DEPARTMENT OF EDUCATION

UPPER SECONDARY SCHOOL CERTIFICATE EXAMINATIONS

INFORMATION COMMUNICATION TECHNOLOGY

Tuesday

18 October 2011

Time allowed:

2 hours and 30 minutes

(11:00am – 1:30 pm)

NO EXTRA TIME

(NO OTHER TIME)

Candidates are advised to fully utilise the allocated time

INSTRUCTIONS TO CANDIDATES

To be read by the external invigilator to all candidates

1. The **subject code** for **Information Communication Technology** is **16**

2. There are **16** printed pages in the question booklet and **7 printed** pages in the answer booklet. The formula sheet is in pages 6 of the question booklet.

3. There are two sections in this paper. Answer all questions.

   Section A : Multiple Choice Questions - 30 marks

   This section will be electronically marked.

   Electronic Answer Sheets will be distributed by your external invigilator. All answers to the Multiple Choice Section MUST be answered on this Answer Sheet.

   Carefully following the instructions, fill in your Candidate Information and Subject Information.

   Section B: Short Answer Questions   20 marks

   Write down your name, your school name and your10 digit candidate number on the Section B Answer Sheet Provided.

4. You are required to only Write the correct answer in the space provided.

5. Answers written on the question paper will not be marked. Write answers neatly in spaces as allocated on the answer sheet. Answer **ALL** questions.

6. Answer all questions on the answer sheet. Answers on any other paper including rough work paper and the question paper **will not be marked**

7. ALL working must be shown step by step to get full marks. Students may lose marks for writing down final answers only.

8. Enough spaces have been allocated for answers to every question. Questions must be answered in spaces as allocated. Answers all over the answer booklet may not be marked.

9. Correctional Fluid is <u>not allowed</u> on the answer sheet. Where you have made an error, cross out all the working and start on a new line.

PENALTY FOR CHEATING OR ASSISTING TO CHEAT IN NATIONAL EXAMINATIONS IS NON-CERTIFICATION.

DO NOT TURN OVER THE PAGE

AND DO NOT WRITE

UNTIL YOU ARE TOLD TO START.

SECTION A: MULTIPLE CHOICE TEST

(QUESTIONS 1 TO 30) 1 MARK EACH

Answer each question by shading in with HB pencil, the circle directly under the correct alternative A, B, C or D on your Electronic Answer Sheet.

If you make a mistake, rub it out completely using an eraser rubber and shade the correct answer on the Electronic Answer Sheet.

Question 1

The term used to describe all physical components of a computer is;

A. Software B. Shareware C. Hardware D. Firmware

Question 2

The process of combining static information in a publication together with variable information in a data source to create one merged publication is called:

A. Merging B. Data sourcing C. Mail merge D. Consolidation

Question 3

Microsoft Office uses a variety of toolbars to accomplish tasks.

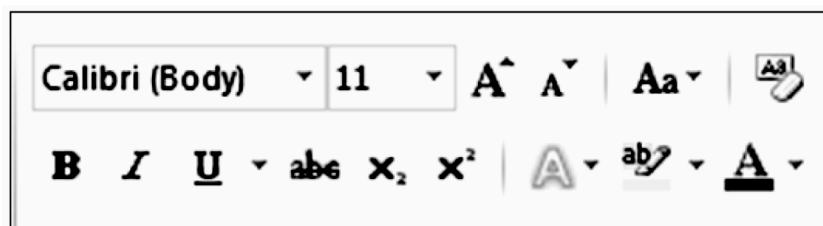Figure below displays one of the toolbars used by Microsoft Office.

Figure .1. MS Office Toolbar

What is the toolbar depicted in figure used for?

A. To manually change the look of characters in an office document.

B. To automatically change the look of paragraphs in an office document.

C. To manually change the theme of an office document.

D. To automatically create and modify lists in an office document.

Question 4

The right to use a piece of software is termed:

A.   Copyright   B.   Patent   C.   License   D.   Installation

Question 5

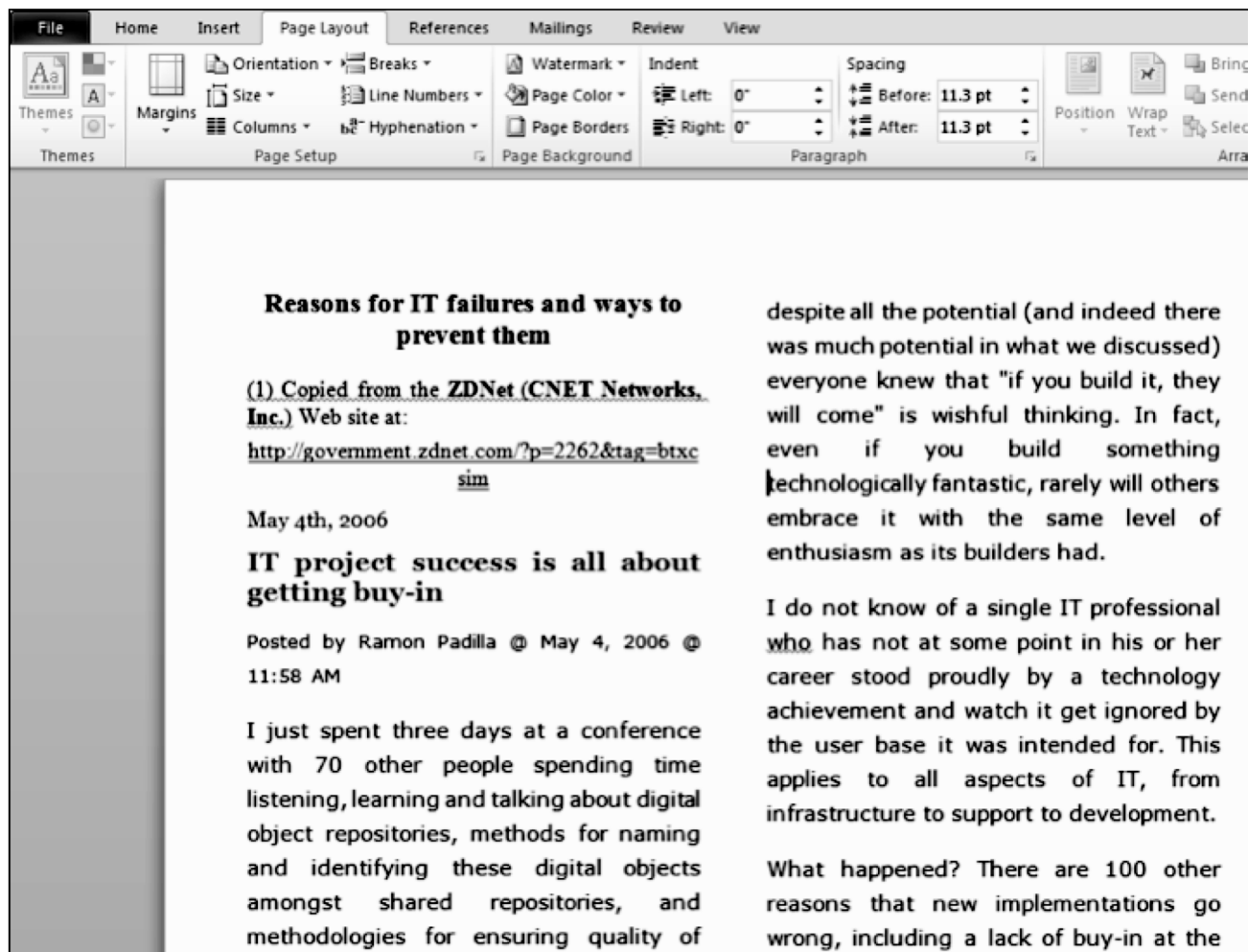Study the figure below and answer the question that follows.

Figure .2. MS Office Word Snapshot

Based on the image above, which of the following is true about this document?

A.   Has labels   B.   Is password protected

C.   Is a single column document   D.   Is a double column document

Question 6

The logical link between two tables in a database is known as _____.

A.   Primary Key   B.   Query   C.   Keys   D.   Relationship

Question 7

Consider the figure below.

	A	B	C	
1	Data	Formula		
2		-4		
3				
4				
5				
6				
7				
8				
9				

Figure .3. MS Office Excel Snapshot

If a user wanted to find the absolute value of the value in cell A2 and store the answer in cell B2.

What formula would the user have to type?

A.   B2 = ABS(-4)   B.   B2 = ABS(A2)

C.   = ABS(-4)   D.   = ABS(A2)

Question 8

Consider the figure below.

	A	B	C	
1	Data	Formula		
2		-4		
3				
4				
5				
6				
7				
8				
9				

Figure .4. MS Office Excel Snapshot

If a user wanted to do the following:

i.   Check if the number in cell A2 is less than or equal to 100.

ii. Print 'Within Budget' in cell B3 if the value in cell A2 is less than or equal to 100.

iii. Print 'Over Budget' in cell B3 if the value in cell A2 is greater than 100.

What formula would the user have to type in order to achieve the above stated goals?

A.   = IF(A2<100,"Wthin Budget", "Over Budget")

B.   = IF(A2>=100, "Over Budget", "Within Budget")

C.   = IF(A2<=100,"Over Budget", "Within Budget")

D.   = IF(A2<=100, "Within Budget", "Over Budget")

Question 9

Consider figure .5 below.

Figure .5. MS Office Excel Snapshot

If a user wanted to consolidate data from cell A2 in worksheets Sales, HR and Marketing, and have the data consolidated in cell A3 of the worksheet Consolidation, what would the user have to type?

A.   = SUM(Sales + Marketing:A2)

B.   = SUM(Sales + Marking.A2)

C.   = SUM(Sales + Marking!A2)

D.   = SUM(Sales!Marking!A2)

Question 10

To extract specific information based on a specific criteria in an Access Database, a user would use a

_____.

A.   Query Object   B.   Table Object

C.   Report Object   D.   Form Object

Question 11

Microsoft Access is an example of a database program. The purpose of a database program is to

A.   store data in an ordered manner for easy retrival.

B.   store information in an ordered manner for easy retrival.

C.   pull data electronically from different tables to whatever order meets a users needs.

D.   pull information electronically from different tables to whatever order meets a users needs.

Question 12

Consider the figure below.

Figure .6. MS Office Access Snapshot

In Microsoft Access, what would be the name used to refer to the portion of the form denoted by the letter "X"?

A.   Interface   B.   Form   C.   View   D.   Subform

Question 13

To receive email, you need an email provider, a connection to your provider and an email client application. If your Internet Service Provider (ISP) has a POP server; you have a wide choice of email applications.

What does the acronym POP stand for?

A.   Postal Officed Protocol   B.   Post Office Protocol

C.   Post Official Protocol   D.   Postal Office Protocol

Question 14

Which of the following is <u>not</u> applicable in desktop publishing?

A.   Report Writing   B.   Book Keeping

C.   Presentation   D.   Creating Information Leaflets

Question 15

In Microsoft Office, the ratio of a picture's height to it's width is called the _____.

A.   Aspect Proportion   B.   Proportional Aspects

C.   Proportional Ratio   D.   Aspect Ratio

Question 16

With respect to Microsoft Office, what is the aim of the crop function?

A.   Discards the gray parts of a picture.   B.   Reduces the size of a picture

C.   Deletes parts of a picture   D.   Compresses a picture to reduce the file size.

Question 17

In computer networking, what are the three basic components needed to create a network?

A.   hardware, software, users   B.   cabling, software, users

C.   hardware, software, cabling   D.   hardware, cabling, users

Question 18

Which of the following is <u>not</u> a transmission medium?

A.   Infra-red   B.   Satellite   C.   Search engines   D.   Cables

Question 19

Which of the following is a valid view of a Microsoft Office Access table?

A.   Table view   B.   Design view   C.   Field view   D.   Record view

Question 20

An Information and Communication System can be defined as:

A.   The set of formal procedures by which data is collected, processed into information and distributed to users.

B.   The set of informal procedures by which information is collected, processed into data and distributed to users.

C.   A group of two or more interrelated components that serve a common purpose.

D.   The process of compiling, arranging, formatting and presenting information to users.

Question 21

In Microsoft Access, the main purpose of a query is to:

A.   Locate specific information stored in one or more tables based on certain criteria.

B.   Provide a user-friendly interface through which users can edit the information of an underlying table.

C.   Provide a means whereby information recorded in tables can be viewed in a nicely formatted and accessible manner.

D.   Provide a relational system that users can use to access and store data.

Question 22

Which of the following is <u>not</u> a valid section of a Microsoft Office Access form?

A.   Body   B.   Header   C.   Footer   D.   Detail

Question 23

In Microsoft Access, a One-to-One Relationship can be defined as:

A.   A relationship where one record in one table can be related to one or more records in another table.

B.   A relationship where one or more records in one table can be related to one or more records in another table.

C.   A relationship where one record in one table can be related to exactly one record in another table.

D.   A relationship where one or more records in one table can be related to one record in another table.

Question 24

The text that gets displayed instead of an image when the image fails to open on a webpage is known as _____.

A.   Alternative text   B.   Auto text   C.   Linked text   D.   Source image

Question 25

In Internet terminology, what does the acronym DHTML stand for?

A.   Dynamic HTML   B.   Dynamic Hypertext Markup Link

C.   Dynamic Hypertext Makeup Language   D.   Dynamic Hypertext Markup Language

Question 26

In Internet terminology, what does the acronym WYSIWYG stand for?

A.   Why You Saw Is What You Got   B.   What You See Is What You Get

C.   Where You See Is Where You Got   D.   What You See Is What You Got

Question 27

In Microsoft Office Powerpoint, 'SmartArt' provides predefined sets of diagrams for users to use.

Which of the following is <u>not</u> a type of diagram provided by the Microsoft Powerpoint SmartArt feature?

A.   Process   B.   Hierarchy   C.   Cycle   D.   Relation

Question 28

Microsoft Office Powerpoint comes with several categories of built-in transition effects.

Which of the following is <u>not</u> a type of transition effect supported by Microsoft Powerpoint?

A.   Subtle   B.   Speed   C.   Exciting   D.   Dynamic content

Question 29

In Microsoft Office Powerpoint, there are two types of slide orientation that are supported.

What are these orientation types?

A.   Portrait and Landscape   B.   Upright and Landscape

C.   Portrait and Facedown   D.   Landscape and Facedown

Question 30

Which of the following is <u>not</u> a career option in ICT?

A.   Systems Administrator   B.   Investment Analyst

C.   IT Manager   C.   Systems Analyst

SECTION B: SHORT ANSWER TEST   **(QUESTIONS 31 to 40)**

For Questions 31 to 40, work out the answers for each question and write the answer in the space provided on the SECTION B ANSWER BOOKLET.

Question 31

i. Study the figure .7. below and fill the missing labels represented by letters **P, Q, R, and S.** (4 marks)
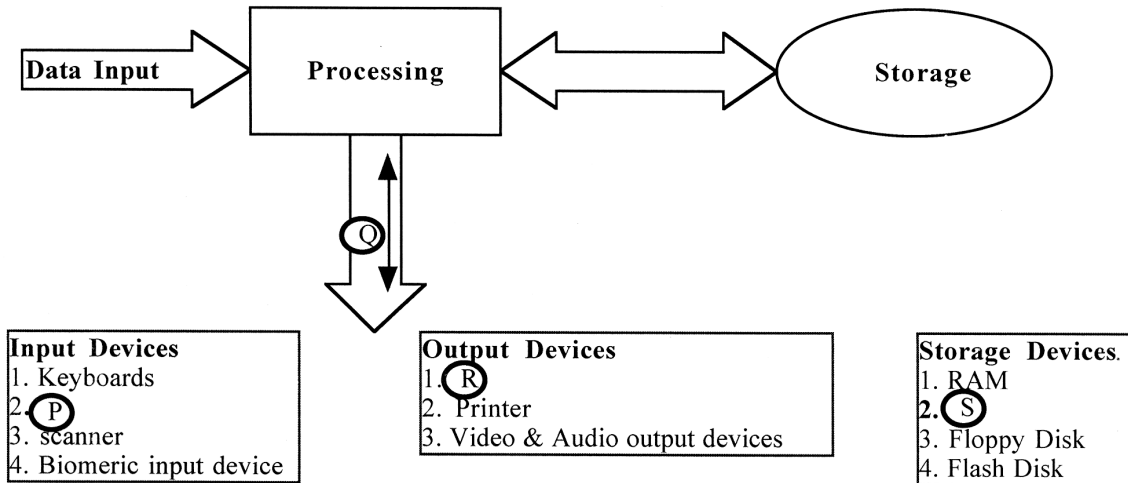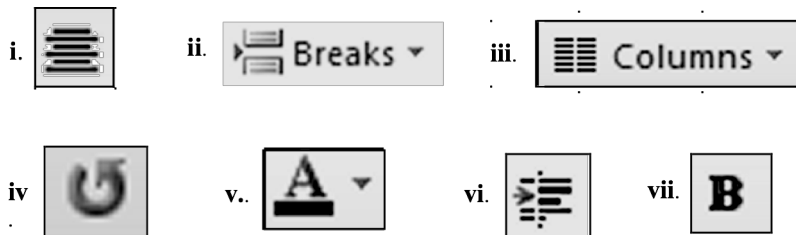

Figure 7. Computer System Schematics

ii. What are the three major components that make-up a computer? (3 marks)

Question 32

Microsoft Office uses various toolbars and controls to accomplish various tasks. For each of the controls depicted below, **provide a brief explanation** of what each control is used for. (7 marks)

Question 33

i. What would be the value of the function "=SUM(B3:B4)" entered at cell B5. (1 mark)

	A	B	C
1			
2		5	
3		4	
4		3	
5			

Figure .8. MS Office Excel Snapshot

ii. Study the figure below.

What values will get displayed in cells B1 to C1 after typing Jan in cell A1 and then click at the bottom right hand corner of cell 1 and dragging it over B1 and C1. (2 marks)

	A	B	C
1	Jan		

Figure .9. MS Office Excel Snapshot

iii. Refer to the Figure below.

	A	B	C	D
1	JAN	FEB	MAR	APR
2	40	70	80	
3				
4				
5				

Figure .10. MS Office Excel Snapshot

If a user wanted to have the sum of the numbers in cells A2 to C2 calculated and displayed in cell D2, what formula would the user have to enter into D2? (2 marks)

iv. Below are depicted some of the most common error codes found in Microsoft Excel. For each error code below, **provide a brief description** of what each error code means. (2 marks)

   a. ########

   b. #REF!

Question 34

i. Consider the figure below.
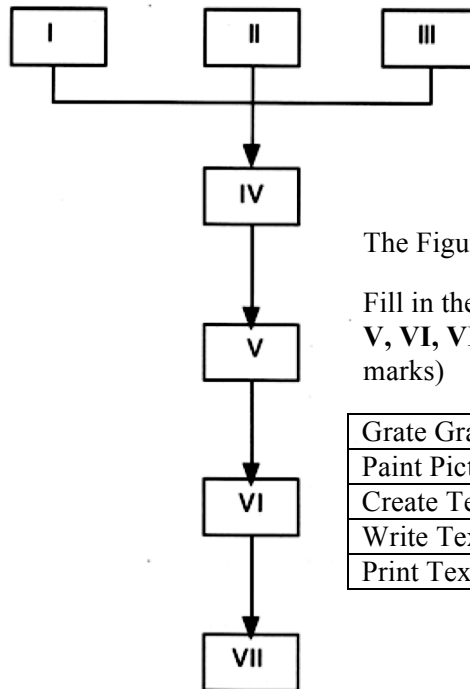

The Figure depicts a Microsoft Access table.

Name the portions of the figure labeled **X, Y, and Z** respectively. (6 marks)

Figure .11. MS Office Access Table Snapshot

ii. In Microsoft Access, the database object view that defines how data is structured is known as _____. (1 mark)

Question 35

Consider the Figure below.

The Figure depicts the Desktop Publishing process.

Fill in the portions of the above diagram labeled **I, II, III, IV, V, VI, VII** with the correct terms from the table below. (7 marks)

Grate Graphics	Layout of Publication
Paint Picture	Correct Errors
Create Text	Print Publication for Proofing
Write Text	Correct Errors
Print Text	Print Final Copy

Figure .12. Desktop Publishing Process

Question 36

i. Study Figures .13a and .13b below and indicate the type of network represented by each Figure. (2 marks)
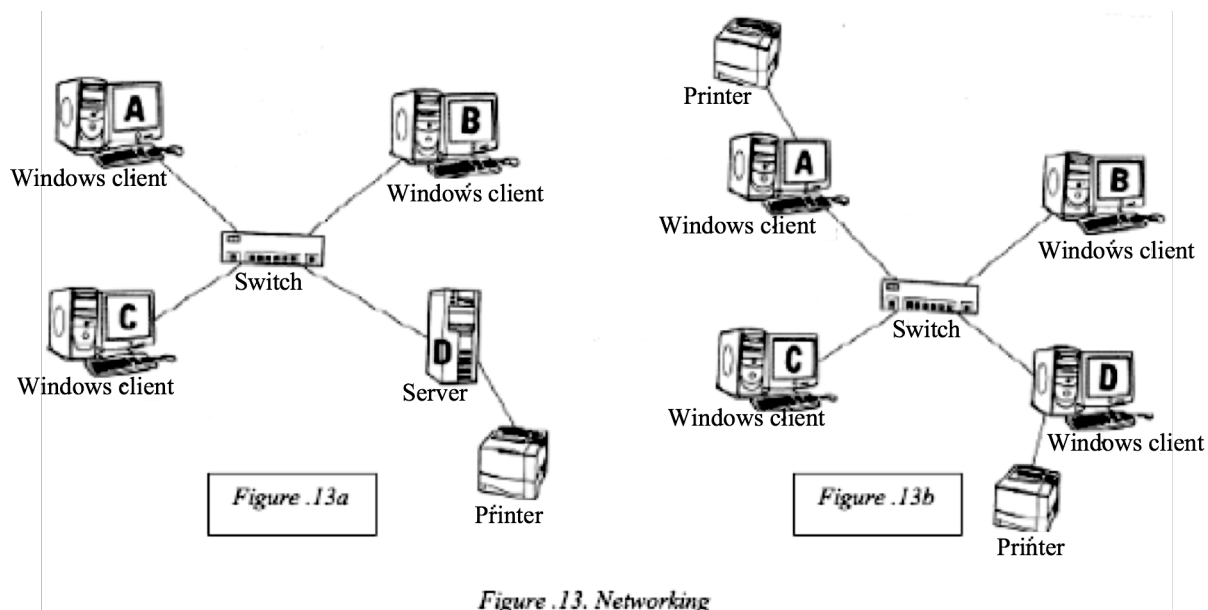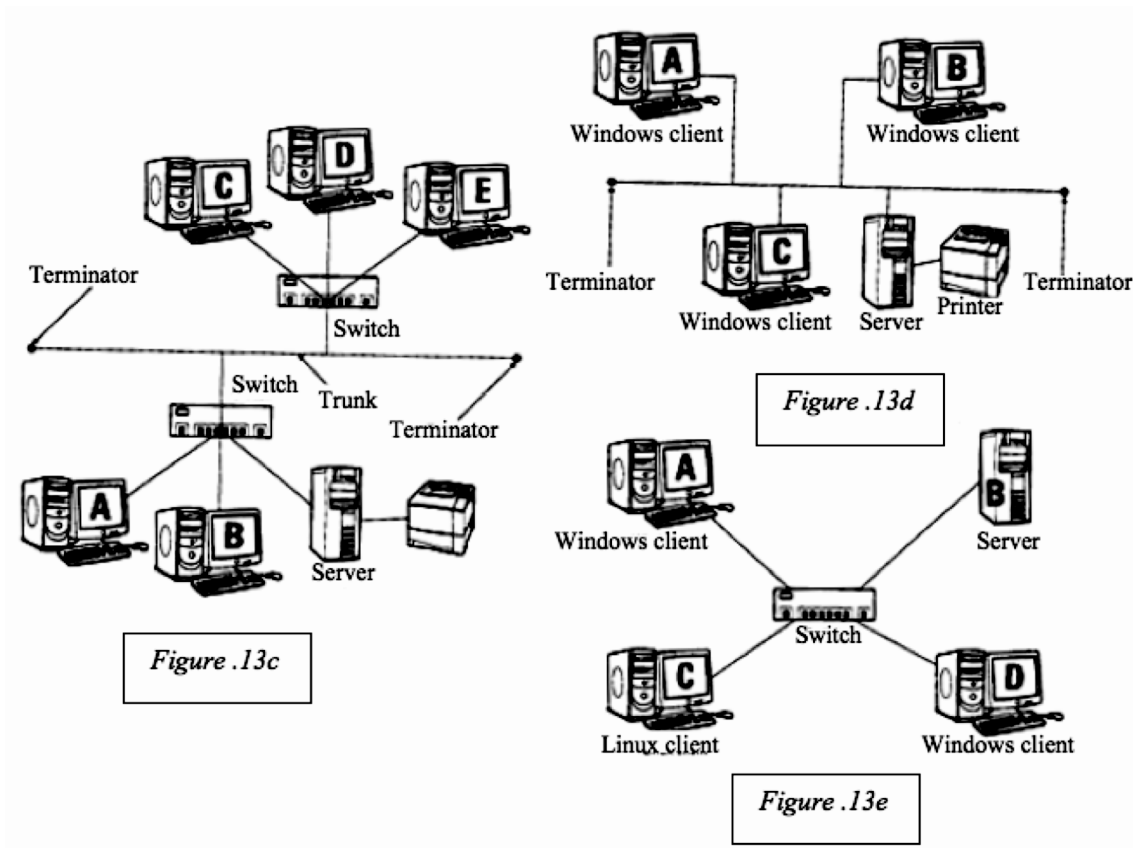

Figure .13. Networking

ii. A network topology refers to the physical layout of a network. Study Figures .13c, .13d, and .13e below and indicate their appropriate topology. (3 marks)

Figure .13d

Figure .13c

Figure .13e

iii. Briefly explain what a web browser is. (2 marks)

Question 37

i. Hyperlinks can link from the current webpage to many destinations. List three possible destinations. (3 marks)

ii. Every webpage has a unique web address called a URL. For each of the following, state what kind of institution would use the listed domains. (4 marks)

    a.   .edu

    b.   .gov

    c.   .org

    d.   .com

Question 38

i. Today computers are considered to be useful tools in getting work done. List four sectors of the society in which computers are now used. (4 marks)

ii. To defend your computer, there are various different software that protects against various threats. For each of the threats listed below, state the general name given to the types of software that defend against these threats. (3 marks)

   a. Viruses

   b. Malware

   c. Rootkits

Question 39

In Microsoft Office Access, when defining a database table, the data type column allows users to specify the type of data that can be contained in a field. List seven data types that can be used in Microsoft Access. (7 marks)

Question 40

Put the following words or phrase in their appropriate labeled blank spaces (7 Marks)

File, spreadsheet, current presentation, another presentation, export, linked, email address, embedded

i. In Microsoft Office Presentation Hyperlinks can be created to:

   (a) A location in the _____

   (b) A specific side in _____

   (c) A specific side in _____

   (d) An _____

ii. Also in Microsoft Office Presentation Multimedia can be integrated with other Microsoft Office applications. For example, slideshows can be (e) _____ into a slide. Multimedia can also be (f) _____into a spreadsheet. One can also (g) _____multimedia files.

END OF EXAMINATION