PIONEER INTERNATIONAL UNIVERSITY

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UNIVERSITY EXAMINATIONS

BACHELOR IN INFORMATION TECHNOLOGY

ACADEMIC YEAR: 2021/2022   **UNIT NAME:** SYSTEMS ANALYSIS AND DESIGN

SEMESTER: SEPTEMBER – DECEMBER 2021   **UNIT CODE:** BSIT 2130

DATE: SEPTEMBER 2021   **Main exam**   **TIME:** 2 HOURS

INSTRUCTIONS: Answer question one (30 marks) and any other two

QUESTION ONE (COMPULSORY 30 MARKS)

a. Define the following terms;

i. Systems Analysis   [1 Mark]

ii. Systems Design   [1 Mark)

iii. Feasibility Study   [1 Mark]

iv. Systems Theory   [1 Mark]

v. Veto   [1 Mark]

b. In developing a feasibility study, what FIVE pertinent questions on the current situation needs to be adequately answered?   [5 Marks]

c. With help of diagrams differentiate between the Gantt and PERT Charts.   [6 Marks]

d. List any FIVE activities undertaken in the design phase   [5 Marks]

e. When does a Project Manager apply Critical Path Method?   [3 Marks]

f. Explain the "PIECES" Framework.   [6 Marks]

QUESTION TWO (20 MARKS)

a. What are the key objectives of a feasibility study? [6 Marks]

b. What are the FIVE primary objectives of the planning phase? [5 Marks]

c. Describe an information system as a whitebox. [5 Marks]

d. Differentiate between logical and physical designs is database design. [4 Marks]

QUESTION THREE (20 MARKS)

a. Explain any TWO types of feasibility study. [6 Marks]

b. What are the most crucial issues when designing forms and dialog boxes? [6 Marks]

Issues when designing forms and dialogue boxes:

c. List and briefly explain analysis phase activities [6 Marks]

d. Give two disadvantages of Return on Investment. [2 Marks]

QUESTION FOUR (20 MARKS)

a. Overall project control entails a number of activities. Enumerate any SIX. [6 Marks]

b. Give any FIVE causes of project failure according to UK Office of Government Commerce.
[5 Marks]

c. Differentiate between functional and non-functional requirements. [4 Marks]

c. i. What is Business Process Re-engineering? [2 Marks]

ii. What are THREE ways of analyzing Costs vs. Benefits. [3 Marks]

QUESTION FIVE (20 MARKS)

a. i. Comprehensive guidelines to follow for completing every activity in the system development life cycle, including specific **MODELS**, **TOOLS** and **TECHNIQUES.** Differentiate between the THREE words.   [6 Marks]

ii. Give TWO examples of each in a) i. above.   [3 Marks]

b. Give FOUR advantages of having common interfaces.   [4 Marks]

c. What FIVE crucial things make a good user interface?   [5 Marks]

d. Explain the word Swimlane.   [2 Mark2]