

ICS 2215



W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY  
OF  
AGRICULTURE AND TECHNOLOGY  
UNIVERSITY EXAMINATIONS 2016/2017  
SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE  
DEGREE  
OF**

**BACHELOR OF LAND RESOURCES PLANNING AND MANAGEMENT  
ICS 2215: INFORMATION TECHNOLOGY 11**

**DATE: JUNE, 2017**

**TIME: 2 HOURS**

**INSTRUCTIONS:**

1. Answer question ONE (section A) and any other two questions in section B.
2. All questions except question one carry equal marks

**SECTION A (30 MARKS)**

- a). Explain what you understand by the term data communication and the concepts. (6 marks)  
b) Explain the concept of algorithms. (6 marks)

- c)  
i. Decision tree is a way of displaying an algorithm. Discuss the concept. (5 marks)  
ii. Explain the two real numbers as held by a computer. (4 marks)

- d)  
i. State and explain any two programming languages. (4 marks)  
ii. Write a pseudo code that would draw a picture of a house. (5 marks)

**QUESTION 2.**

- a) Discuss the concept of Multiuser computer explaining the requirements (4 marks)

- b) Discuss the difference between centralized and distributed processing. (6 Marks)

c)

```
1 // my first program in C++
2 #include <iostream>
3
4 int main()
5 {
6     std::cout << "I am a student of land resource department.";
7 }
```

- Discuss the structure of the C++ program above program. (6 Marks)

- d) Explain the meaning of broadcasting. (4 Marks)

ICS 2215

**QUESTION 3.**

- a) Discuss the term packet switching explaining how it works. (6 marks)
- b) Discuss what you understand by the term office automation and explain what you need to automate an office. (5 marks)
- c) Discuss the term voice mail and explain the main features. (5 marks)
- d) Discuss the term Standalone computers. (6 marks)

**QUESTION 4.**

- a) Explain the importance of flowcharts in the computer industry. (6 marks)
- b)
  - i) Discuss the top down program structure and explain the advantages. (6 marks)
  - ii) Explain what you understand by wide area network (WAN). (4 marks)
- e) Explain any two data types found in most computer programming languages. (4 marks)