

MAASAI MARA UNIVERSITY

SCHOOL: Business and economics

COURSE NAME: INTRODUCTION TO COMPUTER SCIENCE

COURSE CODE: BBM 102

LECTURER: OGEGA JAPHETH.

QUESTION ONE

- (a) Differentiate between analog and digital data (3 Marks)
- (b) Describe four computer classifications? (8 Marks)
- (c) Convert 10110_2 to a base 10 (or decimal) number (3 Marks)
- (d) A software engineer requires a range of software utilities. Explain the usefulness of any three such utilities. (9 mks)
- (e) Differentiate between Binary and hexadecimal number systems (2 mks)

QUESTION TWO

- (a) List the most important secondary storage media. What are the strengths and limitations of each? (10 Marks)
- (b) What is the difference between batch and on-line processing? (5 Marks)

QUESTION THREE

(a) What are the major types of software? How do they differ in terms of users and uses? (5 marks)

(b) Describe multiprogramming, virtual storage, time-sharing, and multiprocessing. Why are they important for the operation of an information system? (10 Marks)

QUESTION FOUR

(a) Convert the decimal number 7.5625_{10} into its binary equivalents (4 Mks)

(b) State the **three** elements that make up a computer file (3Mks)

(c) State at least four advantages of storing data in computer files over other manual systems (4mks)

(d) differentiate between Random file organization and serial file organization (4Mks)

QUESTION FIVE

(a) Describe the **FOUR** programming languages in computers (7 mks)

(b) A manager in Kakuzi Company intends to acquire an application package for his company's ICT department. Advice him on any four factors he should consider before acquiring it. (8Mks)