THE OPEN UNIVERSITY OF SRI LANKA

DIPLOMA IN EARLY CHILDHOOD AND PRIMARY EDUCATION

FINAL EXAMINATIONS – 2009

ESD 1232 -CURRICULUM STUDIES AND PRACTICUM -MATHEMATICS

DURATION: THREE (03) HOURS

Date : 16th May 2009 **Time: 9.30 a.m. – 12.30 p.m.**

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

PART - I

01. State the four models used in assessing children in primary classroom.

02. i. What are the three main elements in the present teaching-learning process of primary level?
ii. How does the emphasis on each element change from key stage to key stage?

03. Mention any five (05) objectives of teaching mathematics in primary schools.

04. What are the pre-number concepts a child should acquire during his/her early years?

05. Explain the relationship between Mathematics and Language in the primary stage.

06. State four evidences to show the existence of Mathematical knowledge in pre-historic era.

07. What are the topics dealt under the theme 'Number' in primary Mathematics systems.

08. What are 'routine' and 'non-routine' problems? Give an example for each.

(8 x 5 = 40 marks)

PART - II

09. i. Explain "How children learn Mathematics" under the following headings.
    a) Readiness
    b) Motivation
    c) Ability
    d) Structure.

    ii. What are the theories in respect of these?

10. i. Explain briefly the contribution of the development of Mathematics by
    a) Indians
    b) Egyptians, Greek, Roman.
    c) Chinese
    d) Arabian
    e) Europeans

    ii. What are the most significant of these.

11. i. Explain the challenges a teacher has to face when organizing activities for development of Mathematical concepts in pre-school children.

    ii. Explain with examples how experiences in Mathematics would help children to understand other concepts in the pre-school.

12. Describe related to primary mathematics.
    a) Teachers guides
    b) Workbooks
    c) Test books used for teaching mathematics at primary level.

13. Write a lesson plan for grade 3 on any one of these topics, Length, Weight, Capacity, Time under following headings.
    i. Clear statement of lesson objectives.
    ii. Essential mathematics vocabulary
    iii. List at teaching resources
    iv. Suitable whole class introductory activity.
    v. Practical activity for group work.
    vi. Addition activities fast learners and suggestion to support slow learners.

(20 x 3 = 60 marks)