

PAN AFRICA CHRISTIAN UNIVERSITY

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY

COURSE CODE: BIT100

COURSE TITLE: FUNDAMENTALS OF COMPUTING

EXAM DATE: THURSDAY 6TH DECEMBER, 2018

TIME: 2:00PM -5:00PM

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Four questions in Section **B**.
- Write only your **student number** on the answer booklet provided.
- None programmable calculator permitted
- Calculators on phones, tablets and computers are NOT permitted in Theory Papers

SECTION A: (Answer ALL questions in this section)

Question 1:

a) Define the following terms as used in computing: **[4 Marks]**

- i) Hardware
- ii) Network topology
- iii) Double clicking
- iv) System software

b) The classification of computers was mainly based on the physical size. Describe two types of computers based on this criterion. **[4 Marks]**

c) A worksheet contains the data shown below

Cell	A1	A2	A3	C1	C2	C3	G1
Entry	5	7	10	10	15	15	=sumif (A1:C3, "<=10")

State the value displayed in G1. **[2 Marks]**

d) The medical industry is experiencing a lot of break through by use of Information Technology. Discuss the use of computers in the medical sector. **[3 Marks]**

e) Explain the function(s) of the following keyboard short cuts: **[3 Marks]**

- i. Ctrl + Alt + Del
- ii. Ctrl + V
- iii. Ctrl + E

f) Explain the functions of the following in any Microsoft application: **[3 Marks]**

- i) Menu bar
- ii) Scrollbar
- iii) Status bar

g i) Computer crimes include *Denial-of- service attack*, *Spoofing*, and *Computer virus* . Highlight each of them. **[3 Marks]**

ii) Explain three security measures that can be put in place to curb the above g(i) security threats. **[3 Marks]**

h) XYZ College wants to buy computers that will be used for sending and receiving electronic messages, student research and other transactions.

- i. Explain four input hardware devices that will be required. **[4 Marks]**
 - ii. Describe three major criteria that the college will consider when acquiring the hardware. **[3 Marks]**
- i) Discuss four functions of an operating system. **[8 Marks]**

SECTION B:(Answer any FOUR (4) questions in this section)

Question 2:

- a) Distinguish between the following terms: **[8 Marks]**
- i) Relative and Absolute cell referencing
 - ii) Wide area network and Local area network
 - iii) Internet and Intranet
 - iv) Client/Server network and Peer-to-peer network
- b) With an aid of a diagram, explain three functional components of the Central Processing Unit. **[7 Marks]**

Question 3:

- a) Outline the procedure that could be used to apply the following to text in Microsoft word program: **[6 Marks]**
- i) Adding Header and footer
 - ii) Applying 1.5 line spacing
 - iii) Center alignment
- b) With the aid of diagrams, describe three types of network topologies. **[9 Marks]**

Question 4:

- a) State five factors you would consider before installing an operating system. **[5 Marks]**
- b) You have been requested to give a talk on classification of computers based on generations. Discuss five computer generations. **[10 Marks]**

PAN AFRICA CHRISTIAN UNIVERSITY EXAMINATIONS PAPER



Question 5:

a i) State five symptoms of a computer affected by viruses.

[5 Marks]

ii) Explain two causes of computer viruses.

[2 Marks]

b) The following is an extract of Microsoft Access table that contains student's details.
Use it to answer the questions that follow.

StdID	Names	FeesPaid	Date of Reporting	County
PP001	Nancy Kanini	Ksh.20,500.00	03-Feb-12	Machakos
PP002	Peter Lagat	Ksh.30,500.00	15-Jun-10	Nairobi
PP003	Paul Mwanza	Ksh.20,000.00	25-Oct-11	Kilifi
PP004	Ester Pepe	Ksh.40,500.00	04-Jan-13	Nairobi
PP005	Pauline TYU	Ksh.30,600.00	15-Jul-11	Kilifi

i) Using the information given above, determine the data types for the "FeesPaid" and "StdID" fields.

[2 Marks]

ii) Write criteria in the query that will:

a. Display all students starting with letter "P".

[2 Marks]

b. Display all student whose fees_paid range from Ksh.20,000 to Ksh.30,000.

[2 Marks]

c. Display only student from "Nairobi" and "Kilifi" county

[2 Marks]

Question 6:

a) Convert the following:

[6 Marks]

i) EC5B₁₆ to octal equivalent

PAN AFRICA CHRISTIAN UNIVERSITY
EXAMINATIONS PAPER



ii) 11.5625_{10} to binary equivalent

iii) 111.11011_2 to decimal equivalent

b) The following is an extract of Microsoft excel sheet that contains student's marks.
Use it to answer the questions that follow.

	A	B	C	D	E	F
1	Name	English	Kiswahili	Total	Average	Grade
2	Amos	70	66			
3	Peter	55	34			
4	Nancy	30	12			
5	Brian	44	90			
6	Mary	21	54			
7	Total					
8	Mean					
9	Highest					
10	Lowest					
11	Grade					

i) With the help of appropriate functions show the formula for computing the following parameters for each subject.

a) Total mark **[2 Marks]**

b) Highest mark **[2 Marks]**

c) Lowest mark **[2 Marks]**

ii) The average marks for each student were graded as follows:

Below 50 grade **"F"**

**PAN AFRICA CHRISTIAN UNIVERSITY
EXAMINATIONS PAPER**



50-59 grade **"D"**

60-69 grade **"C"**

70-79 grade **"B"**

80-100 grade **"A"**

Write down the formula to compute the grade.

[3 Marks]