



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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University Examinations 2021/2022

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

EMP 3350: RESEARCH METHODOLOGY

DATE: JANUARY 2022

TIME: 2 HOURS

INSTRUCTIONS: *Answer question one and any other two questions*

QUESTION ONE: 30 MARKS

Following a School meeting in October, 2021, the Office of the Registrar, Academics and Students' Affairs at Meru University of Science and Technology intends to carry out a study on the Learning Management System, a platform that was introduced in the university several years ago. The system was to improve the teaching and learning processes in the university. Assume you have been enlisted to assist in carrying out the study.

- a. Formulate a researchable topic from the information provided (2 marks)
- b. State two measurable objectives for your study (2 marks)
- c. State a research and a null hypothesis for your study (4 marks)

Assume the university has four other campuses at Meru, Isiolo, Maua and Nanyuki towns. 3000 students, 200 administrative assistants, 150 lecturers and 30 heads of departments will be used for the study to be conducted between 5th January 2022 and 31st May 2022.

- d. Explain the appropriate research design that you would employ (4 marks)
- e. Discuss the sampling procedure appropriate for this study (4 marks)
- f. Data will be collected from human subjects. Describe any four ethical issues you as a researcher should be conscious of during the field study (8 marks)

g. Highlight some challenges you would face as a researcher in using questionnaires for data collection (8 marks)

QUESTION TWO: 20 MARKS

- a. With clear and appropriate examples, explain four critical considerations one should make while constructing research instruments (8 marks)
- b. Discuss the purpose of a pilot study (4 marks)
- c. Literature review is a pivotal element of any research study. Explain any four reasons for undertaking a literature review (8 marks)

QUESTION THREE: 20 MARKS

- a. Differentiate probability sampling from non-probability sampling (4 marks)
- b. Describe two methods of non-probability sampling (8 marks)
- c. Explain the procedure of selecting a simple random sample (8 marks)

QUESTION FOUR: 20 MARKS

In searching for literature on a topic “Socio-emotional skills in children”, you came across an article whose excerpt is below.

Psychology in the Schools, Vol. 53(4), 2016
View this article online at wileyonlinelibrary.com/journal/pits

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DOI: 10.1002/pits.21912

PRESCHOOL CHILDREN’S INTEREST, SOCIAL-EMOTIONAL SKILLS, AND EMERGENT MATHEMATICS SKILLS

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Yeshiva University

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Yeshiva University

This cross-sectional study examined the relationship between interest, social-emotional skills, and early math skills in preschool children. Math-specific interest and global interest in learning were measured using teacher report and a play-based observation task. Math skills were assessed with a test of math achievement, and social-emotional skills were assessed using a teacher-report measure. Children with higher global interest in learning, math-specific interest, and observed goal-directed play demonstrated higher math skills. Furthermore, social-emotional skills were associated with global interest in learning and math skills, but not with math-specific interest. Overall, findings support the relevance of interest and social-emotional skills for school readiness in young children.
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- a. Referring to the research problem, what did the study conclude? (3 marks)
- b. Based on one of the findings of the study above, do an in-text citation of this reference (4 marks)
- c. Include this reference in the bibliography section of your paper. (4 marks)
- d. With clear examples, differentiate primary, secondary and tertiary literature sources (9 marks)

QUESTION FIVE: 20 MARKS

- a. Describe, giving examples, the four levels used in the measurement of variables (12 marks).
- b. What is primary data? Discuss three ways in which it can be obtained. (8 marks)