### 2009 MAY/ JUNE NBC/NTC SECTION B ESSAY

Attempt FIVE questions in all, at least one from each section. All questions carry equal marks

# SECTION I: INTRODUCTION TO INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)

### **Question 1**

- (a) (i) Who is a database administrator
- (ii) State three (3) advantages of Database System to NABTEB as an examination body
- (b) Describe two (2) methods of securing data from computer hackers?

### Solution 1

(a)(i) Database administrator (DBA) is a person that manages, update, control, maintain, secure and modify Data base.

- (ii) a. Easy access to data and information
  - b. Data base improved strategic use of corporate data
  - c. Easier modification and updating of data
  - d. Data base improved data integrity
  - e. Easy back up and recovery of data, e.t.c
- (1b) Explanation of any 2 of;
  - The use of passwords
    - The use of data encryption
    - The use of firewall

The use of intension detection system

Digital certificate e.t.c

Any 2

Example

- 1. Data encryption: Involves the translation of data into a form that is illegible without a deciphering mechanism
- 2. Password: this involves a secret word or phrase that gives authorized user access to a particular file, system or data base.

# **Question 2**

- (a) (i) What is your e-mail address?
  - (ii) State three (3) minimum parts of all internet e-mail address

- (iii) Assuming your e-mail address domain ends with .co.uk,what dose .co.uk mean?
- (c) Distinguish between Post Office Protocol (POP) and Internet Mail Access Protocol

### Solution 2

(a)(i) Any e-mail address that has the following features:

- It must be in lower case
- User name
- @ symbol
- Domain
- No space between the characters
  e.g. <u>desiromond@yahoo.com</u>, <u>mabayoje2003@yahoo.com</u>, <u>nbtc@hotmail.co.uk</u>
- (ii) user name
  - @symbol
  - Domain
- (iv) co.uk is an internet country code for the united kingdom
- (2b) PoP does not support mail folder but support inbox WhileIMAP support mail folder in addition to the inbox

# SECTION II: COMPUTER APPLICATION I & II (WORD PROCCESSING. SPREAD SHEET, POWER POINT & COREL DRAW)

# **Question 3**

- (a)(i) Define "Word Processing"
- (ii) State THREE (3) advantages of word processing over type writer
- (b)(i) Explain briefly Two (2) types of formatting of text in MS- word
  - (ii) State the steps to be taken to copy a text within a document.

# Solution 3

- a(i) Word processing is the use of computer to create, revise, format, edit and save document for printing.
- (ii) 1. It saves time
  - 2. Storage
  - 3. Speed
  - 4. Word wrap
  - 5. Easy editing
  - 6. Spell checking
  - 7. Inserting picture  $\backslash$
  - 8. Duplication
  - 9. easy formation etc Any 3

3b

i. font size

- ii. font color
- iii. character spacing
- iv. line formatting
- v. page formatting
- vi. paragraphing
- vii. bullets and numbering
- viii. change case etc Any 2

### **Explanation:**

- 1. the size of the character i.e. changes from one size to another.
- 2. changes from one color to another color
- 3. font size changes from regular style to another style

3b(ii). Highlight/select/block the text Click at edit Any short – cut key is acceptable

### **Question 4**

- (a) (i) What is spreadsheet?
  - (ii) Identify the features of work book in MS Excel
- (b) Write a short note on THREE (3) of the following features found in a workbook environment
  - (i) Cells
  - (ii) Formula bar
  - (iii) Sheet tabs
  - (iv) Tab scrolling buttons
  - (i) sketch a draft on a piece of paper to create a workbook structure
    - (ii) Outline the suggested order when entering data in an excel work sheet

# Solution 4

(c)

- 4ai. Spreadsheet is an array (collection) of rows and columns which form cells in which data can be entered
- (ii) Worksheet Formula bar

Rows

Columns

Cell label

Scroll buttons

Sheet tab

Any 4

- b. cells: Definition, diagram or example. e.g.
  - Is formed out on intersection of rows and columns
  - It is a rectangular box in which data is entered in work sheet etc

Formula bar:- Display the content of active cell.

- For formula entries
- Sheet tabs: locate at the lower part of the current sheets in a work book
  - Display the number of sheets in a work books
  - It indicates the current sheet or it display the name of work sheet you are working with

Tab scrolling buttons: move a sheet left, and right, up and down

Any 3

	i my c					
А	В	С	D	Е	F	G
	A	A B	A B C	A    B    C    D      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I      I    I    I    I	A    B    C    D    E      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I      I    I    I    I    I	A    B    C    D    E    F      Image: Imag

(ii) Go to the desired cell enter the data

# **Question 5**

- (a) (i) Differentiate between power point and presentation
  - (ii) Mention FOUR (4) ways presentations are delivered in to audience using different media
  - (iii) Identify the THREE (3) parts which Normal View is divided in power point.
- (b) (i) Explain briefly the uses of bitmaps in MS Corel draw(ii) State FOUR (4) functions of pick tool in MS Corel draw

# Solution 5

- a(i) slide
  - 2 overhead transparencies
  - 3 automated shows on a computer
  - 4 broadcast over the web
- a(ii) slide pane
  - 5 outline pane
  - 6 note pane
- b(i) Bitmap is used to convert text for the purpose of modification
- (ii) To:
  - 7 pick the drawing tool
  - 8 drop tool after use
  - 9 select object
  - 10 deactivate drawing tool
    - etc Any 4

### SECTION III: AUTOCAD I & II

#### **Question 6**

- (a)i State TWO (2) advantages of AUTOCAD over manual drawing in the design process
- ii Explain briefly the link between computer aided design (CAD) and computer aided manufacturing (CAM)
- (b) (i) With suitable examples, give the difference between Cartesian and polar co- ordinates system
  - (ii) Explain briefly the use of the following modify commands in AUTOCAD:
    - (a) array
    - (b) fillet
    - (c) offset
    - (d) chamfer

#### Solution 6

a(i)	- easy dimension	oning					
	easy duplication						
	- easy modification						
	13 speed						
	etc	Any 2					
(ii)	CAD is soft ware used for designing objects while CAM is software that aids the manufacturing of objects designed						
b(i)	Examples:						
	Cartesian	Polar					
	P1: 50, 50	P9: 175, 150					
	D2. 100 50	$P_{10} = 50 + 45$					

11.00,00	17.175,150
P2: 100, 50	P10: @ 50 < 45
P3: 100, 100	P11: @50 < 135
P4: 50, 100	P12: @ 50 < 225
Any 2	

(ii)

- (a) Array is used to create multiple copies of object in a pattern
- (b) Fillets is used to round and fillets the edges of an object
- (c) Offset is used to create concentric circles, parallel lines and parallel curves
- (d) Chamfer is used to create sloping edges (bevels) of objects

### **Question 7**

- (a) Describe briefly how to create angular dimensions
- (b) (i) Explain how to use array command to draw polar array(ii) State how layers help in construction and understanding of drawing

# Solution 7

- (a) select dimension tool
- (b) select dimension style
- (c) select dimension style manger
- (d) click on new

### (b) i

Draw big circle, inscribe small circle at the top make sure that the polar array is enabled on the array dialog box. Select object and press enter Click on pick center point on the dialog box Click on the center of the circle Enter the total number of angle, click on the center again and press enter.

(ii)

Layer help in construction and understanding of a drawing in that it is used to differentiate different parts on the construction with different colors for their understanding of a drawing.