

THE OPEN UNIVERSITY OF SRI LANKA  
FACULTY OF EDUCATION  
BACHELOR OF EDUCATION HONOURS IN NATURAL SCIENCES  
DEGREE PROGRAMME – 2022/2023  
FINAL EXAMINATION – 2023  
STU6409 – MEASUREMENT & EVALUATION IN EDUCATION  
DURATION – THREE (03) HOURS



Date: 15.11.2023

Time: 9.30 a.m. – 12.30 p.m.

Answer All Questions in Part I and any three (03) questions from Part II. Calculators could be used for basic mathematical calculations.

PART - I

01. Differentiate the concepts “Assessment” and “Evaluation”.
02. Discuss the importance of sociometry in classroom practices.
03. “What is meant by the content validity of a test” Briefly explain.
04. i. What is the “skewness” of the distribution of marks?  
ii. Explain using a diagram the positive skewness of a distribution.
05. “How does educational assessment assist you to identify the proficiency levels of the students”. Discuss by citing **two (02)** examples.
06. Briefly explain the six levels in Bloom’s Taxonomy on educational objectives in the cognitive domain.
07. “What is meant by a behavioural objective”? Explain with a suitable example.
08. Explain **two (02)** techniques that can be used to measure the attitudes of the students.

(5 x 8 = 40 marks)

PART - II

09. i. Differentiate “Essay Type Tests” and “Objective Type Tests”. (02 marks)  
ii. Name **four (04)** types of items in objective type test and give an example for each type. (04 marks)  
iii. Write **three (03)** advantages and **three (03)** disadvantages of an essay type test. (06 marks)

- iv. Write an essay type question related to the subject you teach and convert it into a structured essay test item. (04 marks)
- v. Briefly explain **two (02)** advantages of that conversion. (04 marks)

10. A) What are the measures of central tendency? (02 marks)
- B) Following are the marks obtained by 40 students in a class at a year end examination.

40	45	22	31	38	46	88	51
32	58	25	25	50	56	67	59
18	95	23	14	38	76	11	14
69	35	53	64	52	60	70	23
80	41	44	51	42	83	06	58

- i. Prepare a frequency distribution for the above set of marks taking (50-59) as one of the class intervals. (02 marks)
  - ii. Calculate the mode and median of this distribution of marks. (04 marks)
  - iii. Considering the assumed mean of the above set of marks to be in the class interval (50-59) calculate the arithmetic mean. (06 marks)
  - iv. Calculate the standard deviation of this distribution. (06 marks)
11. A. Briefly explain how the normal probability curve is used for grading marks. (02 marks)
- B. Marks obtained by 2000 students in an examination are distributed according to the normal probability curve. The arithmetic mean and the standard deviation of the distribution are 45 and 10 respectively.
- i. Find the number of students who scored between 30-60 marks. (06 marks)
  - ii. If the best 05% of the students are expected to be given A grade, what is the minimum mark required to obtain on A grade? (06 marks)
  - iii. If 60% of the students are to be passed the examination, calculate the minimum mark for passing the examination. (06 marks)

12. A. Explain in brief the terms 'Correlation' and 'Correlation Coefficient' (04 marks)

B. Marks obtained by 10 students for the subjects Mathematics and Science at a year end examination are given below.

	A	B	C	D	E	F	G	H	I	J
Mathematics	45	68	68	52	54	70	35	57	43	48
Science	48	66	62	49	52	61	40	61	45	65

i. Calculate the Rank difference correlation coefficient for above marks. (12 marks)

ii. Interpret the value obtained for the correlation coefficient. (04 marks)

13. i. What is meant by 'Psychomotor Development' of a child? (02 marks)

ii. "It is crucial to measure both 'process' and the 'product' in a psychomotor activity". Justify this statement by citing **two (02)** examples. (06 marks)

iii. Imagine that you need to measure psychomotor skills of students by using an activity related to the subject you teach.

a. Provide a brief description of the activity. (04 marks)

b. Design instruments to measure the various aspects in the process and the product in relation to the above mentioned activity. (08 marks)

*-copyrights reserved-*

