

THE OPEN UNIVERSITY OF SRI LANKA  
 CERTIFICATE IN PRE-SCHOOL EDUCATION PROGRAMME  
 FIRST SEMESTER FINAL EXAMINATION – 2005/2006  
 ESC 1125/ESC 1136 – DEVELOPMENT OF MATHEMATICAL SKILLS.



**DURATION : TWO (02) HOURS**

**DATE : 26<sup>th</sup> October 2006**

**TIME : 10.00 p.m. 12.00 noon**

ANSWER ANY FOUR (04) OF THE QUESTIONS.

01. i. Describe two (02) activities you plan to develop the mathematical concept "one to one correspondence" in pre school children. (08 marks)
- ii. Explain with illustrations the teaching aids you could use for the two activities you have described. (07 marks)
- iii. Explain step by step how you would engage children in activities using these Teaching Aids. (10 marks)
02. i. Cite five (5) interests of pre school children that could be used by a teacher to develop mathematical concepts in them. (5 marks)
- ii. Select any four (04) of the interests you have mentioned above and explain how you could use these to develop the concept "sorting" in pre school children. (20 marks)
03. i. State Piaget's stages of cognitive development according to their sequence. (08 marks)
- ii. Select any two from the stages you have mentioned above and analyse their characteristics. (17 marks)

04. i. Write a story that could be used to develop differing relationships that are possible between objects namely "belonging to the same kind" "ownership" and "comparison"  
(15 marks)
- ii. Explain briefly how you would select teaching aids and questioning to establish the above mentioned relationships when relating the story you have written.  
(10 marks)
05. Explain with illustration suitable sets of teaching aids (a set per concept) to develop following mathematical concepts.
- a. Order
  - b. Symmetry
  - c. Capacity
  - d. Weight
  - e. Neighborhood.
- (5 x 5=25)
06. i. Describe special characteristics you should develop in yourself as a pre school teacher.  
(10 marks)
- ii. Select any three (3) of the characteristics you have mentioned above and explain how the characteristics you have developed in yourself would be useful to you when dealing with pre school children.  
(15 marks)

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