



UNIVERSITY OF EMBU

SECOND SEMESTER YEAR EXAMINATIONS 2020/2021

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION

EPS 201: EDUCATIONAL MEASUREMENT AND EVALUATION

DATE: 4 MAY, 2021

TIME: 2.00- 5.00 PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE (30 MARKS)

- a) What is measurement as applied in education? With appropriate examples explain the four levels (scales) of measurement (5 marks)
- b) Explain the challenges facing education evaluation in Kenyan secondary schools (5 marks)
- c) Using relevant examples, distinguish between aptitude and achievement tests as used in education (5 marks)
- d) Explain what a test format is and highlight the various test formats as used in educational measurement and evaluation (5 marks)
- e) What is the role of statistics in education? Explain any two statistical techniques of presenting educational data (5 marks)
- f) Explain what a table of specification is, as used in educational measurement, and its importance (5 marks).



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Knowledge Transforms

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QUESTION TWO (20 MARKS)

- a) Explain the concepts of reliability and validity, highlighting their importance, as used in education (6 marks)
- b) What is evaluation as applied in the educational context? (2 marks)
- c) With relevant examples, explain the four types of evaluation (12marks)

QUESTION THREE (20 MARKS)

- a) Discuss the importance of norm referenced and criterion referenced measurements as applied in the context of an education system (4 marks)
- b) The following marks were obtained from Form Three computer test. The test was scored out of 100 percent

40,62,48,45,69,67,73,18,25,83,27,36,62,53,56,70,28,37,86,16,45,63,51,60,35,59,27,
38,81,35,84,63,54,79,42,19,24,70,46,83,27,36,62,53,56,70,28,37,86,16,45,63,51,60
73, 65, 84,63,54,79,42,19,24,70,46,83,27,36,62,53,56,70,28,37,86,16,45,63,51,60,35

Required:

- i) Prepare a frequency table (6 marks)
- ii) Find the range (2 marks)
- iii) Compute mean (4 marks)
- iv) Calculate the standard deviation (4 marks)

QUESTION FOUR (20 MARKS)

- a) Explain the importance of item analysis in Kenya Examination council (6 marks)
- b) The following scores were obtained from Sociology and History examinations. The test was marked out of 60 marks.

| Test | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| sociology((| 34 | 42 | 46 | 48 | 58 | 41 | 35 | 46 | 32 | 40 | 38 | 36 | 47 | 37 | 48 | 46 | 50 | 48 | 46 | 32 |



| | | | | | | | | | | | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| x) | | | | | | | | | | | | | | | | | | | | |
| histor y(y) | 40 | 47 | 48 | 39 | 52 | 48 | 54 | 40 | 49 | 48 | 48 | 47 | 49 | 48 | 46 | 45 | 55 | 49 | 38 | 48 |

- a) Compute the Spearman rank correlation coefficient between sociology and history examination. (8 marks)
- b) Interpret the results in (a) above (2 marks)
- c) Explain the instances when a researcher could use Pearson product moment correlation for data analysis (4 marks)

QUESTION FIVE (20 MARKS)

- a) (i) Explain what is skewness (2 marks)
- (ii) With relevant examples, explain the types of distribution which could be used to present the data in teaching- learning process (12 marks)
- b) What practical measures would you recommend to strengthen the conduct and administration of the national public examinations to alleviate the challenges faced currently? (6 marks)



