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[Knowledge for Development]

KIBABII UNIVERSITY

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**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**SUPPLEMENTARY/SPECIAL EXAMINATIONS
YEAR THREE SEMESTER ONE EXAMINATIONS**

**BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY**

COURSE CODE : BIT 313 [B]
COURSE TITLE : TRANSACTION PROCESSING SYSTEMS

DATE: ²²~~10~~/10/2018 **TIME:** 11.30A.M. – 1.30P.M.

INSTRUCTIONS TO CANDIDATES

Answer Questions ONE and ANY OTHER TWO.

QUESTION ONE [COMPULSORY] [30MARKS]

- a. What do you mean by transaction in DBMS? [2 marks]
- b. Discuss the different types of Databases for transaction processing [6 marks]
- c. State four benefits of TPS [4marks]
- d. Explain what is data validity and its procedure [6 marks]
- e. What are the five types of TPS in business organizations? What functions do they perform? Give example of each. [5 marks]
- f. Two operations are said to be conflicting if which conditions satisfied [3marks]
- g. What is the main distinguishing feature of a batch processing system? [4 marks]

QUESTION TWO [20 MARKS]

- a. What is a Transaction Processing System? [2marks]
- b. Explain the terms below as used in equivalence schedule [6marks]
 - I. Result Equivalence
 - II. View Equivalence
- c. TP systems serve the various levels of management in a business. Describe the characteristics of transaction processing systems (TPS) and the roles they play in a business. [5 marks]
- d. Using a diagram, discuss the different States of Transactions [7 marks]

QUESTION THREE [20 MARKS]

- a. What is real-time processing system [2 marks]
- b. Differences between real-time and batch processing [8 marks]
- c. Discuss the typical activity of a Transaction Processing System. [10marks]

QUESTION FOUR [20 MARKS]

- a. What is a transaction processor? [2marks]
- b. Web-Ticket allows customers to purchase tickets for major theatre and sporting events over the internet. When customers visit the company's website they can choose an event, view the seating arrangements, see what seats are available, choose their seats and purchase tickets. For the business to run successfully it is essential that the seating details supplied to any customers at any time in any location, are correct and up-to-date. There is no margin for error or system failure. Describe and analyze the ticketing system in terms of the information processes of
 - I. collecting
 - II. storage and retrieval
 - III. processing [8 marks]

- c. Discuss the characteristics of transaction processing system

[10 marks]

QUESTION FIVE [20 MARKS]

- a. Discuss the ACID Properties in TPS

[8 marks]

- b. Outline six features that are desirable in a database system used in transaction processing systems

[6marks]

- c. Discuss the types of Transaction Processing Systems, how they work and give an example in each

[6 marks]