THE COPPERBELT UNIVERSITY SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

AUGUST, 2018 - SESSIONAL EXAMINATIONS
PE231 - EDUCATION MEDIA AND TECHNOLOGY

TIME ALLOWED: THREE HOURS INSTRUCTIONS :
> Maximum Marks Available - 100
$>$ This paper has SIX(6) Questions
$>$ Answer Any FIVE(5) from the SIX (6) Questions
> All Questions Carry Equal Marks (20 marks)

## QUESTION ONE

a) State FOUR (4) reasons as to why computers are considered to be powerful machines. [4 marks]
b) Briefly state how a Central Processing Unit (CPU) causes processing to occur in a computer. [6 marks]
c) State and briefly describe FIVE (5) specific functions of a Computer Operating System. [10 marks]

## QUESTION TWO

a) State and describe four primary tasks performed by most Database Management Systems (DBMS) [6 marks]
b) Describe four abilities provided for by the Microsoft PowerPoint Presentation software. [6 marks]
c) Describe the following features of a word processor [8 marks]
i) Mail Merge ii) Importing iii) Desktop Publishing iv) Thesaurus

## QUESTION THREE

a) Briefly describe the stages a source program would pass through during the compilation process. [6 marks]
b) State the steps taken by the CPU when running a program. [6 marks]
c) State and describe two types of errors in programming. [4 marks]
d) State the steps a computer goes through to run a program. [4 marks]

## QUESTION FOUR

a) Write an Algorithm that would determine the week's earnings for an employee from the hourly pay rate and hours worked for the week. Report the gross earnings (including overtime earnings) for the week. [8 marks] Note: Overtime hours $=$ hours over 40, Overtime pay rate $=1.5 *$ regular pay rate.
b) State and describe the three major categories of programming languages. [6 marks]
c) Discuss the parts of the basic structure of a pascal program. [ $\mathbf{6}$ marks]

## QUESTION FIVE

a) Write a Pascal program that prompts a user to enter their gender and print the following message depending on the gender entered, ie. Male "You are invited for Lunch tomorrow". Female "You are invited for a cup of tea tomorrow"
b) Write a pascal program that calculates your final exam mark given the following distribution of marks: CA: 40 (Theorytest: 30 (marked out 40), PracticalTest: 10 (marked out of 100) and Exam 60 (marked out of 100).
c) Write a Pascal program that would determine the week's earnings for an employee from the hourly pay rate and hours worked for the week. Report the gross earnings (including overtime earnings) for the week. [8 marks] Note: Overtime hours $=$ hours over 40, Overtime pay rate $=1.5 *$ regular pay rate.

## QUESTION SIX

a) State six (6) advantages of non-projected media when used as teaching aid tools [6 marks]
b) State six uses or advantages of using Charts when teaching. [6 marks]
c) List eight selection criterion for choosing a particular teaching media. [8 marks]

