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KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR
..... YEAR ... SEMESTER 2

SPECIAL/SUPPLEMENTARY EXAMINATION

FOR POST GRADUATE DIPLOMA IN EDUCATION/BED

COURSE CODE: PSY 713/311

**COURSE TITLE: EDUCATION MEASUREMENT AND
EVALUATION**

DATE: 9/2/2021

TIME:

INSTRUCTIONS TO CANDIDATES

Answer Question One and Any other TWO (2) Questions

TIME: 2 Hours

1. (a) Citing specific topics from your subject area of study, show how the first three cognitive objectives of the Blooms taxonomy can help you construct a test (6mks)

(b) Indicate the suitable scales or levels of measurement for each of the following variables:

- (i) Heights of all the KIBU students. (1mk)
- (ii) Admission numbers of High School students (1mk)
- (iii) The positions of learners in an end-semester examinations. (1mk)
- (iv) The scores of Form 4 students in a Mathematics (1mk)

(c) Given below is a set of grouped data showing the performance of students on a Form 2 Biology test.

| 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 |
|-------|-------|-------|-------|-------|-------|-------|
| 5 | 8 | 15 | 18 | 20 | 10 | 4 |

Using the above tabular information compute the following Measures of

(a) Central tendency:

- (i) Mode (1mk)
- (ii) Median (3mks)
- (iii) Mean (3mks)

(b) Variability:

- (i) Quartile deviation (3mks)
- (ii) Variance (3mks)
- (iii) Standard deviation. (1mks)

(c) Construct a frequency polygon for the data (6mks)

2. (a) Discuss five factors you would consider when choosing a test format?
(10mks)

(b) Using relevant examples discuss the role of measurement and evaluation in education (8mks)

(c) How is measurement different from evaluation? (2mks)

3. In a mock examination, the overall mean score was 100 and the standard deviation 20. Assuming that the scores were normally distributed and the classes which did the mock had 200 pupils altogether:

(a) How many pupils scored marks between 80 and 120? (4mks)

(b) How many scored between 110 and 120? (3mks)

(c) Which score separates the upper 20% of scores from the lower 80 in the mock examination (5mks)

(d) Explain four methods of determining reliability of a test (8mks)

4. (a) Discuss four factors that would make you prefer multiple choice format in constructing a test (8mks)

(b) State and explain any three evaluation techniques used in school (6mks)

(c) Using a sketch describe what is considered when constructing a histogram (6mks)

5. (a) Describe five types of errors or biases that can occur when rating essay tests (10mks)

(b) For each error in (a), give a possible remedy. (5 marks)

(c) Find the area under the normal curve between $z=0$ and $z=1.2$ (5 marks)