THE OPEN UNIVERSITY OF SRI LANKA

POST GRADUATE DIPLOMA IN EDUCATION

FINAL EXAMINATION (SECOND SEMESTER)- 2006/2007

ESP 1103 – MEASUREMENT AND EVALUATION IN EDUCATION

DURATION: THREE (03) HOURS

DATE: 10.11.2007 **TIME : 9.30 a.m. – 12.30 p.m.**

ANSWER ALL THE QUESTIONS IN PART I AND ANY THREE QUESTIONS FROM PART II. CALCULATORS COULD BE USED FOR BASIC MATHEMATICAL CALCULATIONS.

PART I

01. What is meant by 'descriptive analysis' in the evaluation of learning outcomes?

02. State three main characteristics of educational measurements.

03. What is 'discriminating ability" of a test item? Explain using an example.

04. Explain using a diagram, the characteristics of a cumulative frequency curve.

05. What is 'mental age' of a child? The mental age of a 10 years old child was found to be 11 years and 6 months. Calculate his "Intelligence quotient".

06. Explain using examples the difference between general objectives and specific objectives.

07. What is a 'Sociometric Test? Explain it's uses for a teacher.

08. What is meant by 'norm tables'? State three types of norm tables used in educational evaluation and explain one in brief.

PART II

09. i. What is meant by 'affective development' of a child?

ii. Explain using an example how can Thurston's Rating Scale be used to measure attitudes.

iii. a) What do you mean by "Interests"? Give two examples for interests.

b) Explain using an example how interests can be measured.

10. i. What is meant by 'School Based Assessment'?

ii. State three main characteristics of this assessment procedure.

iii. Explain how do you conduct school based assessment in relation to a subject you teach in a selected grade.

iv. Discuss three main problems faced by teachers in implementing this assessment procedure.

v. Discuss three main problems faced by teachers in implementing this assessment procedure.

11. Write short notes on any <u>four</u> (04) of the following.

i. Main steps involved in an evaluation process.

ii. Aptitude tests.

iii. Reliability of a test item.

iv. Analyzing results using measures of central tendencies.

v. Calculation of quartile deviation using Ogive.

vi. Basic factors to be considered in constructing multiple choice test items.

12. Following are the marks obtained by 30 students in a class at an year end examination.

51	38	25	10	13	85	18	70	22	27
82	64	55	45	57	40	37	62	75	45
47	60	72	50	42	30	68	46	52	34

i. Prepare a frequency distribution for the above set of marks taking (39-51) as one of the class intervals.

ii. Calculate the mode and median of this distribution.

iii. Considering the assumed mean of the above set of marks to be in the class interval (39-51), calculate the arithmetic mean.

iv. Calculate the standard deviation of this distribution of marks.

13. i. Explain the terms 'correlation' and 'correlation coefficient'.

ii. What is meant by "perfect positive correlation"

iii. Below given are marks obtained by 10 students for Mathematics and Science at an year end examination.

	A	B	C	D	E	F	G	H	I	J
Mathematics	52	67	35	45	67	55	30	80	60	40
Science	76	58	40	55	60	60	25	70	56	45

a) Calculate the Rank Difference Correlation Coefficient between Mathematics marks and Science marks.

b) Comment on the value you obtained for correlation coefficient.

14. i. "A set of marks is distributed according to normal probability curve" What do you mean by this statement? Explain three characteristics of such a distribution.

ii. The marks obtained by 1500 students in an English test are distributed according to a normal probability curve. The mean and the standard deviation of the above set of marks are 45 and 15 respectively.

a) If the best 5% was given A grades and the weakest 5% was given E grades calculate the limiting marks of the above two grades.

b) Calculate the number of students scored more than 55 marks.