

THE OPEN UNIVERSITY OF SRI LANKA
 CERTIFICATE IN PRE-SCHOOL EDUCATION

FINAL EXAMINATION – 2009

ESC 1136/ ESC 1125 – DEVELOPMENT OF MATHEMATICAL SKILLS

DURATION : TWO (02) HOURS



DATE : 05th July 2009

TIME : 1.30 p.m. – 3.30 p.m.

ANSWER ANY FOUR QUESTIONS.

01. a) Name three (03) mathematical concepts children develop through experiences during early years. (03 marks)
- b) Explain citing five relevant examples how young children develop mathematical concepts. (22 marks)
02. a) Briefly explain what is meant by the mathematical concept Neighbourhood/location. (10 marks)
- b) Describe how you would organize an activity to develop the concept Neighbourhood/location in pre-school children. (15 marks)
03. a) State four steps a teacher should follow in introducing numerals to pre-school children. (10 marks)
- b) Explain activity that could be used to introduce numerals in pre-school children. (15 marks)
04. a) What is meant by the mathematical concept conservation/Invariance. (07 marks)
- b) Write an activity to develop each of the following concepts in preschool children.
- i. Material/solid conservation
 - ii. Number conservation.
 - iii. Liquid conservation.
- (6 x 3 = 18 marks)
05. Explain citing examples what special qualities a teacher should possess in developing mathematical concepts in pre school children. (25 marks)
06. a) Identify how children develop the concept shapes from the environment. (10 marks)
- b) Write an activity that would provide experiences to pre school children in relation to geometrical shapes. (15 marks)