii.    List out four characteristics of Dyslexia and explain the manner in which they affect language acquisition and mathematical with relevant examples.

                                                  (16 marks)

13. i. "In Mathematics errors may occur in four ways"
What are those four ways.

(04 marks)

ii. Following mathematical sums done by two Grade 3 children Mahesh and Romani

**Mahesh**

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| 25 | 64 | 31 | 64 | 70 |
| +83 | +52 | +92 | +82 | +57 |
| 09 | 17 | 24 | 47 | 28 |

**Ramani**

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| 25 | 64 | 31 | 64 | 70 |
| +83 | +52 | +92 | +82 | +57 |
| 18 | 17 | 15 | 20 | 19 |

Study the answers given by both children and explain their errors.

(04 marks)

iii. If Mahesh and Ramani answer the following sums, write their answer separately.

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| 41 | 57 | 67 | 31 | 70 |
| +82 | +91 | +40 | +82 | +75 |
| | | | | |

(04 marks)

iv. Propose a suitable remedial methods to overcome above errors.

(08 marks)

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