



KENYATTA UNIVERSITY

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

BRE 101: INFORMATION COMMUNICATION TECHNOLOGY

1ST SEMESTER 2021/2022

TIME: 2 HRS

INSTRUCTIONS

Answer Question One (COMPULSORY) and any other Two questions

Question One

- a) Differentiate between the following terms as used in computer technology (12 marks)
 - i) SRAM and DRAM
 - ii) Volatile and non-volatile memory
 - iii) System software and Application software
- b) Describe CPU as the brain of computer (6 marks)
- c) Define basic operation of ALU (4 marks)
- d) Briefly explain four types of numbering system (8 marks)

Question Two

- a) Discuss five major functions of operating system (10 marks)
- b) Briefly explain two types of application software highlighting two advantages and two disadvantages (10 marks)

Question Three

- a) With the help of a diagram discuss how a computer process data (10 marks)
- b) State and explain three types of file organization highlighting advantages and disadvantages of each (10 marks)

Question Four

- a) State two categories of computer according to purpose and functionality (4 marks)
- b) Differentiate between cache memory and buffer memory (4 marks)
- c) State the Ms. Excel function for computing grading given the following criteria (A>70, 60-69 B, 50- 59 C, 40-49D, >39 E) (5 marks)
- d) Calculate the following numbering system (7 marks)
 - i) CF16+ 110110012
 - ii) 658+ 1011112
 - iii) 11101112 + 11110012 + 10111112

Question Five

- a) State and explain functions of major component of computer processor (6 marks)
- b) Outline three symptoms of computer affected with virus (6 marks)
- c) Explain three ways of how to secure a computer from viruses (3 marks)
- d) State five functions of a computer (5 marks)