

Department of Industrial and Technology Education
School of Science and Technology Education
Federal University of Technology, Minna
Second Semester Examination 2019/2020 Session

Title: Land Surveying

Date: 13/07/2021

Code: ITE224

Time Allowed: 2 Hours

Instruction: Answer question **one (1)** and any other **two (2)**

- Q1a. The following series of readings were taken by 200 Level student of Industrial and Technology Education Department during the surveying exercise. Use the data to book in both rise and fall method and collimation method. Take reduce level as 36.00. Check arithmetically to ascertain the correct bookings **(10 marks)**
- a. 0.77, 1.88, 1.31 & 2.43
 - b. 2.82, 2.78, 2.52 & 3.52
 - c. 1.78, 2.86 & 1.92
- Q1b. Draw and label the dumpy level that was used for the series of readings during the survey work **(5 marks)**
- Q1c. Outline five (5) characteristic of a closed traverse **(5 marks)**
- Q1d. Outline the seven (7) important points a surveyor must observed to prevent the survey work from being useless **(7 marks)**
- Q1e. List how the different types of obstacles can readily be by-pass using principles of plane geometry. Support your answer with good sketches **(3 marks)**
- Q2a. Define the followings
- i. Local attraction
 - ii. Traverse
 - iii. Offset and
 - iv. Check lines. **(8 marks)**
- Q2b. Generally survey work consists of three (3) major components. List and explain any two **(7 marks)**
- Q3a. List two (2) possible errors or mistake in chain surveying. Give two (2) examples of each. **(6 marks)**
- Q3b. what were the intentions from the survey work during ITE224? List six (6) of them **(6 marks)**
- Q3c. Outline the three (3) major part of prismatic compass. **(3 marks)**
- Q4a. The entire work of survey operations may be divided into three (3) distinct stages. List them and explain. **(5 marks)**
- Q4b. Define survey, give four (4) reason for reconnaissance **(6 marks)**
- Q4c. Outline and explain the two (2) main methods of determining distance between two points on the surface of the earth **(4 marks)**

GOOD LUCK