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UNIVERSITY EXAMINATIONS 2023/2024

**FOURTH YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN HEALTH RECORDS AND INFORMATION MANAGEMENT**

HPR 3411:DATA ANALYTICS

DATE: JANUARY 2025

TIME: 2 HOURS

INSTRUCTIONS: Answer *questions One and any other Two*

QUESTION ONE (30 MARKS)

- a. Distinguish between Data and information (5 Marks)
- b. identify five sources of healthcare data (5 Marks)
- c. In DIKW model of data transformation, distinguish between data and knowledge. (5 Marks)
- d. Identify any five challenges associated with uses of data analytics in healthcare organization. (5 Marks)
- e. Explain the rationale for guarding against data quality during data collection.
- f. Distinguish between measure of central tendency and measure of dispersion. (5 Marks)

QUESTION TWO (20 MARKS)

- a. Explain the role of Machine learning in data analytics giving examples where it can be applied (10 Marks)



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b. Explain the main considerations you would put into place when putting up a working data analytic system in a healthcare organization (10 Marks)

QUESTION THREE (20 MARKS)

a. Describe steps that you will go through in accomplishing this task. (10 Marks)

b. Describe steps taken in data analysis (10 Marks)

QUESTION FOUR (20 MARKS)

a. Explain the role of healthcare managers in data analytics (10 Marks)

b. Data information knowledge and wisdom (DIKW) model has been used in managing data in organizations. Explain how you may use it in health organization. (10 Marks)



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