



**THE COPPERBELT UNIVERSITY**  
**SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY**

**OCTOBER, 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)**

**DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO**

### QUESTION ONE

- a) Give a detailed definition of a computer. **[4 marks]**
- b) State the reasons as to why a computer is considered to be so powerful. **[6 marks]**
- c) Compare and contrast between a Read Only Memory (ROM) and The Random Access Memory (RAM) found in computers. **[4 marks]**
- d) Briefly state the ways in which an operating system manages processing tasks. **[6 marks]**

### QUESTION TWO

- a) State and describe three common features of a spreadsheet program **[6 marks]**
- b) Describe four abilities provided for by the Microsoft PowerPoint Presentation software. **[8 marks]**
- c) Define an integrated package and hence or otherwise give one main advantage and one main disadvantage of this package. **[6 marks]**

### QUESTION THREE

- a) Contrast between compilers and interpreters in programming. **[6 marks]**
- b) Discuss what is involved in the “devise a plan” in the steps of problem solving. **[8 marks]**
- c) Describe what is involved in the compilation of source code in programming. **[6 marks]**

### QUESTION FOUR

- a) Write an Algorithm 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).. **[8 marks]**
- b) Discuss the parts of the basic structure of a pascal program. **[6 marks]**
- c) State the output/s of the following pascal programme. **[6 marks]**

*program out1;*

*var*

*num1 : integer;*

*num2 : real;*

*begin*

*num1 := 456;*

*num2 := 456.789;*

*writeln('The number is': 9, '123.456':5);*

```
writeln('The numbers are':12,num1:2, num2:6:2);  
writeln('The numbers are':16, num1:4, num2:8:4);  
end.
```

### QUESTION FIVE

- a) Write Pascal code that prints either positive or negative depending on the number entered by a user. **[8 marks]**
- b) Write Pascal code to calculate the Volume of a cylinder **[6 marks]**.  
Note Volume of Cylinder =  $\pi r^2 h$
- c) State and describe the three major categories of programming languages. **[6 marks]**

### 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]**

.....**ALL THE BEST**.....