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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)



MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

- 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)

